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**Rome, Italy**

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**SATURDAY MAY 26, 2018**

**17:30-18:30 Plenary Lecture**

**The myth of the origins and the birth of the human relationality**

*Massimo Ammaniti (Italy)*

Throughout history mankind has constantly wondered about the origin of the human species. For many centuries until scientific explanations became available the only possible answers were provided by myths. In origin myths the human birth is often at the centre of scenario and takes on a traumatic character because is marked by the abandonment of the children by parents or adults, an attempt to suppress the newborn babies, as in the Oedipus Myth and in the story of Moses and of Romulus and Remus in Rome. During the Renaissance the great painter Leonardo da Vinci depicting the human foetus in its proper position in the womb raised fundamental philosophical questions: has the foetus his own soul or is under the protection of maternal soul?

Today it's possible to try to reply to these questions using the scientific methodology and new technological instruments to investigate the maternal context during pregnancy, when the physiological development of an individual is embedded so deeply in the physiological adaptation of another. The maternal context is explored considering the foetus' physiological markers, such as the foetal heart responses to maternal voice, the sensitivity to touch, the motor cognition, which could predate the emergence of social behavior. The motor cognition hypothesis will be discussed, which suggests the ontogenetic understanding based upon motor system, confirmed also by the recent neurobiological discovery of the Mirror Neuron System. This process is coupled to the affiliation attitudes and behaviors of the caregivers that initiate during pregnancy and continue after birth.

**SUNDAY MAY 27, 2018**

**09:00-10:15 Plenary Lecture**

**Differential Susceptibility to Environmental Influences: Intervention Evidence**

*Jay Belsky (USA)*

It is widely appreciated that intervention efforts vary in their efficacy, even within generally effective trials and services. Such heterogeneity in efficacy is often, even perhaps typically, attributed to variation in implementation fidelity. Differential-susceptibility theorizing stipulates, however, that much such variation in intervention efficacy is due to the fact that individuals vary in their susceptibility to environmental influences, including intervention ones. Moreover, it stipulates that those very individuals most vulnerable to adversity—for temperamental, physiological and/or genetic reasons—are also most likely to benefit from contextual support and enrichment. In this talk, theory and observational evidence consistent with this claim is reviewed, before turning attention to experimental-intervention evidence indicating the same. Indeed, the work to be presented will reveal that children who are more temperamentally difficult, especially as infants and toddlers, and who are more physiologically reactive and/or carry certain “plasticity” alleles are disproportionately likely to benefit from a variety of intervention programs. Implications of this research are highlighted, especially with respect to the issue of targeting particularly susceptible individuals when resources are limited. And this will raise the issues of efficacy and equity when it comes to the provision of services.

## 10:45-12:15 General Sessions

### Symposium S01 - ONGOING RESEARCHES WITH THE ADBB & THE M-ADBB

Costa R.<sup>[1]</sup>, Viaux--Savelon S.<sup>[2]</sup>, Pérez Martínez C.<sup>[3]</sup>, Skovgaard Væver M.<sup>[4]</sup>, Guedeney A.\*<sup>[5]</sup>

<sup>[1]</sup>ISPUP-EPIUnit, Universidade do Porto ~ Porto ~ Portugal, <sup>[2]</sup>Hospital Pitié salpetrière Paris France ~ Paris ~ France, <sup>[3]</sup>Universidade Valencia, Spain ~ Boston ~ Mexico, <sup>[4]</sup>Department of Psychology, University of Copenhagen ~ Copenhagen ~ Denmark, <sup>[5]</sup>Univ paris 7 & APHP Paris ~ Paris ~ France

The symposium will present four studies having used the Alarm distress baby scale (ADBB, Alarm distress baby scale, Guedeney & Fermanian, 2001, illustrating recent high level research using the scale, with presenters from France, Portugal, Denmark, Spain/Mexico. One deals with the epigenetic substratum of early social withdrawal behavior (R. Costa), one with the effect of postnatal nasal OCT on social withdrawal behavior of infants born with Prader Willy syndrome (S. Viaux Savelon), one on social withdrawal behavior of infants with palate cleft (C. Perez Martinez) and one on the use of the ADBB on a large scale for screening (M Voever).

#### S01.2

### THE PORTUGUESE STUDY ON GENETIC AND ENVIRONMENTAL FACTORS ASSOCIATED WITH INFANT MENTAL HEALTH: POSGEN – IMH.

Costa R.\*

*Universidade Europeia |Laureate International Universities ~ Porto ~ Portugal*

The Portuguese Study on Genetic and Environmental Factors associated with Infant Mental Health: POSGEN - IMH is a longitudinal study involving 387 couples and their infants from gestation (35 weeks) to 18 months after childbirth. This presentation will focus on part of the results of this study regarding the association between serotonin transporter gene 5HTTLPR polymorphism (L/L; L/S; S/S) and early signs of infant social withdrawal. Data for this presentation will include 150 infants with complete data. At 35 weeks of gestation, parents' socio-demographic information was recorded. At 6 months after childbirth whole buccal cells were extracted from the infant for determining 5HTTLPR polymorphism, and infant social withdrawal was evaluated using the Alarm Distress Baby Scale (ADBB). Mothers of S/S children have more anxiety symptoms ( $F=5.210$ ;  $p=.006$ ). When controlled for maternal anxiety, S/S children were associated with more signs of social withdrawal ( $F(2,149)=10.010$ ;  $p=0.008$ ). Children with S allele of 5-HTTLPR show more signs of social withdrawal early in life. Although some environmental circumstances were considered in this study, there are some factors that were not analyzed and should be considered to better understand this association namely it is important to understand the developmental trajectories of these children.

#### S01.3

### THE USE OF OXYTOCIN TO IMPROVE FEEDING AND SOCIAL SKILLS IN INFANTS WITH PRADER-WILLI SYNDROME, USING THE ADBB AND CIB AS ASSESSMENT SCALES

Viaux--Savelon S.\*

*Hospital Pitié salpetrière Paris France ~ Paris ~ France*

The recent discovery of biological correlates of synchrony during interaction validated its crucial value during child development. In a recent study, Tauber et al. (2017) showed that OXT intranasal infusion was able to partially reverse the feeding phenotype, infant's behavior and brain connectivity in Prader-Willi Syndrome (PWS). In this syndrome early endocrinal dysfunction is associated with severe hypotonia and early feeding disorder. This presentation is part of the ADBB research symposium and will detail the baby's and interaction's profiles during feeding before and after OXT treatment using ADBB and CIB assessment. Eighteen infants ( $\leq 6$  months) with PWS were

recruited and hospitalized 9 days in a French reference center for PWS where they were treated with a short course of intranasal OXT. Social withdrawal behavior and mother-infant interaction were assessed on videos of feeding before and after treatment using the Alarm Distress Baby (ADBB) Scale and the Coding Interactive Behavior (CIB) Scale. At baseline, infants with PWS showed hypotonia, low expressiveness, fatigability, severe withdrawal and poor involvement in the relationship. Parents tended to adapt to their child difficulties, but the interaction was perturbed, tense, restricted and frequently intrusive with a forcing component. After OXT treatment, infants were more alert, less fatigable, more expressive, and had less social withdrawal. They initiated mutual activities and were more engaged in relationships through gaze, behavior, and vocalizations. They had a better global tonicity with better handling. These modifications improve parents' sensitivity and the dyad's synchrony in a positive transactional spiral. The PWS paradigm shows us the necessity to sustain the early parent-child relationship to avoid establishment of a negative transactional pattern of interaction that can impact child's development and the efficiency of ADBB and CIB as assessment scales.

S01.4

#### **SOCIAL WITHDRAWAL BEHAVIOR WITH INFANT WITH PALATE CLEFT, USING BOTH THE ADBB AND THE M ADBB**

**Pérez Martínez C.\***

*Universidade Valencia , Spain ~ Boston / Mexico*

Cleft lip and palate (CL/P) is one of the most frequent craniofacial malformations in humans. This presentation comprises the evaluation of social withdrawal behavior in infants with (CL/P).

Describing social withdrawal behavior in infants with cleft palate. This presentation is part of the proposed symposium on Ongoing researches with the ADBB Method: At four months postpartum, 145 infants born with CL/P were recruited in four French reference center for CL/P. At twelve months, 123 infants continued to participate. Social withdrawal behavior was evaluated on videos of baby-clinician interaction using the Alarm Distress Baby scale (ADBB) and the short version m-ADBB. The ADBB scale and the m-ADBB scale showed a good internal consistency (Cronbach's alpha coefficient from .81 to .65) in both assessments. At four months, 15.9% of infants showed signs of social withdrawal –according to ADBB scale-, and 24.9% assessed by m-ADBB. At twelve months, 10.6% and 13.8% of infants were socially withdrawal assessed by ADBB and m-ADBB respectively. Additionally, statistically significant differences were found in infant social withdrawal assessed by ADBB scale ( $p = 0.004$ ) and m-ADBB scale ( $p = 0.002$ ) between the first and the second evaluation. Both, the ADBB scale and the m-ADBB can be used to evaluate social withdrawal in infants with CL/P. Infant social withdrawal was significantly higher at four months than at twelve months. This highlights the importance of assessing social withdrawal behavior during the first months postpartum, especially when infants present a medical condition (e.g., CL/P), in order to intervene,

S01.5

#### **TRAINING THE IMH NURSES IN THE COPENHAGEN STUDY**

**Voevler M.\***

*Department of Psychology, University of Copenhagen Øster ~ Copenhagen ~ Denmark*

The overall aim of CIMHP is to test the feasibility of an infant mental health screening and indicated prevention system and its capacity to (1) detect children at risk of longer term mental health adversities and (2) cost-effectively alter these risks in a general population. We are in the process of screening a minimum 18,000 mothers and infants using two standardized screening instruments: 1) Alarm Distress Baby Scale (ADBB) and 2) Edinburg Postnatal Depression Scale (EPDS), and 314

eligible families are randomized into Circle of Security-Parenting or Care as Usual. We present in detail the ADBB training program of the Danish health visitors (HV) and results from the first year of ADBB implementation as part of HV routine practice. This presentation is part of the proposed ADBB symposium. Screening prevalence rates increased: 47% (n = 405) of the children seen by the HVs were screened after 6 months; 79% (n = 789) of the children had at least one ADBB screening after one year. Finally, we found that attitudes (positive and negative) towards ADBB 7 months post-implementation predicted the proportion of children screened 12 months post-implementation. These results indicate that adding the ADBB to a formal screening program is feasible and acceptable

#### **Symposium S04 - INTEGRATING INFANT MENTAL HEALTH INTO THE PRIMARY CARE SETTING: AN OVERVIEW OF 4 DIFFERENT MODELS OF INTERVENTION AND EDUCATION**

**Gleason M.M.\***

*Tulane University School of Medicine ~ New Orleans ~ United States of America*

Background: Pediatric settings offer unique opportunities for prevention and early intervention because they are readily accessible to young children and their families, especially when compared to traditional mental health clinics. In settings using traditional approaches to identification and intervention, most young children with mental health concerns are not identified and receive no intervention. Innovative approaches to introduce infant mental health services and principles into pediatric settings may support early identification and intervention, possibly resulting in promoting well-being, reducing suffering, and mitigating early risk factors. Objective: To demonstrate the opportunity for education and preventive work based on Infant Mental Health (IMH) principles in a variety of different primary care/pediatric facilities, using a variety of different models. Methods: We provide an overview of the four different consultation models used in primary care settings representing a variety of clinical settings in the U.S. and South Africa: The Infant and Early Childhood Consultation Project, Mothering from the Inside Out, Perinatal Child-Parent Psychotherapy and the Tulane Early Childhood Collaborative. The models apply principles of IMH to educate providers and medical professionals and to intervene in the care of young children and families. Each model will be described using specific case examples to demonstrate how the principles are applied. The diverse clinical, cultural, and geographical settings of the four models will allow for discussion of similarities and differences in global approaches to IMH collaborative efforts. Opportunities for audience participation and reflections will be included. Results: Each presentation will present available qualitative and quantitative outcomes of the project, demonstrating changes in providers and families involved in the project. Conclusions: Primary care offers numerous opportunities for education and intervention in the realm of Infant Mental Health, in a variety of different settings to enhance the well-being of young children and their families.

S04.2

#### **INSIGHTS FROM A REFLECTIVE PRACTICE & MENTALIZING GROUP IN A KANGAROO MOTHER CARE UNIT FOR PREMATURE BABIES IN A DEVELOPING COUNTRY SETTING**

**Lachman A.\*<sup>[1]</sup>, Berg A.<sup>[2]</sup>, Suchman N.<sup>[3]</sup>**

*<sup>[1]</sup>Stellenbosch University ~ Cape Town ~ South Africa, <sup>[2]</sup>University of Cape Town ~ Cape Town ~ South Africa, <sup>[3]</sup>Yale Child Study Center ~ Newhaven ~ United States of America*

To present the adaption of Mothering from the Inside Out (MIO) for use in a group setting in the Kangaroo Mother Care (KMC) unit within a tertiary paediatric hospital setting. MIO is an evidence based manualized therapy developed by Nancy Suchman at Yale Child Study Center. KMC is considered the standard optimal care intervention for low birth weight preterm babies in developing countries. Despite knowledge about mother-infant relationship difficulties in this group,

current KMC does not involve specific targeted psychological intervention or exploration with mothers and tends to focus only on the “physical support”. Mothers of premature newborns were invited from the inpatient KMC units to participate in biweekly groups if they were identified as “high risk” by virtue of being young or having a first premature baby. This presentation will highlight the challenges and opportunities that faced the infant mental health clinician in gaining entry into the paediatric ward. A key feature of integrating our groups into standard and routine care was our willingness to adapt our groups to suit the needs of the ward, a challenge we needed to embrace, while keeping true to the core principles of the model which was to help develop reflective functioning and mentalizing in both the mothers and the staff.

S04.3

**BUILDING THE FOUNDATION: CASE EXAMPLES OF INFANT MENTAL HEALTH TRAINING AND CONSULTATION IN TWO PEDIATRIC RESIDENCIES**

**Chesher T.\***

*Oklahoma State University ~ Stillwater ~ United States of America*

To look at case examples of an infant mental health consultative model integrated into 2 pediatric training programs. Infant Mental Health education and consultation are important for pediatricians to confidently assess, identify, and intervene with young children with infant mental health needs. However, the current educational model of pediatricians does not require infant mental health training. The Infant and Early Childhood Consultation Project was created 3 years ago to address the steadily rising level of at-risk young children in a community as well as the lack of training in the pediatric residency programs. Education and consultation were provided in-person for the first year. In subsequent years, education continued to be provided in-person and consultation was by phone. This project is comprised of two parts: systematically educating pediatric faculty and residents on infant and early childhood mental health and consulting with pediatric faculty and residents on infant and early childhood mental health. This presentation will focus on case presentations from two perspectives: a patient’s perspective as well as a pediatrician’s perspective. This presentation will also review pre and post survey results regarding knowledge of infant mental health and beliefs about the pediatrician’s role in psychosocial development. This presentation will discuss how pediatricians are in a unique role in which they can identify and intervene early with at-risk children by increasing their education and consultation in the area of infant and early childhood mental health.

S04.4

**MAKE ROOM FOR BABY: PERINATAL CHILD-PARENT PSYCHOTHERAPY IN A HOSPITAL SETTING**

**Lieberman A.\***

*University of San Francisco, California ~ San Francisco ~ United States of America*

To use a collaborative approach to integrate perinatal mental health services into obstetrics and pediatric care for high-risk mothers and their babies. Pregnancy and the early months of life present a prime opportunity for early intervention. Among low-income pregnant women opportunities for intervention include unplanned/unwanted pregnancy, intimate partner violence, and partner abandonment. Perinatal Child-Parent Psychotherapy (P-CPP) is an adaptation of Child-Parent Psychotherapy (CPP), an evidence-based treatment for traumatized infants/toddlers and their parents. P-CPP addresses perinatal factors in high-risk pregnant women and their babies. P-CPP is part of an integrated primary care-mental health perinatal and post-partum/pediatric collaborative model. The P-CPP clinician participates in OB-Psych Clinic weekly rounds, identifying women with psychiatric symptoms and/or low emotional investment in the pregnancy. The voluntary service is

introduced to the patient using a warm hand-off by the OB-Psych team. The P-CPP clinician addresses sources of stress, promotes self-care, and helps prepare the woman for labor/delivery and parenting a baby. Treatment general continues until the baby turns 6 months. In this Clinical Symposium, we will describe this model of primary care-mental health collaboration linking Ob-Gyn, psychiatry, infant mental health, and pediatrics in a public health hospital, illustrating the influence of P-CPP. Pre-post treatment analyses show statistically significant decreases in maternal psychiatric symptoms and increases in maternal emotional investment in the baby. This collaborative program increases maternal use of primary care, decrease psychiatric symptoms, and increase emotional investment in the baby in high-risk populations of pregnant women in a public health hospital.

S04.5

**“NO ONE EVER ASKED ME THAT BEFORE” - PREVENTION AND INTERVENTION FOR EARLY CHILDHOOD MENTAL HEALTH CONCERNS IN A PRIMARY CARE SETTING**

**Middleton M.\*, Kelley A., Gleason M.M.**

*Tulane University School of Medicine ~ New Orleans ~ United States of America*

To offer early childhood mental health consultation in pediatric primary care to expand the comfort with and implementation of infant mental health approaches by pediatric primary care providers. Most young children with mental health concerns are not identified and receive no intervention (e.g., Horwitz, et al. 2003). Pediatric primary care settings offer tremendous opportunities for early childhood mental prevention and intervention, especially in marginalized populations who often do not have ready access to specialty mental health clinics. Tulane Early Childhood Collaborative (TECC) provides consultation to pediatric providers about infants and young children and their families with a goal of increasing providers' capacity to identify early childhood mental health concerns and offer first line interventions. The TECC model offers clinical consultation in person at the clinic, remotely by phone or video, and through educational trainings. The program has been active for 3 years and has high satisfaction ratings from pediatric partners. Prospective provider surveys demonstrate improved ability to access IMH resources, increased comfort with and use of IMH approaches. In this Clinical Symposium, case presentations will illustrate how core infant mental health (IMH) principles, are applied in consultations and short-term interventions in a pediatric setting, with a focus on infant and toddler presentations in children affected by traumatic events and caregiving disruptions. Conclusions: Primary care consultation offers opportunities for early identification and intervention to support families and young children and mitigate the effects of adversity.

**Symposium S07 - THE NEXT GENERATION OF RESEARCH IN INFANT AND EARLY CHILDHOOD MENTAL HEALTH CONSULTATION**

**Edge N.\***

*University of Arkansas for Medical Sciences ~ Little Rock, AR ~ United States of America*

The effectiveness of Infant and Early Childhood Mental Health Consultation (IECMHC) to early care and education programs has been well established in large-scale evaluations and rigorous studies, including random-controlled experiments. Positive impacts have been documented in areas such as teacher-child interactions, problem behavior in young children, and teacher stress. The next generation of studies of IECMHC are focused on questions of 'How does it work, and for whom?' Specifically, new research is focusing on exploring the mechanisms by which IECMHC works as well as identifying specific circumstances in which consultation is likely to be effective, exploring teacher, child/family and system characteristics associated with positive outcomes. This symposium will highlight four studies that represent 'next generation' research in IECMHC. The first study represents a key step to address questions of the mechanisms by which IECMHC works, exploring

the concept of the alliance between consultants and teachers as a predictor of change. The next study takes another approach to exploring mechanisms of IECMHC, posing questions about ways in which IECMHC focused at the classroom level (building the skills of the teacher to improve the care of all children) impacts children identified as having behavior concerns. The next two studies address the question ‘For whom and under what circumstances can consultation be effective?’ One study describes the impact of child-specific consultation in the context of a statewide expulsion prevention program, in which only the most complex and challenging cases were assigned to IECMHC. The final study explores whether IECMHC services are more impactful for some children than other, supporting males and minority children to ‘catch-up’ with their peers on measures of social-emotional development and expulsion risk. A discussant will set the stage for the session, identify common themes among the studies and highlight future research needs in this area.

S07.2

### **IDENTIFYING THE MECHANISMS FOR EARLY CHILDHOOD MENTAL HEALTH CONSULTATION IN EARLY CARE AND EDUCATION**

**Davis A.\*<sup>[1]</sup>, Perry D.<sup>[2]</sup>**

<sup>[1]</sup>*The Catholic University of America ~ Washington, DC ~ United States of America*, <sup>[2]</sup>*Georgetown University ~ Washington, DC ~ United States of America*

Many young children in childcare settings present with challenges regulating their emotions and behavior – particularly those with early life adversity. Left unaddressed, these social-emotional difficulties often persist and worsen (National Scientific Council on the Developing Child, 2012). In response, mental health consultants partner with staff to build their capacity to foster responsive caregiver-child relationships and to promote healthy social-emotional development (SAMHSA, 2014). The “transformative” factor in early childhood mental health consultation (ECMHC) is theorized to be the consultant-caregiver relationship (Johnston & Brinamen, 2012). Yet there is no empirical research regarding this consultative alliance, and there is currently no measure of the alliance that integrates the perspective of both parties. The purpose of this research was to create a model that operationalizes the consultative alliance for the first time. Data were analyzed from a longitudinal evaluation of Arizona’s statewide ECMHC program. Both caregivers (n=799) and consultants (n=105) completed parallel measures of the quality of their relationships (adapted from Green et al., 2006). Relevant items from each respondent were entered into a Confirmatory Factor Analysis. Results indicated that several items significantly loaded on the latent variable, and suggested that model fit was strong  $\chi^2(3) = 1.2, p=.986, CFI = 1.000, RMSEA= .000$ . Analyses will also investigate whether the consultative alliance is modified by differences in consultants’ discipline (e.g. mental health, early education), years of experience, and consultant-caregiver ethnic match. This research informs the field of ECMHC by helping operationalize the consultative alliance and investigating variables that may predict the quality of this alliance, with implications for professional development, program evaluation, and dissemination efforts.

S07.3

### **CLASSROOM-LEVEL EARLY CHILDHOOD MENTAL HEALTH CONSULTATION SUPPORTS CHILDREN WITH THE MOST CHALLENGING BEHAVIOR**

**Heller S.S.\*<sup>[1]</sup>, Boothe A.<sup>[1]</sup>, Keyes A.<sup>[1]</sup>, Brunet K.T.<sup>[2]</sup>**

<sup>[1]</sup>*Tulane University ~ New Orleans, Louisiana ~ United States of America*, <sup>[2]</sup>*Children's Bureau of New Orleans ~ New Orleans, Louisiana ~ United States of America*

Early childhood mental health consultation (ECMHC) supports the healthy development of young children by working to improve the quality of teacher-child interactions and to promote

developmentally appropriate and healthy early childhood environments. The Tulane model of ECMHC has been successfully implemented across Louisiana in the United States for 10 years. This presentation will describe the Tulane model and identify how mental health consultation focused on the classroom as a whole impacts children with significant behavior concerns. Data were collected as part of a statewide evaluation of an ECMHC program. Data collected at baseline and six months later included measures of Emotional Support and the Classroom Organization (from the CLASS-PK). Teachers in randomly selected classrooms were asked to identify the three most challenging children in their room and to complete an expulsion risk measure and standardized measures of social emotional development. After 6 months of consultation, results suggest improvements in teacher-child interactions. In addition, even without individualized intervention, significant improvements were seen in the social and emotional development of children identified by their teachers as among the most challenging in the classroom. Their expulsion risk was also decreased. The implication of these findings on model development and policy will be discussed.

S07.4

#### **EARLY CHILDHOOD MENTAL HEALTH CONSULTATION IN THE CONTEXT OF A STATEWIDE EXPULSION PREVENTION SYSTEM**

**Edge N.C.\* , Kyzer A.**

*University of Arkansas for Medical Sciences ~ Little Rock, AR ~ United States of America*

Prior studies have demonstrated the effectiveness of Early Childhood Mental Health Consultation (ECMHC) to early care and education programs in decreasing challenging behavior in the classroom, and ECMHC has been recommended as an approach to reducing behavior related expulsions of children birth to five. Our objective is to explore the outcomes associated with implementation of ECMHC as part of a statewide expulsion prevention system in which the most complex and severe cases of children at risk for expulsion are referred for ECMHC. Descriptive study of a statewide expulsion prevention system for ECE providers offering three tiers of support: phone support, technical assistance focused on developmentally appropriate practice and mental health consultation. Data were gathered about 277 children and their caregivers referred in the first year of the program, including demographics, child and family history and teacher, classroom and child characteristics. We also obtained standardized measures of teacher-reported behavior concerns pre-and post- consultation, and tracked case outcomes (e.g. whether child remained in center, teacher satisfaction). Of the 277 referrals, 29.6% were triaged to receive ECMHC services based on a decision guide related to the complexity and severity of the case. Children ranged in age from 1 to 6 years of age ( $M=4.41$ ,  $SD=0.92$ ). Most were male (82%), and Caucasian (69%); Half (51%) of children referred were known to have experienced potentially traumatic events, including abuse or neglect, witnessing domestic violence, parental separation, etc. Teachers and parents were engaged in 3 months of child-specific ECMHC services. Results indicate that expulsion was avoided in 98% of the cases and teacher reports from a standardized measure of behavior indicate significant reductions in externalizing behavior concerns. ECMHC services can be an effective component of a statewide expulsion prevention system, preventing expulsion in even the most complex cases.

S07.5

#### **INFANT AND EARLY CHILDHOOD MENTAL HEALTH CONSULTATION (IECMHC) AS AN APPROACH TO REDUCING DISPARITIES IN CHILD OUTCOMES**

**Steier A.\*<sup>[1]</sup>, Shivers E.M.<sup>[2]</sup>**

*<sup>[1]</sup>Southwest Human Development ~ Phoenix, AZ ~ United States of America, <sup>[2]</sup>Indigo Cultural Center ~ Phoenix, AZ ~ United States of America*

Research suggests that boys and children of color are at increased risk for behavior related expulsions from early care and education (ECE) settings. Access to IECMHC is associated with reductions in both expulsions and classroom behavior problems, though existing research has not explored differential impacts by gender, race or ethnicity. Our objective is to examine whether IECMHC is effective at ameliorating disparities in the context of a statewide evaluation of IECMHC services. Data were collected at baseline and 6 months later from 1,028 children and their 799 caregivers who were receiving IECMHC services. Data included demographics, a measure of social-emotional development (Devereux Early Childhood Assessment, LeBuffe & Naglieri, 1999), the Student-Teacher Relationship Scale (Closeness and Conflict subscales; Pianta, 1992), Preschool Expulsion Risk Measure (Gilliam, 2010) and Teachers' Negative Attributions of Focus Child (adapted from Schecter et al., 2005). Analyses focused on evaluating change over time in child outcomes, including exploring interactions by gender and race/ethnicity. Of the 1,028 children, 74% were boys and the mean age was 42.5 months. About half (51%) were White, 25% Latino and 12% African-American. Teachers were 98% female, and a high school diploma was the highest education level for most (53.3%). The entire sample showed significant growth for all DECA scales and teacher closeness and significant declines in teacher-child conflict, negative attribution and expulsion risk. Interaction effects revealed that African American students had a greater increase DECA scores and greater reduction in conflict scores compared to White students. Latino students also made greater gains in social-emotional development, teacher-child relationship and expulsion risk compared to White students. Results from this study suggest that IECMHC may be an effective approach to reducing gender and racial/ethnic disparities in teacher perceptions of social-emotional development and classroom discipline practices.

#### **Symposium S10 - "PROTECT, NURTURE, AND ENJOY" (PNE): INDIVIDUALIZED INFANT MENTAL HEALTH TRAINING IN LOW TO MIDDLE INCOME COUNTRIES**

**Harrison A.\***

*Harvard Medical School ~ Cambridge, MA ~ United States of America*

##### Joint Abstract

The symposium will present infant mental health training for caregivers of infants and parents in Low to Middle Income Countries (LMICs) created through a collaboration of international consultants and local institutions. Teams from India, China, Peru, and Grenada are represented. To create individualized infant mental health training in LMIC. An intensive mini-course in infant mental health (Protect, Nurture, Enjoy) consisting of lecture, videotape illustrations, clinical demonstration, and an accompanying study guide with online video, has been taught in four LMICs. A study has begun to test the performance of 45 PNE-trained Indian nurses in their interaction with mothers, compared with a control group that has not received PNE training. Assessments of effectiveness of the PNE are derived from questionnaires given to the mothers and nurses in both groups. Similar studies are being planned in Peru and Grenada, and a qualitative study of the need for PNE has been done in China. The basic module of PNE training was modified to accommodate the individual interests and needs of institutions in four LMICs. A group from each site will describe the process of individualizing the PNE and will present qualitative and quantitative data from assessments of the effectiveness of the training. Each group will also address means for establishing the sustainability of the training in their site. The symposium will present the PNE, infant mental health training, in India, Peru, Grenada, and China. International panel members representing these countries and a US-based nonprofit describe their experience with the PNE and present data assessing the effectiveness of the intervention.

S10.2

### **"PROTECT, NURTURE, AND ENJOY" (PNE) IN GRENADA**

**Solomon J.<sup>[1]</sup>, Honigman R.\*<sup>[2]</sup>**

<sup>[1]</sup>*St. George's University ~ St. George ~ Grenada*, <sup>[2]</sup>*reachwithin ~ New York City ~ United States of America*

Grenada is a Low-Medium Income Country (LMIC) in the Caribbean whose population suffers from multiple ACEs, including high unemployment and a high rate of births to single mothers. The impoverished population was further stressed by Hurricane Ivan in 2004. In collaboration with Reach Within, a nonprofit serving Grenada's children, the PNE was given to 35 nursing students in August, 2017. Qualitative and quantitative data regarding the effectiveness of the training will be presented. The collaboration with Reach Within was essential in facilitating the connection to the Nursing School at St George's University. The PNE was given to a class of 35 nursing students at SGU in a 3-day course. The NBO was performed on 5 mothers and infants, each NBO observed by a group of 7 students. NBO's were videotaped and shown to the class during the lectures. Assessment of the effectiveness of the PNE was obtained by questionnaires given to the participants before and after the training, and a course evaluation was given to the students at the end of the course. The pre and post questionnaires demonstrated that the students gained knowledge from the PNE in multiple areas. Class discussions and course evaluations revealed an increased awareness of the desirability of involving fathers in the life of the child from birth, the nurse's role in identifying post partum depression, and the need for support after the mother and infant return home from the hospital. Collaboration with other NGO's can significantly increase the success of initiating infant mental health training program in an LMIC. The first PNE course in Grenada resulted in greater knowledge and generated interest in further developing infant mental health training in Grenada.

S10.3

### **"PROTECT, NURTURE, AND ENJOY" (PNE) IN PERU**

**Traverso Koroleff M.P.\***

*Pontificia Universidad Católica del Perú ~ Lima ~ Peru*

Peru is a Low-Medium Income Country in transition, with increasing standards in education and public health. Training and education in infant mental health lags behind other health standards, The PNE was offered in Lima at two sites. Qualitative and quantitative data regarding the effectiveness of the training will be presented. The PNE training was given to health providers at a large state maternity hospital and at a nonprofit organization, 29 and 26 participants respectively. Adaptions of the PNE were made at both sites to accommodate the needs and requirements of each institution, particularly regarding time allowed for educational purposes. At the hospital, participants were given the training in two half-days. At the NGO, the participants were given the training in one full day. Study guides translated into Spanish and an online video were given to both groups. Assessment of the effectiveness of the PNE was obtained by questionnaires given to the participants before and after the training. In both sites differences in the pre- and post PNE questionnaires, demonstrated learning. Anomalous findings seemed either to reflect cultural factors or possible problems in the translation of the questionnaires. Participants were enthusiastic about the demonstrations of the NBO, which provided "experiential learning" about the infant-caregiver relationship and potential tools for their clinical work. An initial PNE training may be the first step in building a culture of infant mental health in an institution. Accommodating to the expressed needs of the institution for a short training with a video supplement was necessary to motivate further interest. The next step may be more training with the option of certification in one of several clinical interventions, including the NBO.

S10.4

**"PROTECT, NURTURE, AND ENJOY" (PNE) IN INDIA**

**Lyall N.\***

*Christian Hospital of Kasganj ~ Kasganj ~ India*

I will present the PNE training in Kasganj, a collaboration of the Christian Hospital of Kasganj, and Supporting Child Caregivers. I will then, present qualitative and quantitative data from an assessment of the PNE as a tool for teaching nursing students methods of supporting the infant-parent relationship. An intensive mini-course in infant mental health (PNE) consisting of lectures on child development with videotape illustrations was piloted at the CHK in September, 2015, and has since been taught to two sequential classes of nursing students. Important changes made in the PNE as a result of the pilot training include the introduction of the Newborn Behavioral Observation (NBO) method of facilitating the bond of parents to their new infant, interviews of the parents to demonstrate the influence of the parents' past experience on their transition into parenthood, an online video of the lectures, and the use of skits by the students to assess the knowledge gained from the PNE. A controlled study to assess the performance of 45 PNE-trained Indian nurses in their interaction with mothers, compared with a control group that has not received PNE training will begin in December, 2017. Assessments of the effectiveness of the PNE will be derived from questionnaires given to the mothers and nurses in both groups. Preliminary results from the study of the PNE will be available in May, 2018 and will be presented in the symposium. The development of an infant mental health training (PNE) for the nursing school of the Christian Hospital of Kasganj and preliminary results of a controlled study assessing the effectiveness of the PNE are presented.

S10.5

**PRELIMINARY ASSESSMENT OF CHINESE MEDICAL PROFESSIONAL'S UNDERSTANDING OF INFANT MENTAL HEALTH**

**Qian C.\***

*Stanford University ~ Stanford ~ United States of America*

A study was initiated to assess whether a knowledge gap in infant mental health exists among a group of current medical professionals in China. The pre-test of the intensive mini-course in infant mental health (PNE) was administered to 29 participants in a county-level city in Anhui, China. Participants were doctors and nurses in obstetrics and gynecology and pediatrics in a women's hospital and a general hospital. The pre-test of the "Protect, Nurture, and Enjoy" mini-course includes questions about the science of early childhood, adverse childhood experience (ACE), postpartum depression, and the caregiving relationship. Doctors and nurses were presented with the questionnaire during lunch breaks, were told that the anonymous surveys were to assess where future professional development subjects may be needed and that their answers had no implications on their job performance. Preliminary results show that current medical professionals have good understanding of potential adverse childhood events and prenatal and neonatal development. Medical professionals had moderate confusion about the impact of nature versus nurture on developmental characteristics and outcomes (i.e. health problems, temperament), had misunderstandings about postpartum depression and had limited understanding of neuroscience and psychological theories (i.e. attachment theory and mutual regulation theory). This preliminary study suggests that a current knowledge gap in infant mental health may be present in Chinese medical professional's understanding of infant mental health. Future work will be necessary to continue quantifying the knowledge gap in Chinese medical professionals understanding of infant

mental health, to understand where infant mental health training may be needed, and to engage interest in infant mental health in these professional communities.

## **Symposium S16 - INFANT MENTAL HEALTH IN FOSTER/ADOPTIVE FAMILIES: INFANT DEVELOPMENT, PARENT PERSPECTIVES, AND CLINICAL CONSIDERATIONS**

**Waterman J.\***

*UCLA TIES for Families ~ Los Angeles ~ United States of America*

In the United States, infants who are removed from their birth parents by child protective services (mostly as a result of parental substance use) often participate in a “concurrent planning” process, where they are placed with foster/resource families who are available to provide permanency to them through adoption if reunification services provided to the birth family are not successful. In this symposium, we provide an overview of concurrent planning, including benefits to the children and conflicts for birth and resource parents, and then present three talks on topics relating to this high-risk population. First, we present data on foster infants’ cognitive, language, motor and social-emotional development at both 2 and 12 months post-placement. While the children had many biological and environmental risk factors, they were generally typically developing in their foster/adoptive homes. Mean scores were in the average range, with language scores lower at 2 months post-placement but improving significantly by 12 months post-placement. Second, we discuss concerns for the foster/adoptive parents, elucidating their feelings about concurrent planning, their own parenting and attachment, the child’s attachment, development and behavior, predicting to parenting stress and placement satisfaction. Strikingly, those parents for whom placement stability has not been determined by 12 months post-placement have significantly more concerns about their parenting and attachment, the child’s attachment, behavior, and development than those for whom concurrent planning issues have resolved by that time. Third, we describe the UCLA TIES for Families Infant Mental Health program begun in 2004 to promote positive outcomes among these families. We discuss the following program elements, with clinical examples: intake home visiting; ongoing home visitation utilizing parent-infant psychotherapy; interdisciplinary developmental assessments; and parent-infant support groups. We conclude with recommendations for both before the child is placed and during the placement to help infants and families experiencing concurrent planning.

S16.2

### **RISK AND DEVELOPMENT AMONG INFANTS ADOPTED FROM FOSTER CARE**

**Lavner J.\*<sup>[1]</sup>, Tung I.<sup>[2]</sup>, Christian--Brandt A.<sup>[3]</sup>, Waterman J.<sup>[4]</sup>**

*<sup>[1]</sup>University of Georgia ~ Georgia ~ United States of America, <sup>[2]</sup>UCLA ~ Los Angeles ~ United States of America, <sup>[3]</sup>Pacific University Oregon ~ Oregon ~ United States of America, <sup>[4]</sup>UCLA TIES for Families ~ Los Angeles ~ United States of America*

Infants detained from their biological parents and placed in foster care often have risk factors such as prenatal exposure to substances, leading to concerns among some prospective adoptive parents about how these children will fare over time. The current study aimed to examine development among a high-risk sample of 91 infants transitioning into adoption from foster care, using data from 2 months post-placement and 12 months post-placement. Data was gathered from infants’ charts and from developmental assessments with the Bayley Scales of Infant and Toddler Development-III (Bayley, 2006). Infants had many risk factors at birth, including prematurity (30%), prenatal drug exposure in utero (80%), a positive toxicology screen at birth (75%), and birth complications (50%). Mean age at detention was 5.35 weeks and mean age placed in their current foster-adoptive home was 20 weeks. Infants averaged more than 1 placement on average (Range: 1-4), with 22% having

lived with their birth parents at some point. Despite these risk factors, infants performed within the normative range on the Bayley-III. Mean scores at baseline were all in the Average range (T1: Cognitive = 100, Language = 88, Motor = 91, Social-Emotional = 97), as were scores at 12-month follow-up (T2: Cognitive = 100, Language, Mean = 96, Motor = 92, Social-Emotional = 98). Language scores showed a significant increase over time,  $p = .002$ . Associations between pre-placement risk factors and developmental outcomes were inconsistent, with most showing no significant association. The most notable exception to this general pattern was birth complications, which were associated with lower Cognitive, Language, and Motor development at T1, but not at T2. Infants placed into foster-adoptive placements show typical development over the first year post-placement. Adoption may significantly buffer pre-placement risk on developmental outcomes for high-risk infants.

S16.3

### **EXPERIENCES OF CONCURRENT PLANNING AND PARENTING AMONG FOSTER PARENTS WISHING TO ADOPT**

**Nadeem E.\*<sup>[1]</sup>, Blake A.<sup>[2]</sup>, Langley A.<sup>[2]</sup>, Waterman J.<sup>[2]</sup>**

*<sup>[1]</sup>Yeshiva University ~ New York ~ United States of America, <sup>[2]</sup>UCLA TIES for Families ~ Los Angeles ~ United States of America*

Concurrent planning provides benefits to foster children but also includes challenges for resource parents interested in adopting these children, raising important questions about their experiences. This short-term longitudinal study aimed to understand resource parents' feelings about concurrent planning, their own parenting and attachment, and the child's attachment in relation to parenting stress and overall placement satisfaction at 2 and 12 months post-placement. Participants were 105 primary caregivers who were 41.26 years old on average; women comprised 62% of the sample. Caregivers were 41% White, 12% Black, 18% Latino, and 4% Asian (the rest were mostly mixed ethnicity). Fifty-nine percent of families were experiencing birth parent visitation. Children were 4.9 months (range 0 to 24 months) at placement, 54% were male, and 80% had experienced prenatal substance exposure. About 84% were children of color, and 27% of placements were transracial. Child risk factors and development were included as possible factors related to parental experiences. Paired sample t-tests revealed that resource parents reported feeling better overall about the resource parent/adoption process, stronger attachment from their child, and better interactions with the child welfare agency at 12-months post placement compared to 2 months post-placement. Resource parents with higher concerns over legal issues and child welfare involvement a year after placement had significantly greater parenting stress and more concerns about their parenting and attachment, and the child's attachment, behavior and development. Child characteristics and pre-placement risk factors were not related to parents' perceptions of the overall process, the child's behavior, or their attachment experiences. Issues relating to concurrent planning were powerful predictors of parents' functioning 12-months post-placement, calling for additional resources pre- and post-placement to help these families in order to promote infant mental health.

S16.4

### **UCLA TIES FOR FAMILIES INFANT MENTAL HEALTH PROGRAM**

**Waterman J.\*, Lippincott C., Langley A.**

*UCLA TIES for Families ~ Los Angeles ~ United States of America*

This presentation describes the four components of the UCLA TIES for Families Infant Mental Health (IMH) program, which began in 2004 when infant referrals increased due to concurrent planning.

This community program serves infants in foster care and their resource parents. The IMH program has four components: (1) Intake home visiting. Intakes are conducted in the home, with aims of understanding parental concerns, assessing reflective capacity of the resource parent(s), and conducting developmental screening of the infant. (2) Ongoing home visitation. If the infant and/or resource family are experiencing significant emotional distress or behavioral issues, regular home visitation services utilizing parent-infant psychotherapy are instituted. Areas covered include child behavioral and developmental concerns, parent-child attachment, and legal uncertainty. (3) Interdisciplinary developmental assessments. Assessment with the Bayley Scales of Infant Development is carried out at 2 and 12 months post-placement to identify needs for early intervention. Experts from pediatrics and speech pathology participate as needed. (4) Parent-infant support groups. Families can participate for up to 2 years in monthly support groups, which include topics such as talking with your child about adoption, prenatal substance exposure, feeding problems, etc., as well as parental sharing and support about issues involving parental distress, child care, and the legal systems. In addition, parents who are grieving because an infant has returned to the birth family can participate in our LIFT (Loss Intervention for Families in Transition) group to help process their grief and hopefully feel ready to accept another foster placement. Clinical examples will be provided.

#### **Workshop WS34 - PRACTICAL STRATEGIES AND ACTIVITIES FOR SUPPORTING RESPONSIVE PARENTING IN HIGH RISK SETTINGS**

**Rochat T.\*<sup>[1]</sup>, Rozentals--Thresher R.<sup>[2]</sup>**

*<sup>[1]</sup>Human Sciences Research Council ~ Durban ~ South Africa, <sup>[2]</sup>Dlalanathi ~ Pietermaritzburg ~ South Africa*

There is overwhelming scientific evidence that the parent-child relationship is critical to children's development. In Sub-Saharan Africa young children and their parents face a myriad of risks as a result of poverty, violence and disease. In-home activity support is critical to ensure parents are able to provide a nurturing, stimulating and supportive care environment for children throughout childhood. The interventions demonstrated in this workshop address this need directly using simple, user-friendly material for mothers and implementers, which ensure fidelity and provide skills transference to mothers and can be implemented at a large scale, within existing mainstream public systems of care. The facilitators, Tamsen Rochat and Rachel Rozentals-Thresher, have over a decade of experience developing practical, successful in-home support parenting programmes suited to high risk environments and parenting under difficult circumstances. Tamsen is a Chief Research Specialist at the Human Sciences Research Council, a ZERO TO THREE Fellow, and Associate Professor in the Department of Pediatrics at the University of the Witwatersrand. Her intervention work has been published in high impact publications such as PLOS Medicine, AIDS, Social Science & Medicine and Lancet HIV. Rachel, who has collaborated on many of these interventions, is an early child development and parenting expert and leads Dlalanathi, a non-profit organisation which provides psychosocial support for children through play by training and supporting caregivers delivered through community platforms. This interactive workshop will demonstrate activities used in three successful interventions: Ibhayi Lengane, Play for Communication and Amagugu. We illustrate how a relationship-based framework can guide all aspects of intervention design and implementation, and how simple everyday tools (a baby's blankets, homemade toys and parent-child led play and communication activities) can ensure that parents are strengthened in their capacity to care for children and can continue to do so long after home visitation has ceased. In this workshop Tamsen and Rachel will share practical skills, examples and activities which have been successfully developed and tested with high risk South African families to support responsive caregiving.

## **Symposium S22 - PARENTING RISK AND PROTECTIVE FACTORS IN RELATION TO CHILD OUTCOMES IN SOUTH AMERICA**

**Boyce L.\*<sup>[1]</sup>, Farkas C.<sup>[2]</sup>**

*<sup>[1]</sup>Utah State University ~ Logan, Utah ~ United States of America, <sup>[2]</sup>Psychology School, Pontificia Universidad Católica de Chile ~ Santiago ~ Chile*

Much of the research in Latin American countries has focused on environmental or health factors as determinants of children's social, language, and cognitive development with little emphasis on parenting behaviors. A review of early childhood interventions in low-income and middle-income countries indicates that parenting interventions can improve children's cognitive and social-emotional development. Greater effects were found for programs of higher quality and those serving higher risk children. However, the authors of this same review note that there has not been enough research in specific countries to establish best approaches for intervention (Engle et al, 2011). The proposed symposium will begin to fill this gap in the research literature by presenting papers from Chile, Argentina, and Ecuador that focus on family and parenting predictors of children's outcomes. First, the role of maternal sensitivity and responsive parental style in relation to developmental delays will be discussed in one sample of infants from Chile. Second, the strength of maternal sensitivity as a predictor of 12-15 month old infants' language development one year later after controlling for maternal education and SES will be discussed in a second sample of infants and toddlers from Chile. Third, the Argentine Scale of Sensory Motor Intelligence (EAIS) will be discussed in relation to its sensitivity to identify developmental delays and its association with environmental and biological risk factors in 956 Argentina infant and toddlers. Finally, the role of parenting stress, maternal education, maternal frequency of singing and telling stories, and toddlers' daily intake of fruits and vegetables in relation to cognitive development in a sample of toddlers from Ecuador will be discussed. The symposium discussant will provide a context for current research in South America and the parenting data presented. Implications for developing and implementing parenting interventions specific to community contexts within these countries will be discussed.

### **S22.2**

#### **LANGUAGE DEVELOPMENT OF CHILEAN INFANTS AND TODDLERS AND ITS RELATIONSHIP WITH MOTHERS' SENSITIVITY, EDUCATIONAL LEVEL, AND FAMILY SES**

**Farkas C.\*, Strasser K., Santelices M.P.**

*Psychology School, Pontificia Universidad Católica de Chile ~ Santiago ~ Chile*

A large body of evidence shows that the quality of mother-child interactions, considering sensitivity and responsiveness, during the first years of children's life has a relevant influence on the quality of children's attachment (e.g. Bakermans-Kranenburg et al., 2003), but also this competence is relevant for children's language development. Language is a fundamental skill and its development is related with children social emotional and cognitive development, academic success and future life (e.g. Mashburn et al., 2008). Besides, in South American countries like Chile, family SES and mothers' educational level has shown a very significant impact on children's language (Farkas & Corthorn, 2012). Language scale from Bayley III (Bayley, 2006) was administered to children. A sociodemographic questionnaire and Adult Sensitivity Scale (E.S.A., Santelices et al., 2012) were administered to mothers. Participants were 91 mother-child dyads of different SES, with typically developing children attending childcare centers. Data were collected when children were 10-15 months (T1) and 28-33 months (T2). Mothers' sensitivity was related with children's language at T1 ( $r=.275^{**}$  for expressive language,  $r=.210^*$  total language) and more strongly at T2 ( $r=.294^{**}$

receptive language,  $r=.376^{**}$  expressive language,  $r=.363^{**}$  total language). Additionally, maternal educational level and SES were positively related with children's language at T1 and T2. A regression analyses showed that children language, mothers' educational level and sensitivity at T1 predict a 31.9% of child's language variance at T2, where mothers' sensitivity was the strongest predictor ( $\beta=.292^{**}$ ), after the other variables were controlled. Mothers' sensitivity is relevant for children language and its influence increases when children grow. Implications for policy and future research directions are discussed.

S22.3

### **INFANT DEVELOPMENT: ASSOCIATION WITH MATERNAL SENSITIVITY, PARENTING STYLES AND POSTPARTUM DEPRESSIVE SYMPTOMS**

**Binda V.\*<sup>[1]</sup>, Figueroa F.<sup>[1]</sup>, Olhaberry M.<sup>[2]</sup>**

<sup>[1]</sup>*Pontificia Universidad Católica de Chile, Department of Family Medicine, Faculty of Medicine. ~ Santiago ~ Chile,* <sup>[2]</sup>*Pontificia Universidad Católica de Chile, School of Psychology ~ Santiago ~ Chile*

Untreated developmental problems may have significant negative impact on individuals and have economic and social impact on whole society (Tough et al., 2008). The quality of early parent-child relationships have an influence on later child development (NICHD Early Child Care Research Network, 2005). However, there is scarce information about mechanisms of this effect (L.E Malmberg et al., 2016), specifically the relationship between parental style and problems in infant development. The current study assesses the association between infant development (Ages & Stages Questionnaire) with maternal sensitivity, parenting styles (CARE Index) and postpartum depressive symptoms (Edinburgh Postnatal Depression Scale). Near a quarter (21,8%, N= 39) of infants presented risk of developmental delay, this group showed lower scores of maternal sensitivity than those who didn't have risk of developmental delay ( $p= 0.04$ ), in addition to higher scores in maternal unresponsiveness ( $p = 0.02$ ) and passivity in the child ( $p = 0.04$ ). No association was observed between the presence of postpartum depressive symptoms and risk of developmental delay ( $p = 0.36$ ). These results suggest that mother - child interactions with low sensitivity, and specifically those with unresponsive parental style are associated with developmental delay, independent of the presence of depressive symptoms in the mother. These findings are important to consider for early interventions for children with risk of developmental delay, which should address the mother infant relationship to improve long term outcomes in children.

S22.4

### **COGNITIVE DEVELOPMENT DURING EARLY CHILDHOOD: INFLUENCE OF BIOLOGICAL AND SOCIO-ENVIRONMENTAL FACTORS**

**Oiberman A.\*, Paolini C.I.**

*The Interdisciplinary Center of Mathematical and Experimental Psychology Research, "Dr. Horacio J. A. Rimoldi" & The National Scientific and Technical Research Council ~ Buenos Aires ~ Argentina*

The periodic evaluation of development in cognition, motor skills, language and social behavior is a contribution in the early detection of risks. Some biological and environmental risk factors increases the probability of deficits in a child's development. The greater the number of risk factors to which a child is exposed, the greater the possibility of compromise in their development. The importance of biological and environmental risk factors for child development has already been widely studied, in populations at risk, however, relatively little has been studied in the population of healthy, term-born children. We administered the Argentine Scale of sensory motor intelligence (EAIS) to 956 Argentinean children from 6 to 30 month old, healthy, born at term, with normal birth weight. The EAIS is the first Argentinean scale that allows early detection of cognitive delays in children. We

observed that the infant's age older than 15 months old, is associated to risk level in cognitive development. Infants with gestational age less than 39 weeks gestations obtained higher frequencies of delay in cognitive development. Children of 37 weeks of gestation were the most affected in cognitive development. Younger mothers tended to be associated with cognitive development delay in their children. And finally, having an unemployed father or lack of support from child father and mother's family was associated to delay in cognitive development. We highlight the importance of the periodic development evaluation even during the second year old of life in healthy infants and we propose to rethink the cognitive development features and the evaluation in infants, born at 37 and 38 gestational weeks. We consider environmental risk factors are indicators of socioeconomic status.

S22.5

### **PREDICTORS OF TODDLER COGNITIVE DEVELOPMENT IN ECUADOR: PARENTING STRESS, MATERNAL EDUCATION, AND NUTRITION**

**Boyce L.\*<sup>[1]</sup>, Ortiz E.<sup>[1]</sup>, Santos M.<sup>[2]</sup>, Vasconez Rivera I.<sup>[2]</sup>, Chavez M.D.L.A.<sup>[2]</sup>, De La Cadena Saenz Y.<sup>[2]</sup>, Alvarez Roman L.<sup>[2]</sup>, Cayetano Carvajal S.<sup>[2]</sup>**

*<sup>[1]</sup>Utah State University ~ Logan, Utah ~ United States of America, <sup>[2]</sup>Universidad Case Grande ~ Guayaquil ~ Ecuador*

The relations among preschoolers' cognitive development, socio-economic status, child health, and parenting quality in Ecuador has been studied (Handal, Lozoff, Breilh & Harlow, 2007; Paxson & Schady, 2007). However, research is needed with toddlers and parental mental health to better address questions of early predictors of child cognitive outcomes. This study examines health, mental health and caregiving practices that influence cognitive development of toddlers in Ecuador to inform efforts to develop targeted interventions to reduce the risk of negative child outcomes. The sample included 100 families of toddlers who were approximately 18 months old. The primary sources of data used in this study include the Multiple Indicator Cluster Survey (United Nations Children's Fund, 2006), The Parenting Stress Index Short Form (PSI-F; Abidin, 1995) and the Bayley Scales of Infant Development-III (BSID-III: Bayley, 2006). A multiple regression model was tested to examine predictors of toddler cognitive development. The family factors of maternal education, whether she wanted to be pregnant, maternal parenting stress, the daily quantity of fruit and vegetables the child received; caregiving practices of the amount of time the mother spent singing and telling the child stories and child gender were all entered into the regression model. The results indicate that the predictors explained 26% of the variance ( $R^2 = .26$ ,  $F(6, 89) = 5.07$ ,  $p < .000$ ). Quantity of fruits and vegetables ( $\beta = -.33$ ,  $t = 3.52$ ,  $p = .00$ ), maternal education ( $\beta = -.25$ ,  $t = 2.55$ ,  $p = .01$ ), and parenting stress ( $\beta = -.21$ ,  $t = 2.18$ ,  $p = .03$ ) were statistically significant predictors. The negative association in the model between maternal education and cognitive development is surprising. Parenting interventions should continue to focus on both nature and nurture as both nutrition and parenting stress seem to be critical factors for toddler cognitive development.

## **Symposium S24 - LAY PRACTITIONERS REACHING INFANTS AND PARENTS WHO ARE HARD TO REACH, WITH THE NBO (NEWBORN BEHAVIORAL OBSERVATIONS)**

**Nicolson S.\*<sup>[1]</sup>, Nugent J. Kevin<sup>[2]</sup>**

*<sup>[1]</sup>Royal Women's Hospital ~ Melbourne ~ Australia, <sup>[2]</sup>Boston Children's Hospital ~ Boston ~ United States of America*

This symposium will present and debate groundbreaking work of lay practitioners using the NBO (Newborn Behavioral Observations) in three global settings. Pilot data, videos and case studies and will be presented of their perinatal work to build fragile trust, honour culture and promote Infant Mental Health universals of parental reflection about the baby, interpretation of newborn observations in the first three months in terms of infant regulation and care-giving needs, and sensitive responsiveness to the baby in Aboriginal community services in Australia, in a homeless family project in Boston USA, and at Ububele Psychotherapy Trust in Alexandra, South Africa. Approaches to NBO training and ongoing supervision of lay practitioners will be discussed that have been developed to build lay practitioners' infant mental health expertise and reflective skills while working in extremely challenging circumstances to provide sustainable, culturally-safe and baby-led care. The possibilities and challenges for the future will be debated.

S24.2

### **LAY PRACTITIONERS ENGAGING FAMILIES IN ALEXANDRA TOWNSHIP: TRAINING IN THE NBO, REFLECTIVE SUPERVISION AND IMPACT**

**Dawson N.\*, Frost K.**

*Ububele Educational and Psychotherapy Trust ~ Johannesburg ~ South Africa*

This oral presentation will speak to the use of the NBO in Alexandra township, Johannesburg. Historically, the NBO has primarily been utilised by trained health professionals in North America, Western Europe and Australasia. This paper will speak to the first training of African lay practitioners, at the Ububele Educational and Psychotherapy trust in South Africa. In addition to local professionals, the NBO team at Ububele comprises of Pedi, Zulu, Venda and Xhosa mothers who live in the vibrant but turbulent setting of Alexandra Township. In this setting, the role of local, lay practitioners is critical for the provision of appropriate, accessible infant mental health services due to the high level of mental health needs, the low numbers of health professionals (particularly in community settings) and the great cultural diversity. The paper will look specifically at the success of the initiative as an entrée to broader infant mental health support and the model of reflective supervision utilized to ensure competence, fidelity and reflective practice, while also reflecting on the broader implications for utilizing the NBO in culturally diverse settings

S24.3

### **THE HORIZONS PROJECT: BUILDING FUTURES FOR HOMELESS CHILDREN**

**Kennedy W.\***

*Horizons for Homeless Children ~ Boston ~ United States of America*

This oral presentation aims to outline and discuss the innovative approach and initial findings of a project at Horizons for Homeless Children in Boston to train and embed the NBO in the family support work of lay practitioners who themselves experienced homelessness. This oral presentation will outline the approach and initial findings of the current project at Horizons for Homeless Children. The project goal is to examine the effectiveness of the Newborn Behavioral Observations (NBO) system as a strength-based intervention designed to enhance maternal sensitivity and confidence by supporting the parent-infant relationship from the beginning, in this challenging setting. One of the core assumptions behind the study is that the NBO, in the hands of well trained,

well supported lay practitioners, who themselves have a shared experience of homelessness in their past, has the potential to build a trust with parent/caregiver, because of their shared experiences, as they work to support infant mental health in a way that feels safe, manageable and rewarding against the background of trauma. This work is important, given that on any given day in Massachusetts, in the United States, 13,000 people are experiencing family homelessness. Sixty percent of those are children. A newborn's secure attachment relies on parental sensitivity and consistent availability. However, the trauma and toxic stress of homelessness can adversely affect parent/caregiver's capacity to respond to their babies, resulting in negative effects on attachment, and the need for intervention from outside supports who must first establish a trusting relationship.

S24.4

**WONDER WORDS: ANTENATAL YARNING EXPANDING CURIOSITY-RICH COMMUNICATION WITH ABORIGINAL PARENTS AND THEIR CHILDREN**

**Crouch K.\***

*Mallee District Aboriginal Services; Loddon Mallee Action Research Group ~ Mildura ~ Australia*

This brief oral presentation will detail preliminary qualitative data from clinical cases and professional practice reviews following the introduction of yarning and mentalising provisions in the peri-natal period for vulnerable Aboriginal parents in regional Australia. The presentation will explain how innovative, baby-led yarning experiences, which begin before birth and continue into their first year of life, are subtly shaping professional practice, culturally-safer service delivery and healing support in the Early Years Service for Loddon Mallee communities in Victoria. Yarning and narrative traditions are central to Aboriginal Australia. Telling stories and having mindful conversations in safe places assist wisdom sharing, shaping behaviour and building relationships. In Early Years Services, traditional safe practices are being harnessed to improve contemporary health care for vulnerable parents and their babies. A Community-developed antenatal yarning resource 'Wondering From The Womb' is offered to families in the antenatal period to begin the process of mindful curiosity regarding the unborn child. With 'Ghosts in the Nursery' being gently explored through yarning about their unborn child, Aboriginal parents are supported to consider baby-led approaches to their own development. Post-natally, this yarning extends to incorporate the Newborn Behavioural Observations (NBO) experience, revealing that babies can share wisdom with their caregivers and that babies are active forces for change and healing in their family.

S24.5

**DEVELOPING NBO TRAINING FOR LAY PRACTITIONERS; PRACTICE AND POTENTIAL**

**Nicolson S.\*, Paul C., Newman L.**

*Royal Women's Hospital ~ Melbourne ~ Australia*

This presentation aims to describe and discuss the provision of the first trainings in the NBO to lay Aboriginal family workers in Northern Victoria, Australia, and in Alexandra Township in Johannesburg, South Africa, from 2015-2018. The Newborn Behavioural Observations (NBO) has been adapted to form part of the suite of interventions provided by lay family practitioners in two culturally diverse communities experiencing profound intergenerational stress. Adaptations were made to the regular NBO training and there were some learning methods that made a positive difference, whilst others seem less useful. The family practitioners had limited training in infant mental health and there were concerns that arose and that will inform future training and supervision of lay practitioners. These examples of NBO training will be used to prompt debate about approaches to building the practice and potential of lay practitioners. The training aims to foster deep understanding of infant mental health principles among lay practitioners, which might

then inform an otherwise unfeasible intervention for to families in poorly-resourced global settings.

## **Symposium S25 - THE NEED FOR AND CHALLENGE OF A RELATIONSHIP FOCUS IN THE NEONATAL INTENSIVE CARE UNIT**

**Duffy N.\***

*Royal Women's Hospital ~ Melbourne ~ Australia*

The birth of a preterm infant requiring admission to a neonatal intensive care unit (NICU) represents a major-life changing crisis for the family. The NICU admission presents many obstacles for adapting successfully to parenthood and forming a relationship with the infant that best promotes development. Family-centred care has been designed to counteract some of the adverse effects of the NICU experience on both parents and infants. The Newborn Behavioural Observations (NBO) system is a family-centred, clinical tool designed to sensitize parents to their infant's capacities and individuality and to enhance the parent-infant relationship by strengthening parents' connection to their baby in the perinatal period. This symposium brings together work from around the world using the NBO with high-risk infants, their families and the staff caring for them. We have explored the use of the NBO as a means of enhancing knowledge of how to care for vulnerable infants, reducing parental stress and anxiety and strengthening the infant-parent bond in preparation for discharge home. Each contributor focuses on different aspects of the NICU journey: the ward round, bedside care, discharge planning and early intervention community services. We hope this research will contribute to the growing body of evidence in optimising long-term outcomes for infants and parents. This symposium will include video demonstrations of using the NBO with high-risk infants and their families. It will showcase the NBO as a developmentally appropriate, family-centred resource, which can be used with ease in the NICU environment and beyond.

S25.2

### **INTRODUCING A RELATIONSHIP-BASED TOOL WITH HIGH-RISK INFANTS AND THEIR FAMILIES IN NEONATAL INTENSIVE CARE TO REDUCE PARENTAL STRESS AND PREPARE FOR HOME**

**Duffy N.\*<sup>[1]</sup>, Nicolson S.<sup>[1]</sup>, Jacobs S.<sup>[1]</sup>, Paul C.<sup>[2]</sup>**

*<sup>[1]</sup>Royal Women's Hospital ~ Melbourne ~ Australia, <sup>[2]</sup>Royal Children's Hospital ~ Melbourne ~ Australia*

The birth of a preterm infant requiring admission to a neonatal intensive care unit (NICU) represents a major-life changing crisis for the family. The NICU admission presents many obstacles for adapting successfully to parenthood and forming a relationship with the infant that best promotes development. Family-centred care has been designed to counteract some of the adverse effects of the NICU experience on both parents and infants. The Newborn Behavioural Observations (NBO) system is a family-centred, clinical tool designed to sensitize parents to their infant's capacities and individuality and to enhance the parent-infant relationship by strengthening parents' connection to their baby in the perinatal period. Aim: To determine the feasibility of using the Newborn Behavioral Observations (NBO) system in the preterm population as a means of reducing parental stress and preparing families for discharge home. Methods: Pilot study of preterm infants (born less than 37 weeks gestation) and their families using sequential video-recorded NBO sessions in the weeks leading up to discharge from a single-centre tertiary neonatal intensive care unit (NICU). Demographic data, baseline scores of parental stress and anxiety and feedback on the NBO sessions were collated. A senior member of NBO Australia team along with the principal researcher reviewed the videos to allow reflection on the NBO's place in NICU from the clinician's viewpoint. Results: Seven parent-infant dyads were enrolled into the study (3 singleton pregnancies and 2 twin pregnancies). Each dyad participated in at least 2 sessions. Infants were able to participate fully in

each session; with no sessions being ceased prematurely secondary to infant instability. All parents provided positive feedback on the NBO's ability to increase knowledge about their infants' behaviour. The principal researcher noted the success of the NBO in forging a therapeutic alliance between infant parent and clinician, in which all three participants had an equal "voice". Conclusions: The NBO is a developmentally appropriate, family-centred resource, which can be used with ease in the NICU environment with preterm infants. Families and staff benefit greatly from this simple neurobehavioural tool and find its positivity a welcome break from the confronting environment of NICU.

S25.3

### **FEASIBILITY AND ACCEPTABILITY OF AN ADAPTED VERSION OF THE NBO TRAINING AND SUPERVISION MODEL IN A NICU IN A NORWEGIAN HOSPITAL**

**Slinning K.\*, Tranaas U., Haga S.M., Lisoy C., Oroug Larsen B., Lee Solevag A.**

*Regional centre for child and adolescent mental health ~ Oslo ~ Norway*

Infant- and family-centred care should be the standard in all NICUs. However, relatively few healthcare professionals in Norway working in NICUs are formally trained in Individualized developmental care or have sufficient training to support parent-infant bonding. This ongoing project examines (1) the acceptability and feasibility of an adapted version of the Newborn Behavior Observations (NBO) system in a NICU in a Norwegian hospital, (2) training outcomes on enhancement of nurses' observational skills of premature infants' behavior, and (3) parental satisfaction with nurse support and supervision. Twenty-five nurses were selected by their leader to join the first group in the unit to undergo training and supervision in this individualized and relationship-based approach. Methods: Data on nurses' work experience and readiness, and changeable measures like intention, attitudes, knowledge, and clinical competencies in infant observation and supporting the parent-infant relationship were collected by use of questionnaires, video materials and focus group interviews before and after NBO training. Two groups of parents, one pre- and one post-NBO training, were interviewed individually and they completed questionnaires about their satisfaction with support and supervision during their stay in the NICU with their premature infant. Results: We will report on the feasibility of the NICU adapted version of NBO and nurse satisfaction with the NBO training and supervision process. Further, we will report on changes in the nurses' observational skills based on their descriptions of videos of premature infants pre-and post NBO-training. Finally, we will report on differences in parental satisfaction with support and supervision pre-and post training.

S25.4

### **TRANSITION TO HOME (TTH) AFTER PRETERM BIRTH: PILOT TESTING AN ADVANCED PRACTICE NURSE (APN)-LED MODEL OF TRANSITIONAL CARE**

**Schuetz Haemmerli N.\*<sup>[1]</sup>, Cignacco E.L.<sup>[2]</sup>, Stoffel L.<sup>[1]</sup>, Latal B.<sup>[3]</sup>, Rascon A.<sup>[2]</sup>, Limacher A.<sup>[4]</sup>, Nelle M.<sup>[1]</sup>**

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Preterm birth is associated with significant and often life-long developmental, emotional and financial burdens. The incidence of preterm births in Switzerland is 7.1%. Preterm infants can face developmental delays and social and behavioral problems. Parents suffer from emotional and physical stress which in turn can have a negative impact on the child's development. In Switzerland, during transition from hospital to home, there are not many interventions intended to improve

mental health outcomes in parents or to promote positive parenting to improve developmental outcomes for the preterm infant. In order to improve parent and preterm infant outcomes a unique new model of transitional care was developed. Our pilot study will evaluate the feasibility and effectiveness of the Transition to Home (TtH) model for infants born preterm measuring the impact of an Advanced Practice Nurse (APN)-led intervention at the Children's University Hospital Bern. The intervention focuses on improving parental mental health and well-being and on infant growth and development. The intervention: the TtH model includes interventions from an APN, who will participate in comprehensively planning discharge, assessing the family's needs, coordinating services, consulting and coaching the family from birth to 6 months after discharge from the neonatal intensive care unit. During this period the APN provides 3 Newborn Behavioral Observation (NBO) sessions. The NBO is an infant-centered and family-focused method for building relationships between parents and children. The study will evaluate our TtH model with qualitative (focus groups and interviews) and quantitative (randomized controlled trial) methods. We will randomly allocate 36 families of preterm children to either the standard of care or the APN-led intervention. We hope this new transitional care model will improve developmental outcomes for preterm infants, mental health of their parents and parent-child interaction. We also expect readmission rates and emergency consultations to drop.

S25.5

#### **ROUNDING ROUND THE NICU: USING THE NBO WITHIN AN INFANT MENTAL HEALTH WARD ROUND**

**Chapman M.**<sup>[1]</sup>, **Nold M.**<sup>[2]</sup>

<sup>[1]</sup>Royal Children's Hospital ~ Melbourne ~ Australia, <sup>[2]</sup>Monash Children's Hospital ~ Melbourne ~ Australia

A medical/surgical Neonatal Intensive Care Unit (NICU) is a place where the sickest babies come. Within this environment, we lose babies. Some die. Others are sometimes lost in a haze of medical interventions, and brutal reality. This paper will outline how to help "find" babies in the NICU. As part of the roll-out of a new, Infant Mental Health informed model of care, an IMH ward round was initiated on NICU. This round was led by a senior IMH clinician, with a senior neonatal trainee who was completing his twelve month psychosocial rotation with the IMH team. The rounds aim was to help all see the baby as a person, despite them being in NICU, by increasing staff IMH awareness, and seeing infants and families who otherwise may not have had contact with an IMH clinician. The Newborn Behaviour Observation (NBO) principles were central tenants within the round. The IMH NICU ward round quickly became an accepted component of the weekly life of the NICU. Suggestions as to which babies and families to see came from all disciplines of clinicians working on the ward, ranging from bedside nurses, allied health clinicians, to neonatologists. Formal requests for NBO's to be undertaken with babies and their families were frequent, and using components of the NBO became standard when seeing babies on the ward round, opening doors for finding and connecting with babies on the NICU. Using the classic medical ward round structure to provide IMH input on NICU is a successful intervention that quickly became part of the normal life of NICU. The NBO provided tools that enhance the experience for babies, families and staff.

## Poster Workshop PW01 - PLAYFULNESS IN PARENT-CHILD INTERACTION

PW01.1

### **OBSERVED PARENTAL PLAYFULNESS: FINDINGS FROM FOUR DIFFERENT COUNTRIES**

**Aldoney D.\***

*Universidad del Desarrollo ~ Santiago ~ Chile*

Despite consensus that play is fundamental for children's development (Lillard et al., 2013), we know little about how parents engage in pretend play and how playful it is. Understanding parental playfulness merits further attention because studies suggest that children learn about play through parental playfulness and that lack of it is associated with low levels of child playfulness and self-regulation (e.g., Mireault et al., 2015; Valentino et al., 2011). The studies included in this symposium examine different aspects of parental playfulness, all based on rich observational data. Specifically, the first study reports a new instrument developed in the UK to assess parental playfulness in interaction with infants in a sample of mothers and fathers (n=197). Results show, for example, that mothers interacted more playfully with their infants compared to fathers. The second study examines whether education, cultural beliefs, and stress are associated with parental playfulness in sample of Latino parents (N= 60) and their toddlers. Preliminary findings indicate that endorsement of Mexican American values and levels of stress, but not education, are associated with parental playfulness. The third study examines the relations between parenting stress, efficacy, the quality of mother-child play interactions and children's development (CDI and Bayley) in a sample of 44 low-income families in Chile. Mothers and their infants participated in free play interaction and were coded for maternal playfulness, sensibility, and cooperation. Preliminary results indicate that parenting stress and maternal education is related to playfulness. Finally, the fourth study includes a sample of 111 children from Israel and examines the role of parental playfulness as a moderator of the link between mind-mindedness and child responsiveness. Results highlight the importance of parental playfulness on child behavior and reveal differences between fathers and mothers. Collectively, these four studies aim to contribute to the limited literature on parental playfulness.

PW01.2

### **MOTHERS' AND FATHERS' STRESS, EDUCATION, CULTURAL BELIEFS AND PARENT-CHILD PLAY INTERACTIONS**

**Garcia K.\*, Cabrera N., Mittone D.**

*University of Maryland ~ College Park ~ United States of America*

Relative to the large literature on play conducted with peers, there is much less scholarship on the quality of play between parents and their children, especially in low-income families who are at higher risk for poor outcomes. There are gaps in our knowledge about the types of play that promote child wellbeing as well as the factors that are associated with high quality parent-child play interactions. The few studies to date have shown that parents' levels of education, cognitions, in particular cultural values (DiBianca Fasoli, 2014), and parental stress (Crnic, Gaze, & Hoffman, 2005) are robustly related to the quality of parent-child interactions. It is less clear whether these factors are also associated with quality of parent-child play. Guided by sociocultural and family stress models, we investigate whether education, cultural beliefs, and stress are associated with the quality of play between mothers and fathers and their children in a low-income Latino sample. Observational and survey data were collected from Latino parents (n = 60) and their 22-33 month-old toddlers. Parent playfulness was coded from videotaped parent-child play interactions using a global rating of a parent's use of creativity and imagination during play (Atzaba-Poria, Cabrera, & Menashe, 2014). Self-report measures were used for education, stress (PSI-SF; Abidin, 1995), and

cultural values (MACVS; Knight et al., 2010). Preliminary results indicate that increased endorsement of Mexican American values and higher levels of stress are associated with less playfulness; education is not significantly related to playfulness. Given the importance of play for the development of children's foundational skills, these findings suggest that we also need to pay attention to how parental stress might be associated with lower quality of play between mothers and their children, not just with negative parenting as other studies have shown

PW01.3

**PLAYFULNESS, SENSITIVITY, AND COLLABORATION IN MOTHER-CHILD PLAY INTERACTIONS AND CHILD DEVELOPMENT. THE ROLE OF PARENTING STRESS, EFFICACY, AND EDUCATION**

**Aldoney D.\*<sup>[1]</sup>, Mendive S.<sup>[2]</sup>, Coo S.<sup>[1]</sup>**

<sup>[1]</sup>*Universidad del Desarrollo ~ Santiago ~ Chile*, <sup>[2]</sup>*Pontificia Universidad Catolica de Chile ~ Santiago ~ Chile*

Despite consensus that play is fundamental for children's development (Lillard et al., 2013), we still know little about the ways in which low-income mothers engage in play with their infants. The literature suggests that maternal characteristics (e.g., stress and self-efficacy) are related to parenting (e.g., Crnic, Gaze & Hoffman, 2005). However, it is not clear how these factors relate to different aspects of the quality of infant-mother play interactions and child development. Guided by Bronfenbrenner's theory (1979) we examined the relations between maternal characteristics (education, parenting stress, and self-efficacy), the quality of mother-child play interactions (e.g., playfulness, sensitivity, and cooperation) and children's development. The sample included 44 Chilean low-income mothers and their 8 to 9-month-old children (M= 280 days). Mothers reported on stress (PSI-SF; Abidin, 1995) and self-efficacy (PES; Farkas, 2008). Maternal playfulness (Aztaba-Poria, Cabrera & Mensahe, 2014), sensitivity, and cooperation (Ainsworth, 1969) were coded from videotaped mother-child play interactions. Child development was assessed (BSID-III; Bayley, 1993) and reported by mothers (McArthur-Bates Communicative Development Inventory; CDI), both at 9 months of age. Preliminary analysis (n= 20) showed that mothers displayed low levels of playfulness (M= 3, SD= 1.5) and sensitivity (M = 4, SD= 1.2) and slightly higher levels of cooperation (M= 5, SD= 1.1). Maternal education was related to parenting stress ( $r=-.4$ ,  $p=.01$ ) and playfulness ( $r= .4$ ,  $p=.1$ ). Sensitivity was positively related only to children's comprehensive language development ( $r=0.4$ ,  $p=0.1$ ). Complete results will be reported in the conference. Examining mother-child play interactions during the first year of life is critical for interventions because mother-child play is an activity that is fun and enjoyable and is relatively low-cost and accessible (Evans & English, 2002). Our preliminary findings suggest that mothers with low level of education are less playful in their play interactions with their infants.

PW01.4

**THE RELATIONSHIP BETWEEN MATERNAL MIND-MINDEDNESS AND CHILD RESPONSIVENESS: THE ROLE OF PLAYFULNESS**

**Menashe A.\*, Mottes--Peleg M., Atzaba--Poria N.**

*Ben-Gurion University of the Negev ~ Beer-Sheva ~ Israel*

The notion that parental mentalization/mind-mindedness (MM) has a crucial impact on parent-child interactions has been established over the last decade. High MM has been related to more positive parent-child interactions. Moreover, MM abilities were found to mediate the links between parenting behaviors and child attachment. Although it is well established that parental playfulness (i.e., parental quality of play) is important to child development, most research on parenting has focused on parental sensitivity, intrusiveness, and structuring, ignoring parental playfulness.

Furthermore, the links among MM, playfulness, and child responsiveness have yet to be studied while considering parental MM and child behaviors. This study aims to better understand the role of parental playfulness as a moderator of the link between MM and child responsiveness and the differences between mothers and fathers in this relationship. Our sample included 111 children (age =1-3 years) and their parents. Parent-child play interactions were videotaped and coded using the Emotional Availability Scales, the Mind-Mindedness Coding system, and the Parental Playfulness System. Results revealed a different pattern of results for mothers and fathers. For mothers, child responsiveness was significantly related to both maternal playfulness and MM ( $r=0.32^{**}$ ,  $r = 0.21^*$ , respectively). However, only maternal playfulness (and not MM) had a unique contribution to child responsiveness. Finally, maternal playfulness significantly moderated the link between MM and child responsiveness ( $\beta=-2.90^{**}$ ). Post-hoc analysis revealed that this link was significant only for mothers with low playfulness ( $\beta=.47^{**}$ ). When mothers had high playfulness, this effect was no longer significant ( $\beta=17$ , ns). For fathers, child responsiveness was related to paternal playfulness ( $r=0.22^*$ ) but not to paternal MM ( $r=0.18$ , ns). A moderation effect was not found. These findings demonstrate the importance of parental playfulness on child behavior and, particularly, on the way that MM and playfulness are related to child behavior, but differently for mothers and fathers.

PW01.5

#### **THE RELATIONS AMONG PLAYFULNESS, SOCIAL INFORMATION PROCESSING, AND SOCIAL ADJUSTMENT IN PRESCHOOL CHILDREN**

**Ghanayim Y.\*, Ziv Y.**

*University of Haifa ~ Haifa ~ Israel*

“Playfulness” appears parallel to the ability of “play” (Lester et al., 2008). While “playfulness” represents the urge to open up, to explore possibilities, and believe in the ability of the individual to act independently, “play” is the outward expression, or the actualization of the tendency to “playfulness” (Burghardt, 2005). A vital element of playfulness skills is the ability to read cues (framing). A major research area focusing on this ability is the one focusing on children’s social information processing (SIP). These processes were found to be associated with children’s social and cognitive functioning in educational settings with more adaptive SIP processes linked with higher levels of school-readiness (Ziv, 2013). Sixty nine kindergarten children (42%-boys, mean age =64.51) were filmed during two 15-minutes free-play sessions, indoors and outdoors, based on the Test of Playfulness (Bundy, 2003). Children’s SIP patterns were interviewed by using the SIP-P (Ziv & Sorongon, 2011). Higher quality outdoor playfulness was associated with lower frequencies of avoidant response generation, a major marker of SIP:  $r(69) = -.26$ ,  $p < .05$ . Outdoor playfulness significantly related to the positive evaluation of a competent response ( $r(69) = .25$ ,  $p < .05$ ) and to the positive evaluation of an avoidant response ( $r(69) = .26$ ,  $p < .05$ ). It is possible that the outdoor environment enables more variety in the social situations experienced by children. Findings shed light on the importance of encouraging educational staff, parents and caregivers to ensure allocating more free outdoor playing time for children. To this end, we must examine the impact of the outdoor environment not only on children's social cognition but also on their actual social skills (Hamm, 2006).

PW01.6

#### **THE IMPORTANCE OF MATERNAL AND PATERNAL PLAYFULNESS AMONG FAMILIES WITH CHILDREN DIAGNOSED WITH DEVELOPMENTAL DELAY**

**Levavi K.\*, Menashe A., Atzaba--Poria N.**

*Ben-Gurion University of the Negev ~ Beer Sheva ~ Israel*

Children diagnosed with developmental delay (DD) are at a higher risk for problem behavior, but parental behavior, particularly parental playfulness, can reduce this risk. Parental playfulness is the manner in which parents tend to play with their children. It holds a combination of creativity and fun. Adults' playfulness was associated with overall well being, but research on parental playfulness is still rare, especially with parents raising children with DD. We propose that due to the worry and stress characterized by parenting children with DD, parents in the DD group will show lower levels of playfulness than parents of typically developing (TD) children. Furthermore, the role of playfulness may differ for fathers and for mothers. One hundred fifty six families (children aged 4-7 years old) participated. Seventy-five families had a child with DD. Parents completed questionnaires, and parent-child interactions were video-taped. Parental playfulness was assessed using the Parental Playfulness System. Both mothers and fathers in the DD group showed lower levels of playfulness than parents in the TD group [ $t(134)=-4.86$ ,  $p<.001$ ;  $t(129.87)=-2.89$ ,  $p<.01$ , respectively]. Additionally, a moderation effect was found ( $\beta=0.45$ ,  $p<.05$ ), with DD children whose fathers were lower in playfulness exhibiting higher levels of behavioral problems compared to TD children. However, no group difference was seen in child problem behavior when fathers were higher in playfulness. Parental playfulness is less prevalent among parents of children having DD. However, fathers' playfulness can act as a buffer reducing problem behavior in DD children.

PW01.7

**PARENTING, MOTHER'S AND FATHER'S PLAYFULNESS AND INTRUSIVENESS: A STUDY WITH SPANISH FAMILIES WITH CHILDREN WITH DISABILITIES**

**Vilaseca Momplet R.M., Cerro Villanueva J.\***

*University of Barcelona ~ Barcelona ~ Spain*

All children benefit from parenting behaviors that support early child's development (Love et al., 2005). For children with a disability, these parents' characteristics predict optimal outcomes (Spiker et al., 2005). In addition, different studies have demonstrated the association between play and children development, including language and self-regulation (Lillard et al. 2013). The links between parenting and mothers' and father's playfulness have been little studied especially in families with children who have disabilities, who are sometimes very directive in their play with their children. We present data of parental interactions with children 1-3 years old with intellectual disability and autism spectrum disorders. Twenty mothers and fathers, separately, auto-recorded 10-minute play sessions at home. Parental interactions were assessed using PICCOLO (Roggman et al., 2013), a standardized measure of parenting (affect, responsiveness, encouragement and teaching). Also, we used The Parental Playfulness System (PPS; Atzaba-Poria, Menashe, & Cabrera, 2015) to analyze parental playfulness in an unstructured play sessions as well as the Parental Intrusiveness subscale (Brady-Smith et al. 1999). Analyses show differences between mothers and fathers. Mothers score higher on PICCOLO. The highest average score was for Affection and the lowest for Teaching for both mothers and fathers. Fathers' play interactions may be more variable by culture than mothers' play interactions (Lamb 2013). We found significant correlations between Teaching and parental playfulness and parental intrusiveness. Clearly, the potential barriers to optimal parenting need to be considered in families with children with disabilities. To support parents to engage in optimal parenting should be considered but also the way in which parental playfulness moderates the link between parental intrusiveness with children development.

PW01.8

**PARENTAL PLAYFULNESS OF FIRST TIME FATHERS AND MOTHERS WITH THEIR 14 MONTH-OLDS: FROM DISCIPLINE TO FREE PLAY**

**Basilio M., Laverty C.\*, Hughes C.**

*University of Cambridge ~ Cambridge ~ United Kingdom*

Current measures assessing adult playfulness with self-report inventories show links to wellbeing (Proyer, 2012; Proyer & Ruch 2010), and stress coping strategies (Magnuson & Barnett, 2012). No measure exists which evaluate adult playfulness directly from observations, which limits our understanding on its potential significance on child development. Our objective was to develop a scale to capture individual variability of mothers and fathers playfulness in infancy. Additionally, we investigate differences in playfulness between mothers and fathers, and according to the context in which it is observed. As part of the New Fathers and Mothers study (PI. Prof Claire Hughes) parents were recorded independently interacting with their 14-months infants in a prohibition and free play task (N=197). Toys were provided and parents were instructed (a) not to allow the child to touch the toys (2 minutes); (b) only allow play with an unattractive toy (2 minutes); (c) play freely (4 minutes). Parental playfulness was coded in a global 9-point scale that ranged from “not playful at all” to “highly playful”. Separate subscales captured frequencies of types of play, intensity and variability. The global scale captured individual differences among parents, and was reliably associated with play types subscales ( $r=.78$   $p < .001$ ). A two way repeated measures ANOVA revealed a main effect for parent ( $F(1)=54.89$   $p < .001$ ) as well as condition ( $F(2.5)=53.74$   $p < .001$ ). Post hoc analyses showed that mothers were coded as more playful than fathers, and that parents found it more challenging to be playful in the prohibition contexts vs the free play scenario. No child-differences were found. We report a new instrument to assess parental playfulness in interaction with infants, which captures individual differences and shows internal consistency. Mothers interacted more playfully with their infants, and both mothers and fathers changed their playful behaviour according to the context.

#### **Video Presentation V01 - PROGRESSIVE EMBODIED MENTALIZATION AND EMOTIONAL LIFE. THE CONTRIBUTIONS OF READING ALOUD, MINDFULNESS AND PSYCHODYNAMIC WORK**

**Agostini F.<sup>[1]</sup>, Micotti S.\*<sup>[3]</sup>, Pozzi M.E.<sup>[2]</sup>, Monti F.<sup>[4]</sup>, Neri E.<sup>[4]</sup>, Stawicka M.<sup>[5]</sup>, Polaszewska--Nicke M.<sup>[5]</sup>**

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The dialogue between neuroscience, infant research, the attachment theory and psychoanalysis underscores the importance of early relational experiences between caregivers' and children's bodies and minds. In our parent-infant work we often meet depressed, disoriented parents with hyperactive, dysregulated children. Indeed, paediatricians often stress this problem. So, how can we share with parents and children the idea that human experience, which is initially turbulent, can eventually find organisation and meaning? How can we support the process of natural communication and embodied mentalization? We will describe four experiences in a territory between interoception and exteroception, between developmental psychology, neurosciences and psychoanalysis.

Fiorella Monti and Erica Neri (University of Bologna, Italy) work as psychotherapists in a Neonatal Intensive Care Unit (NICU) and encourage parents to read stories to their incubated infants. Their recent research demonstrates the benefits to both parents and babies. Sara Micotti, psychotherapist at the Centro Benedetta d'Intino, Milano, holds reading groups with a psychoanalytical focus for parents and children from 0 to 18 months. It is the shared storytelling that creates meaning through the human voice, its rhythm and bodily gestures associated with the mentalisation processes. Maria Pozzi, Enfield Pip UK Service, uses mindfulness as a tool to foster sensory awareness in working with parents and infants. Mindfulness guides parents to tune into

their own feelings, sensations and thoughts as well as with their babies' experience. It fosters better bonding and healthy separateness. Magdalena Stawicka and Magdalena Polaszewska-Nicke (ZERO-FIVE. The Foundation for Infant Mental Health, Poland) discuss the importance of holding bodies and minds together in psychodynamic interventions with young children facing the traumatism of medical and surgical treatments. They show the need of drawing attention of both specialists and parents to the meaning of medical intervention and their impact on children's experience.

#### **Video Presentation V02 - A CEREBRAL PALSY CHILD RECOVERED UNDER FILIAL PSYCHOTHERAPY COMBINING WITH INDIVIDUAL FAMILY REHABILITATION TRAINING: A VIDEO DEMONSTRATION**

**Su Q.<sup>[1]</sup>, Zhang H.<sup>[1]</sup>, Zhang W.<sup>[1]</sup>, Dang S.<sup>[1]</sup>, Shah T.<sup>[1]</sup>, Ali F.<sup>[1]</sup>, Zhu Z.<sup>[4]</sup>, Lu Y.<sup>[3]</sup>, Sun H.<sup>[3]</sup>, Zhu Z.<sup>[2]</sup>, Li H.\*<sup>[1]</sup>**

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Filial psychotherapy combining with individual family rehabilitation training treats motor and language retardation. The child was 2.5 years old with cerebral palsy. He was treated with acupuncture, massage and brain neurotrophic medicine daily from 8 months of age, lasting for 21 months. In the beginning, he showed violent resistance and vomiting before treatment. The child then gradually lost his voice and didn't interact with people. Then he was transferred to our OPD. We stopped all painful treatment and negative evaluation, reestablishing his sense of security. After 1 month, he smiled and walked with support. We used video feedback to train him to walk with a normal posture. After 5 months, he could walk independently, and began to speak and express his needs. The negative emotions of mother and child were eased through sandplay. The child-parent relationship score increased on the Child-parent Relationship Scale. After 7 months, a positive child-parent relationship was established. After 15 months, he walks freely and speaks short sentences. The retardation of this child may relate to the fear caused by over-treatment in early life. A positive child-parent relationship was re-established by filial psychotherapy.

#### **Brief Oral Presentations BOP01 - INFANT MENTAL HEALTH THROUGH A CULTURAL LENS - PART I**

BOP01.1

##### **INFANT ATTACHMENT AND MATERNAL SENSITIVITY IN THE ARAB MINORITY IN ISRAEL**

**Zreik G.\*<sup>[1]</sup>, Sagi--Schwartz A.<sup>[2]</sup>, Oppenheim D.<sup>[2]</sup>**

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Despite the wealth of cross-cultural studies of attachment, no attachment studies have been conducted in the Arab culture although it numbers approximately 366 million individuals worldwide. This study is the first to examine infant-mother attachment in one Arab community, that of the Arab minority living in Israel. We examined the distribution of attachment classifications in the Arab minority as assessed in the strange situation (SSP) and compared them to the distribution of these classifications in the Jewish majority as well as in Western and non-Western aggregate distributions. Additionally, we sought to validate the SSP classifications in the Arab sample by examining whether secure infant attachment is associated with sensitive maternal behavior as expected according to attachment theory. Eighty five Arab 1-year-old infants were observed in the strange situation, and maternal sensitivity was assessed from home observations using the Maternal Behavior Q-sort. No differences were found between the Arab-Israeli attachment distribution and Jewish-Israeli,

Western, and non-Western distributions when examined at the secure versus insecure level, although few differences emerged when examined at the four-way ABCD level. The secure attachment was the modal classification. Moreover, in this sample, as with previous Jewish-Israeli samples, the ambivalent classification appeared to be overrepresented, with underrepresentation of the avoidant classification compared to the global “world” distribution. We found the expected association between sensitivity and attachment security only among Christian Arabs (as opposed to Muslim Arabs). In the Christian group, mothers of secure infants scored higher in sensitivity as compared to mothers of insecure infants, whereas no such differences were detected among the Muslim group. No differences were found between the two groups regarding infant security; in both groups the majority of infants were securely attached to their mothers. The findings provide support to attachment theory’s generalizability but raise questions regarding the assessment of maternal sensitivity cross-culturally.

BOP01.2

### **COMMUNITY-BASED PARENTING SUPPORT FOR FAMILIES IN MOLDOVA: IMPROVING RELATIONSHIPS AND GROWING HEALTHY AND HAPPY CHILDREN**

**Spivacenco I.\***

*Partnership for Everychild Moldova ~ Chisinau ~ Moldova, Republic of*

The Republic of Moldova is one of the poorest country in Europe, where many families are struggling to care for their children. Moldova inherited a child welfare system heavily reliant on institutional care as the protective measure for children. Parental, family and community responsibilities for the protection of children were greatly diminished. The Government Child Protection Strategy (2014-2020) aims to ensure that Moldovan children grow up in a safe and protected family environment. It includes the development of prevention services and assistance for families at risk of child abandonment. We report on a pilot of Mellow Parenting Programmes (MPP) in a new country that has an emergent focus on developing preventive community social services for families with the aim to: 1) improve community support for vulnerable parents with a balanced emphasis on parental mental health and parent-child interactions and; 2) prevent babies and young children at risk of being removed from parental care. Thirty practitioners trained in MPP. Seven groups were delivered and evaluated in 6 regions of Moldova. Three groups are currently running in 3 new regions. Preliminary data analysis indicates positive changes pre to post in the MPP groups for parental wellbeing and children’s socio-emotional development. Qualitative information further highlights the positive impact of MPP on the participant’s overall quality of life and interaction with their young children. MPP appears to be a promising early intervention service for parents with complex needs and their young children in Moldova. Future steps for MPP in Moldova will be presented.

BOP01.3

### **VIDEO BASED HOME OBSERVATION OF MATERNAL SENSITIVITY IN INFANCY FOR CAREGIVERS FROM RURAL CHINA**

**Guan H.\*<sup>[1]</sup>, Hu P.<sup>[2]</sup>, Zhang S.<sup>[2]</sup>, Xu M.<sup>[1]</sup>**

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Globally and across the lifespan, children spend more time with their mothers than any other person and they have optimal cognitive and social development and appropriate behavior if their mothers are sensitive. Thus, promoting maternal sensitivity is becoming a public health concern. Maternal sensitivity is most commonly assessed during naturalistic observation of free play interactions between mother and child. However, we still lack adequate assessment of maternal sensitivity for the caregivers in rural China. Previous research showed poor understanding of a psychometric

questionnaire for rural caregivers due to low education. Video-based home observation might be used as an alternative measurement of maternal sensitivity for caregivers in rural China. Eighteen minutes of video (in four segments) was used to record parent-infant interaction during home observation in 49 mother-baby pairs with the infants aged 9-15 months. The Maternal Behavior Q-Sort (MBQS) was used to code these videos and the HOME Scale, Adult to Parental Attachment Experience Survey, and the Locke-Wallace Marital Adjustment Test were performed in all households. The internal consistency coefficient among three well trained coders was 0.77. The average score of maternal sensitivity of caregivers in rural China was 0.50 (SD=0.23). There was significant positive correlation between maternal sensitivity and Responsiveness ( $r=0.35$ ,  $P<0.05$ ), Acceptance ( $r=0.32$ ,  $P<0.05$ ), and Learning Materials ( $r=0.49$ ,  $P<0.01$ ) on the Home Scale. Maternal sensitivity was also significantly related to marital satisfaction ( $r=0.43$ ,  $p<0.01$ ). However, there was no significant correlation between maternal sensitivity and adult attachment types.

BOP01.4

### **THE ROLE OF MATERNAL REPRESENTATIONS IN THE TRAUMA TRANSMISSION MECHANISM**

**Dozio E.\***

*PhD Psychologist at Action contre la Faim - Inserm U1178 ~ Paris - France*

Several studies on the transgenerational transmission of trauma confirm the evidence of transmission, although without giving a detailed description of the process. A path to understanding this transmission is to consider the importance of the maternal representations and the specific cultural determinants. The objective of the study was to examine mother representations of the child and their influence in the transgenerational trauma transmission. In a humanitarian context, we recruited twenty-four mother-child dyads in three countries: Central African Republic, Chad and Cameroon. Mothers were exposed to one or more traumatic events, in the absence of the child, before childbirth or during pregnancy and their children, aged from one month to three years. We met the dyads during a semi-structured interview where maternal representations, cultural specific protection factors as well as traumatic markers in mother discourse have been analysed as elements contributing to the traumatic transmission. The discourse analysis highlighted the role of maternal representations about the child in the traumatic transmission process. Maternal trauma influences the mother's representations about the child, her relationship with him and the intergenerational mandate of which the child will be assigned to. Despite the evidence of the transmission of the negative emotional state from the mother to the child, we have observed cultural protective factors that can preserve mothers and children from the inevitability of this transmission. Maternal representations of traumatised mothers are influenced by traumatic events and they can have a role in the transgenerational trauma transmission. Nevertheless, the dyads showed internal resources and skills that give us important elements for the clinical management of traumatized mothers and their infants in order to reduce the effects of the possible transmission of trauma.

### **Workshop WS01 - UNIVERSITY-BASED LABORATORY SCHOOLS AS TOOLS FOR PREPARING THE GLOBAL EARLY CHILDHOOD WORKFORCE: FACILITATORS AND BARRIERS TO MODELING DIVERSITY-INFORMED INFANT MENTAL HEALTH PRINCIPLES AND PRACTICES**

**Linscott L., Graham D., Diaz M., Ndlovu N., Vallotton C.\***

*Michigan State University ~ East Lansing ~ United States of America*

U.S. university-based laboratory schools serve teacher preparation, research, and community needs (Elicker & Barbour, 2012). Lab schools translate current research into practices modeled by master teachers, which provides opportunities for pre-service practitioners to witness high quality practices, practice skills they learn about in lecture courses, and receive immediate feedback from

children and supervising master teachers. Opportunities to practice emerging skills are critical to university students' development (Mcfarland, Saunders, & Allen, 2008). Feedback encourages self-awareness and growth in skills, but may only promote reflection when using a reflective supervision model (Amini Virmani & Ontai, 2010). To support infants' mental health, caregivers must be supported. The complex staffing needs and multi-layered relationship structures within laboratory schools which support pre-service teachers' development may pose challenges to IMH practices. We discuss how supportive adult relationships are developed and fostered, and how staffing is managed to meet needs of both children and students. Most research on infant development is produced by western cultures, yet lab-schools educate university students from around the world. We ask, how can lab schools become more sensitive and relevant to preparing culturally responsive practitioners from multiple cultures?

This workshop will:

- Describe university-based laboratory schools as a model of high-quality practice for training the pre-service early childhood workforce in IMH-principles and practices.
- Critically review the facilitators and barriers of laboratory schools' modeling of the Diversity-Informed Infant Mental Health Principles and Practices (Harris Foundation, 2012).
- Consider whether laboratory schools in one country can be effective in preparing early childhood practitioners from other cultures.

### **Workshop WS08 - UNCHANGED EMOTIONAL NEEDS IN A CHANGING WORLD - WHAT DOES THAT MEAN FOR INFANTS AND PARENTS?**

**Kalckreuth B.\*<sup>[1]</sup>, Knott M.<sup>[2]</sup>, Freiburger E.<sup>[3]</sup>, Wiesler C.<sup>[1]</sup>**

<sup>[1]</sup>GAIMH ~ Freiburg ~ Germany, <sup>[2]</sup>GAIMH ~ Stuttgart ~ Germany, <sup>[3]</sup>GAIMH ~ München ~ Germany

Transition to parenthood is a unique phase in life cycle, connected with a reactivation of biographic experiences, inner conflicts and inner representations. Cultural and rapidly changing role expectations of parents are powerful and often irritating. Reproductive medicine is a new challenge as medicalization and technologization are competing with phases and expectations of timelessness, regression and "reverie" (Bion). These emotional states are essential for mothers, fathers and their babies' healthy psychic and somatic growth. Necessary steps for psychic development during this early time of life are to emerge from these infinitely many states of mind and to accept separation. By means of two case reports, we highlight significant conflicts from this domain that young parents in our accelerating and over-organized time find themselves in. We illustrate the specific contribution of psychoanalytic parent-infant psychotherapy in overcoming these. The infant is seen as an active participant in the therapy sessions, who induces transference and counter-transference by its own presence, activity and feelings as it reacts to conflictual themes. Mother and child are both present in the session and increasingly, the father, too. Mother-father-child interaction can thus be observed and understood here. Working as psychoanalytic child and adult psychotherapists for nearly 20 years we have seen more than 1000 patients - infants and toddlers with sleeping and feeding disorders, lack of self-regulation, separation anxiety, developmental retardation and other psychosomatic disorders, as well as mothers with anxiety and postnatal depression.

## Brief Oral Presentations BOP10 - INTERVENTIONS WITH INFANTS AND FAMILIES

BOP10.1

### **OVERCOMING CHALLENGES: INSIGHTS GAINED IN ENGAGING PARENTS IN INTERVENTIONS AND STUDIES TO DEVELOP AN EVIDENCE BASE**

**Wittkowski A.\***

*The University of Manchester ~ Manchester ~ United Kingdom*

The transition to parenthood can be challenging for parents, especially if they feel unprepared or experience mental health problems during the perinatal period. Parenting interventions show some promising results for family and child outcomes but the evidence base for their efficacy is still limited. Establishing an evidence base for any intervention requires the completion of research studies, ranging from exploring the acceptability of an intervention to its efficacy. In this symposium, we will provide insights into the challenges of engaging parents in studies and randomised controlled trials (RCT) and lessons learnt in order to improve the uptake of parenting interventions. Dr Alina Morawska from the University of Queensland, Australia, will talk about parents' needs and preferences when making the transition to parenthood, drawing on information provided by expectant parents and those with a child under 2 years of age. Focusing on the relationship between engagement and individual and family-level risk factors in an effort to identify possible barriers, Dr Kerri McPherson from the Glasgow Caledonia University, UK, will continue with the topic of engagement by outlining the recruitment and retention of first-time parents in a 2-year-trial designed to test the efficacy of a parenting intervention. Dr. Anja Wittkowski from the University of Manchester, UK, will discuss the challenges of evaluating a parenting programme for mothers admitted to a Mother and Baby Unit (MBU). She will highlight key challenges and solutions in relation to a) maternal mental health problems and b) this particular inpatient ward setting. Reporting on mothers who experience mental health difficulties and/or social adversity, Dr Marion Henderson from the University of Glasgow, UK, will present very preliminary findings from a large RCT (n=500) that compares the impact of two antenatal parenting support programmes with care as usual on maternal and infant outcomes.

BOP10.2

### **EVALUATING A PARENTING INTERVENTION FOR MOTHERS ADMITTED TO A MOTHER AND BABY UNIT: REFLECTIONS ON THE CHALLENGES**

**Wittkowski A.\***

*The University of Manchester ~ Manchester ~ United Kingdom*

Currently, mother and baby units (MBUs) do not systematically offer an intervention that combines parenting skills with psychological coping (see Wittkowski & Santos, 2017; Gillham & Wittkowski, 2015; NICE 2014). This multisite feasibility study aims to test whether 60 women admitted to a MBU can be recruited, engaged and retained in a randomised controlled trial of the Baby Triple P Positive Parenting Programme, an eight-week-intervention designed to enhance positive parenting skills and confidence and mother and infant wellbeing. The study has received NHS Ethics Approval (ref: 16/NW/0510). Participants are randomised to receive Baby Triple P plus MBU care or MBU care only and include women with an infant aged 0-12 months admitted to two different MBUs. Outcomes include parenting competence and confidence, maternal mental health and mother-infant interaction assessed via self-report and observer questionnaires at baseline and 10 and 26 weeks post-baseline. Feasibility of recruitment, randomisation and engaging women in the intervention and completing study measures are being recorded. Intervention acceptability is being explored via interviews with mothers and staff. Recruitment is ongoing and we will provide an overview of

progress to date. This presentation will highlight the challenges of conducting the study in this setting which have included: developing an efficient recruitment pathway and timely completion of observer measures that do not impinge on MBU staff's routine duties, timely completion of intervention sessions particularly following discharge, severity of mothers' mental health problems, length of admissions and preventing researchers being unblinded. The implications of these challenges will be discussed. Solutions to challenges identified can inform planning a full-scale trial.

BOP10.3

### **THRIVE: TRIAL OF HEALTHY RELATIONSHIP INITIATIVES FOR THE VERY-EARLY YEARS**

**Henderson M.\***

*The University of Glasgow ~ Glasgow ~ United Kingdom*

Social adversity, maternal depression and anxiety during pregnancy may affect foetal brain development, increase infant reactivity to stress and impair sensitive mother-infant bonds developing. Additionally, social adversity and maternal mental ill-health have long-term effects on children's health, social and educational outcomes. Parenting interventions show promising improvements to child outcomes; however, there is little evidence of their efficacy in the UK. THRIVE will compare the impact of taking part in one of two antenatal parenting support programmes (Enhanced Triple-P for Baby (ETPB) or Mellow Bumps (MB)) with care-as-usual (CAU) on the mental health and maternal attunement of vulnerable mothers-to-be, as well as the socio-emotional, behavioural and language development of their children. THRIVE is a three-arm randomised controlled trial. Vulnerable pregnant women are invited to participate (n=500). Participants are randomly allocated to ETPB + CAU, MB + CAU or CAU. ETPB consists of four weekly group-based antenatal sessions followed by up to 3 postnatal home visits and is completed with one postnatal group session. It aims to provide babies with a healthy start to life by combining parenting skills training with strategies to enhance individual wellbeing and couple adjustment. MB in comparison, comprises of seven weekly antenatal sessions and one postnatal session. It aims to decrease maternal stress, increase understanding of neonates' capacity for social interaction and emphasise the importance of early interaction for brain development and attachment. Recruitment to the trial begun in early 2014, with findings due to be published in 2019. We will characterise our achieved sample (recruitment due to complete by Easter 2018). As maternal mental health is highly correlated to infant mental health, the findings will include the baseline maternal mental health outcomes: Hospital Anxiety and Depression, Adult Wellbeing Scale and Brief Symptoms Inventory to identify the severity of symptoms.

BOP10.4

### **EARLY PREVENTION OF SOCIAL INEQUALITY IN HEALTH – IMPROVEMENT OF PARENT-CHILD ATTACHMENT**

**Aarestrup A.K.\*, Schiøtz M.**

*Capital Region of Denmark ~ Copenhagen ~ Denmark*

Mental well-being and social circumstances of the mother during pregnancy and the early years of the child's life, impacts the child's well-being. Attachment research indicates that sensitive parenting leads to secure attachment in the child. Secure attachment is significantly associated with positive outcomes for the child, in terms of emotional, social and behavioral development and adjustment. Social and mental vulnerability in parents can affect the attachment formation. However, knowledge is needed about how to detect vulnerable families during pregnancy and how to support them during pregnancy and onwards. To develop and evaluate an inter-sectorial intervention targeting pregnant women with psychosocial vulnerabilities and their partner. The

intervention aims at improving the parents' prerequisite to create secure attachment with their child and thereby improving the well-being of the child. In a RCT the intervention group receives a specific intervention and the control group receives care as usual. Intervention components: 1) screening of the pregnant women for symptoms of mental illness by midwife, 2) joint consultation with midwife and health visitor, 3) nine extra home visits by health nurse during pregnancy and after birth where the parental educational program, Circle of Security–Parenting (COS-P) is used. Around 100 women will be identified. With an expected drop-out rate of 20%, 80 women will be followed from pregnancy until the child is nine months old. Baseline data will be obtained at inclusion (3-5 months of pregnancy), at first follow-up (child aged three weeks), at second follow-up after the intervention ends (child aged nine months). The primary outcome is maternal sensitivity. Secondary outcomes are parents' mentalization skills, parental stress, infant's socio-emotional development. Qualitative data will provide insight into the implementation process including the involved actors' experiences with intervention components. The study will provide knowledge about the efficiency of a multi component, early intervention program aiming to enhance parental sensitivity and attachment in psychosocial vulnerable families.

### **Workshop WS13 - ACTING WITHIN THE REALM OF PARENT-INFANT RELATIONSHIP – REFLECTIONS FROM THE SESSIONS AND SUPERVISION PROCESS**

**Acquarone S.\*<sup>[1]</sup>, Stawicka M.<sup>[2]</sup>, Polaszewska--Nicke M.<sup>[2]</sup>**

*<sup>[1]</sup>Parent Infant Centre ~ London ~ United Kingdom, <sup>[2]</sup>ZERO-FIVE. The Foundation for Infant Mental Health ~ Poznan ~ Poland*

The aim of the presentation is to share with the audience the experience of working through, during supervision sessions, some of the challenges of Parent-Infant Psychoanalytic Psychotherapy - being with and acting within the dense net of parent-infant interactions. The capacity to maintain the therapeutic stance within the realm of multilevel processes evolving among the participants in therapy may be extremely challenging, especially for a clinician in training. The problem will be illustrated with examples showing the process of change in clinical practice, through supervision, with reflections from both sides – an experienced clinician and supervisor from the UK, and two supervisees from Poland. Excerpts of clinical material will be accompanied with the supervisor's commentaries, thus the presentation will evolve around short vignettes of „live supervision”. The presentation will also bring some more general reflections upon the cultural differences in the perception of parent-infant relationships in the UK and Poland, and on various problematic aspects of working with families, e.g. reaching and engaging the families with infants in need, and the unfolding of clinical work in the context of the two cultures. The leitmotif of the presentation will be the specific challenges in the task of practicing Parent-Infant Psychoanalytic Psychotherapy, requiring from the therapist to build during the training the capacity to breach the gaps and building bridges between many levels of functioning of their patients – between their minds and bodies, emotions and physiological reactions, sensations and intellectual insights – as well as among all the participants of the sessions.

### **Workshop WS14 - EMOTIONAL REGULATION IN PARENT INFANT PSYCHOTHERAPY AND GROUP WORK IN COMMUNITY SETTINGS**

**Dearnley K., Mortin V.\*, Higgins S.**

*Lambeth Early Action Partnership/ South London and Maudsley NHS Foundation Trust ~ London ~ United Kingdom*

The Parent Infant Relationship Service (PAIRS) is funded through the UK's National Lottery and is part of one of the five national sites that form the “A Better Start” programme. A community service

in a deprived area of London, PAIRS offers parent-infant psychotherapy and group work using an infant-led approach based on Watch, Wait and Wonder. The team consists of clinical psychologists and child & adolescent psychotherapists. Our multi-disciplinary team have encountered a wide variety of responses between parents and infants as they attempt to manage and emotionally regulate their frequently overwhelming experiences of intimacy in infancy. These experiences can reawaken parents' own primitive states of mind from their childhood ('Ghosts in the Nursery' Fraiberg S., et al 1975). In this presentation, we intend to explore:

- What we can learn as clinicians about the process of emotional regulation from different case studies and outcomes; and
- What we can learn from our therapeutic encounters with mothers who are struggling to parent their babies in the community.

We will be using clinical vignettes from our cases and groups in order to help to illustrate our discussion.

## Brief Oral Presentations BOP04 - TRAINING "FORMATION" AND REFLECTIVE SUPERVISION

BOP04.1

### RECONCEPTUALIZING "TRAINING" AS "PROFESSIONAL FORMATION" IN THE FIELD OF INFANT MENTAL HEALTH: WHY SEFI (SOCIO-EMOTIONAL FORMATION INITIATIVE) IS MORE IMPORTANT THAN A SELFI

Costa G.\*<sup>[1]</sup>, Mulcahy K.<sup>[1]</sup>, Dibella A.<sup>[1]</sup>, Squadron D.<sup>[2]</sup>

<sup>[1]</sup>Center for Autism and Early Childhood Mental Health, Montclair State University ~ Montclair, New Jersey ~ United States of America, <sup>[2]</sup>YCS Institute for Infant and Preschool Mental Health ~ East Orange, NJ ~ United States of America

The development of successive generations of multidisciplinary specialists in the field of infant mental health involves the need to continually create effective models of pedagogy and epistemology by answering two principal questions: 1) "How do we best teach about our discipline?", and 2) "How do we create experiences where learners come to know what they must know." This symposium will examine common methods of professional development which frequently rely on "training" that focuses on transmission of core knowledge, viewed as fundamental to the discipline and on the development of skills, viewed as derivatives of that core knowledge. Such an approach fails to adequately recognize and apply the science of interpersonal processes and the affective and interpersonal context of our work. The concept of "Formation" will be introduced and explained as a model that embodies notions of "integration", "personal unfolding", layered knowledge of "self", and three interrelated "ways" of development: knowing, doing and being. Using three theoretical frameworks: polyvagal theory, interpersonal neurobiology and self-regulation, this model of "Formation" can serve as guidance for all who seek to support the growth of a responsive, multidisciplinary field as our understanding of human development unfolds. A model of statewide professional "formation" developed in New Jersey (USA) will be described through which a university-based infant mental health curriculum (Keeping Babies and Children in Mind) was delivered to a diverse public and private workforce serving infants, children and families (0-8 range). The statewide initiative known as SEFI "Socio-Emotional Formation Initiative" has placed infant mental health, relationship-based services and reflective practices at the core of professional development. Data on pre-post measures assessing change in core understanding in the field in a sample of participants (n= 374) will be presented and implications for professional "formation" will be described. Finally a pre-doctoral psychology internship program in infant and early childhood mental health will be described as a model for influencing the professional identity of psychologists early in their education and career.

BOP04.2

**SEFI (THE SOCIO-EMOTIONAL FORMATION INITIATIVE ) AND WHY IT IS MORE IMPORTANT THAN A SELFI!**

**Dibella A.\* , Mulcahy K.**

*Center for Autism and Early Childhood Mental Health, Montclair State University ~ Montclair, NJ ~ United States of America*

Through this presentation, participants will:

1. Learn about the ways in which the concept of "formation" was instrumental in developing a statewide model of professional development in the infant and early childhood education and care settings.
2. Illustrate the importance of integrating principles and practices of infant mental health into the nature on early childhood education and care settings.
3. Describe a method of identifying staff and centers that require greater support in the areas of socio-emotional development and inclusion.

This presentation will describe the statewide (New Jersey, USA) development and implementation of a multiple component professional education and consultation program in infant and early childhood education and care centers. The development and delivery of a university-based Infant Mental Health curriculum, "Keeping Babies and Children in Mind" will be described, and the results of a pre-post measure assessing change in knowledge in a 374 participants will be presented.

BOP04.3

**WAYS OF KNOWING, DOING AND BEING IN PROFESSIONAL FORMATION**

**Costa G.\***

*Center for Autism and Early Childhood Mental Health, Montclair State University ~ Montclair, New Jersey ~ United States of America*

Participants will:

1. Understand the concept of Professional "Formation" as conceptually distinct from "training" and traditional methods of pedagogy in workforce development in infant mental health.
2. Learn about the distinctions in ways of development: knowing, doing and being, and recognize that the last, is often the area of formation that is least attended to.
3. Understand the critical reasons for "reflective practices" by emphasizing the required attention to the "three selves: public, private and secret self.

The concept of professional formation will be described and identified as a framework for preparing the multidisciplinary workforce in the field of infant mental health. Through descriptions of the science of relationship-based practices, the field of interpersonal neurobiology, the power of affect and the influence of affect, gestures, movement and pacing, and insights from "Polyvagal theory", the need for reframing education and training as "Formation" will be illustrated.

BOP04.4

**AN APA-APPROVED PREDOCTORAL PSYCHOLOGY INTERNSHIP IN INFANT AND EARLY CHILDHOOD MENTAL HEALTH**

**Squadron D., Zatina Egan D.\***

*YCS Institute for Infant and Preschool Mental Health ~ East Orange, NJ ~ United States of America*

Participants will:

1. Learn about the importance of introducing IMH as a field early in the development of professional identity, to promote the growth of psychologists in the field.

2. Learn the elements of the program curriculum, clinical case discussions, reflective supervision, and integration of principles and practices of infant mental health throughout the internship. This presentation will offer participants the opportunity to consider ways to begin to develop IMH internships/practicum programs in conjunction with graduate academic programs in the field. Through presentation, clinical illustrations, and sharing of selected materials, ways of supporting growth as infant mental health practitioners will be illustrated.

BOP04.5

**REFLECTIVE SUPERVISION: BUILDING INTERDISCIPLINARY CAPACITY THROUGH DIVERSE TRAINING MODELS**

**Paradis N.\*<sup>[1]</sup>, O'Rourke P.<sup>[2]</sup>**

*<sup>[1]</sup>Alliance for the Advancement of Infant Mental Health ~ Southgate ~ United States of America,*

*<sup>[2]</sup>Women and Children's Hospital ~ Adelaide ~ Australia*

Reflective supervision/consultation (RS/C) is increasingly recognized as best practice for professionals serving infants and families. In many regions, the capacity to provide skilled RS/C is limited resulting in a need to train qualified professionals from across multiple disciplines and service sectors, and often across great distances. This symposium will offer 3 models of cross-disciplinary training aimed at improving knowledge, skill, and reflective capacity for RS/C providers. Discussion will examine how these approaches could be adapted for global use and will facilitate discussion among symposium presenters and participants.

BOP04.6

**A TRAINING MODEL FOR NOVICE PROVIDERS OF REFLECTIVE SUPERVISION/CONSULTATION**

**Paradis N.\*, McCormick A.**

*Alliance for the Advancement of Infant Mental Health ~ Southgate ~ United States of America*

This model was developed for providers of reflective supervision (RS/C) in Michigan, USA who were very new or who were contemplating becoming a supervisor. Training participants came from and were providing RS/C to multiple disciplines. The presentation will describe the content of the training including guidance on developing reflective supervisory relationships, considerations regarding liability, and strategies for evaluating the skills of those to whom the RS/C is provided. Participants will also learn how resources are provided using this approach, such as sample contracts, templates for group ground rules, and outlines for case presentations. Discussion will also include lessons learned on including a live reflective supervision fishbowl into the training model.

BOP04.7

**USING DISTANCE TECHNOLOGY TO TRAIN PROVIDERS OF REFLECTIVE SUPERVISION/CONSULTATION**

**Mulcahy K.\***

*Montclair State University ~ Montclair ~ United States of America*

A model of interdisciplinary reflective supervision/consultation (RS/C) training piloted in New Jersey, USA, which includes a focus on providing group RS/C through virtual platforms will be discussed. While virtual supervision can allow for a more economic and efficient delivery option, unique strategies should be utilized to preserve reflective, relational connection among group members. Lessons learned about facilitating effective virtual RS/C with an interdisciplinary group will be shared.

BOP04.8

**BUILDING CAPACITY WITH CHILD WELFARE AND EARLY CARE AND EDUCATION (HEAD START)**

**Maderia H.\* , Giordano A.**

*Connecticut Association for Infant Mental Health ~ New Haven ~ United States of America*

The Connecticut Association for Infant Mental Health sponsored an 8-part training series for child welfare workers, Head Start and their community partners. The series was repeated 10 times over 5 years. Of the 480 participants, 87 were involved in reflective supervision/consultation (RS/C) for one-two years. Following their own RS/C experience, 15 participated in a 5 day RS/C training with national leaders and fishbowl opportunities. Follow-up sessions with experienced and endorsed facilitators occurred. Evaluation results and participant outcomes will be discussed.

**Symposium S13 - PARENT-INFANT RELATIONSHIP IN PERIL. MEDICAL CHILD ABUSE AND MUNCHAUSEN SYNDROME BY PROXY IN INFANTS AND YOUNG CHILDREN**

**Maldonado--Duran J.\***

*Baylor College of Medicine ~ Houston, Texas~ United States of America*

We address different perspectives on “medical child abuse’ , also known as Munchausen syndrome by proxy, from the medical-social perspective and the mental health points of view. 1)We present the results of a review of 120 cases of this condition in a tertiary level metropolitan pediatric medical center. The findings suggest several patterns of presentation: a) caregivers wishing to defeat physicians b) the parent elicits sympathy and connectedness through the child’s hospitalizations and relapses c) the caregiver may identify with the child and wish to appear as a “savior” and advocate of the child against the medical establishment, among others. 2) The second presentation highlights the “psychiatric’ Munchausen syndrome by proxy, in which parents present multiple symptoms and “abnormalities” in children who eventually are discovered not to have them. The parent maltreats the child and invents behavioral symptoms like sleep disturbance, temper outbursts, feeding problems when they don’t exist in reality. The psychodynamics of this presentation are highlighted, seen in situations of foster care, post-divorce disputes, and wishing to be seen as “heroic” coping with a very troubled child. 3) The vicissitudes of diagnosing the true nature of the problem, differentiation from “hypochondriasis’ in the parent , and excessive anxiety, in contrast to actual fabrication of symptoms and the barriers to recognition of the problem given the defensive practice of pediatric medicine and the fragmentation of care in multiple subspecialties. 4) We address intervention strategies, from diagnosing the situation in a multidisciplinary forum, careful review of the case, conferences between specialists and the role hospitalization or direct observation of the child and parent child interaction.

S13.2

**PEDIATRIC AND PSYCHOSOCIAL PERSPECTIVES IN MEDICAL CHILD ABUSE (MUNCHAUSEN SYNDROME BY PROXY) OF INFANTS AND YOUNG CHILDREN IN A LARGE PEDIATRIC MEDICAL CENTER**

**Stansbury J.\* , Louis P., Culotta P.**

*Baylor College of Medicine ~ Houston, Texas~ United States of America*

A review of over 120 consecutive cases of confirmed Munchausen syndrome by proxy cases evaluated at a large pediatric medical center allows the evaluation of a number of patterns and typical presentations, which are illustrated. The first part addresses the common symptoms which are observed and include histories of false bleedings, fevers, episodes of hypoxia, seizures, pain, diarrhea, irritability and crying which caregivers address in various specialty clinics in a tertiary level hospital. The repeated hospitalizations or visits to the emergency room, the lack of corroborative

evidence, clinical findings that do not correspond with the typical course of a condition, and the lack of compliance on the part of the caregivers should make the clinician suspect this “syndrome”. For the caregiver, some of the suspicious signs are: 1) apparent pleasure in bringing the child to the hospital or repeated consultations, or emergency room; 2) excessive friendliness and closeness between the caregiver and the staff that underlies the parent’s wish to establish connections with medical professionals in conditions of isolation or marginalization, using the child as a “ticket” to elicit compassion and concern from others; 3) an excessive demand for multiple explorations, procedures, imaging studies and “taking control” of the child’s treatment, in which the caregiver is “almost like a doctor or nurse” and professes to know more about the condition, having read extensive literature on a condition that does not exist in their child. The caregiver experiences him or herself as a “savior of their child” or a martyr who is constantly vigilant and takes pleasure in conducting medical maneuvers that may be unnecessary. Other less common scenarios are touched upon with implications for diagnosis and treatment. Clinicians should suspect medical child abuse in children with frequent visits to hospital, with uncharacteristic course, contradictory medical findings, splintering of medical care and unusual behavior in caregivers.

### S13.3

#### **PSYCHIATRIC MUNCHAUSEN SYNDROME BY PROXY IN INFANTS AND YOUNG CHILDREN. THE FABRICATION OF MENTAL HEALTH SYMPTOMS**

**Maldonado--Duran J.\*<sup>[1]</sup>, Chandra P.<sup>[2]</sup>**

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The fabrication of mental health symptoms by caregivers has received little attention and needs to be recognized. Vulnerable infants may be exposed to unnecessary treatments, including pharmacological ones. The goal is to recognize “alarm signs” and symptoms that may save the child from multiple procedures and treatment interventions for nonexistent problems. We reviewed two series of cases, one involving 70 cases of young children referred for consultation in a mental health center, and 200 further cases from a child psychiatric outpatient clinic, identifying those cases in which fabrication of mental health symptoms was discovered. The caregiver infant relationship was analyzed as well as the interface between the caregiver and mental health treaters. In all 10 cases were identified. Four cases involved foster parents and children in their care. The caregivers gave exaggerated accounts of problems that seemed implausible, like “the child has not slept at all for three weeks”, or “he eats all the time” when the child is actually underweight, or reporting extremely long temper outbursts lasting for “several hours” several times a day. The caregivers wanted to be acknowledge for heroic efforts often being survivors of child abuse. Four cases involved dissociative states in the parent, who maltreated the child in a different mental state, producing unexplained bruises, or burns, that were attributed to the child. The caregiver projected onto the child a “bad self” and perceived the infant as devilish or possessed by the devil. Three cases involved exaggeration of symptoms in postdivorce situations attempting to exaggerate the negative impact of the other parent on the child. The condition should be kept in mind in parents who visit multiple mental health providers, request multiple medications for symptoms that seem exaggerated or implausible, and in which the caregiver has unusual or contradictory behaviors vis a vis the child or the provider.

### S13.4

#### **DIFFICULTIES IN DIAGNOSING MEDICAL CHILD ABUSE AND DIFFERENTIAL DIAGNOSIS OF THE PROBLEM. THE FEATURES OF THE MEDICAL ESTABLISHMENT**

**Louis P.\*, Maldonado--Duran J.**

*Baylor College of Medicine ~ Houston, Texas ~ United States of America*

We identify the main barriers in the diagnosis of medical abuse, and the steps to a differential diagnosis. The purpose is to help various clinician to identify these situations. The problem of “hypochondriasis in the caregiver” should be distinguished from the actual fabrication of symptoms. In the first situation the parent has an exaggerated and catastrophic perception of the child’s symptoms based on intense anxiety, fear of loss, unresolved trauma and losses from the past or negative previous experiences with medical professionals. There is no actual fabrication of symptoms. Another scenario is the superposition of fabricated elements in an infant or young child who actually has a chronic medical condition, but in which the parent purposefully influences a negative outcome, fabricates symptoms, and constantly baffles the medical staff with new unexpected complications or problems that are difficult to solve. It is difficult to disentangle the “true” nature of the chronic condition from the exaggerated accounts of parents who may be eager to defeat the medical staff or acquire friendships and kindness from staff through the illness in the child. In less common situation there is a secondary gain from exaggerating the chronic condition, for purposes of fundraising or acquiring other benefits. We focus also on the features of medical care in large centers, which is often fragmented, and the practice of “defensive medicine” in which multiple studies and procedures are ordered for fear of parental complains or litigation, leading to unnecessary medical procedures and prolongation of the problem.

S13.5

#### **INTERVENTION STRATEGIES IN MEDICAL CHILD ABUSE (MUNCHAUSEN SYNDROME BY PROXY) IN INFANTS AND YOUNG CHILDREN**

**Culotta P.\*, Stansbury J.**

*Baylor College of Medicine ~ Houston, Texas ~ United States of America*

We describe “best practices” to deal with medical child abuse. We describe the need to protect the child as the main priority, balanced often with the need of a comprehensive mental health assessment and treatment of caregivers who may require intensive psychological interventions. We also focus on the role of the medical specialists and child protective services to develop a consistent and sophisticated intervention strategy. Once the diagnosis is made, the dilemma of “where to place the child” comes to the fore. Pediatricians of various specialists will need to evaluate the risks and benefits involved with leaving the child in the home environment or suggesting an alternative placement. This depends on the chronicity and severity of the fabrication of symptoms, the recognition (or not) by the caregiver that there is a problem and the acceptance (or not) of psychosocial evaluations and treatment as a prerequisite to keep the child at home or reintegration. Delicate issues like surveillance of parents, presenting medical evidence of multiple unnecessary hospitalizations, emergency room visits or hospitalizations, manipulation or noncompliance with treatment recommendations are a risky endeavor that may alienate the parent. Child protective services have an important role in exerting leverage on parents to accept and engage in psychosocial interventions, psychotherapy, group therapy, home visitations and extended surveillance in order to improve the parent child relationship and the survival chances of the child, in physical and psychological terms

## Brief Oral Presentations BOP07 - EXPERIENCE OF PREGNANCY AND CHILDBIRTH - PART I

BOP07.1

### **PATERNAL TRAUMA FOLLOWING CHILDBIRTH: FATHERS' EXPERIENCES AND SUBSEQUENT IMPACT**

**Bristow F., Iles J.\*, Pote H.**

*Royal Holloway, University of London ~ London ~ United Kingdom*

The birth of an infant is a key event in the perinatal period that can influence the mental health of both mothers and fathers, sometimes leading to posttraumatic stress disorder (PTSD). Research is no longer limited to maternal experiences and now indicates that fathers can develop trauma symptoms following witnessing their partner's labour and birth. This study aimed to develop a model of fathers' experiences of trauma following childbirth to identify factors contributing to the experience being perceived as traumatic, understand how trauma symptoms are experienced, and the subsequent impact of these postnatally. A qualitative approach was adopted, using grounded theory methodology to explore first-time fathers' experiences of witnessing a subjectively identified traumatic labour and/or childbirth. Ten UK-based fathers were interviewed individually. Fathers either reported full symptoms of PTSD (n = 1), partial or clinically significant symptoms (n = 4), or met criteria for the experience being traumatic but had no symptoms of PTSD (n = 5). The emergent model consisted of six interacting theoretical codes highlighting antenatal, peri-traumatic (during labour and birth) and postnatal processes involved in the development and maintenance of paternal trauma following childbirth. Although findings indicate some similarities with existing theories, a number of factors appear to be unique to the paternal experience. These include fathers' perceived responsibility to protect and support their partner and baby, the influence of partner emotions, shock when attempting to reconcile expectations and reality, the desire for information, need for preparation and support throughout the experience, systemic factors and maladaptive coping strategies which act as barriers to fathers being able to process their experience, and the impact of their experience on parenting. The emergent model highlights important implications for antenatal and perinatal practices, highlighting potential areas for prevention, identification, and treatment of paternal trauma following childbirth.

BOP07.2

### **WOMEN'S EXPERIENCES OF CHILDBIRTH AND THE MOTHER'S BOND WITH THE BABY**

**Ouma S.\***

*Lira University ~ Lira ~ Uganda*

Despite the reductions in maternal mortality registered in the last two decades, pregnancy and childbirth remain life and death experiences for thousands of women across many parts of the developing world. The women's perceptions of near miss maternal experiences and the impact of those maternal experiences on the mothers and the bond the affected mothers develop with their babies have not been widely explored. The purpose of the study was to examine the experiences of childbirth among high-risk mothers and the impact on mother-infant relationships. As part of a mixed methods study conducted in Uganda in 2015, we retrospectively examined the women's experiences of pregnancy and intrapartum for a sample of 41 high-risk mothers. Women narrated their experiences of pregnancy, labour, delivery and the time spent at the hospital following delivery. The women's experiences of pregnancy, labour and post-delivery were similar to experiences of chronic illness described by Frank (1995) and were characterised by narratives of restitution, chaos and quest. Lack of planning for pregnancy and the health care system were responsible for the many negative experiences reported by the mothers. Whereas birth of a live and

healthy baby was reported to have protected many mothers from the impact of negative childbirth experiences, there was evidence of potential long term impact of negative maternal experiences on mothers and their babies. The findings of this exploratory study show that negative experiences of childbirth affect mothers and the bond mothers develop with their babies. Consequently, this might have serious consequences for the attachment relationships of the affected families

BOP07.3

### **FINDING THE WAY INTO MOTHERING A NEWBORN AFTER A POSTNATAL BLACKOUT**

**Kurth E.\***

*Familystart beider Basel ~ Basel ~ Switzerland*

Illustrating how midwifery home care using a combined approach of therapeutic conversation and nursing care interventions can strengthen the mother-infant relation. Joanna had a bumpy journey into motherhood: After several failed attempts of in vitro fertilization she and her husband opted for an egg donation. During the pregnancy she developed preeclampsia which led to induction of labour, emergency c-section and treatment of barely controllable hypertonia in the intensive care unit during which she suffered a mental blackout. Offering postnatal home visits as a midwife, I met Joanna the day after hospital discharge - 7 days post-birth. Due to extreme exhaustion from the hospital experience, she had little interaction with healthy baby, Boran, apart from breast feeding. I used a systemic approach to interact with Joanna, her husband and the baby. The couple was encouraged to narrate their delivery experiences, allowing Joanna to reconstruct a coherent story. To rediscover her sense of self I also offered a massage which helped her relax for the first time since her hospital admission. Having essentially missed the first hours of Boran's life, I suggested her recreating the initial and intimate bonding experience. Freshly bathed, little Boran eventually settled and cuddled into the arms of his mother, skin to skin, bringing tears of joy to her eyes. Over time, Joanna slowly recovered physically, assumed responsibility and enjoyed mothering her child.

BOP07.4

### **THREE TYPES OF TRANSCULTURAL APPROACHES IN A PARIS MATERNITY WARD**

**Radjack R.\*, Mc Mahon A., Moro M.R.**

*Maison de Solenn, Cochin Hospital ~ Paris ~ France*

Migration can be associated with vulnerability, particularly in the perinatal period. Indeed, it may lead to disruptions in cultural representations and mothering techniques. Reassurance and protection usually provided by the cultural group are most needed but frequently lacking. Moreover, most of these parents have been confronted to a traumatic event before their migration and/or they find themselves in a situation of precarity in the host country. These issues are often reactivated in the perinatal period when it is time to welcome the baby. Our team has built multidisciplinary intervention strategies, taking into account the cultural and social context and the specificities of the observed pathologies in these transcultural situations. We have developed three different ways to practice transcultural approaches during the short stay in the maternity ward:

- cultural mediation (with an interpreter) in the hospital room in the presence of the mother and the baby
- a transcultural and cosmopolitan setting (with a group of therapists from different cultural backgrounds)
- a support and discussion group (sharings between migrant women focused on different ways of mothering across cultures and the blending of multiple mothering techniques)

In those three cases, the therapist's role is not to conform the patients' parenthood to his/her own representations. The point is not to show a way to be, or how to do, but to support parenting skills

and to allow cultural representations to be elaborated and deployed. Observing mother-baby interactions in transcultural situations teaches the therapists to “decenter” themselves from their own representations and to recognize and elaborate their cultural counter-transference. It is relevant to differentiate these three types of transcultural practices, which are adapted according to the temporality and singularity of each of the mother-infant dyads.

BOP07.5

### **DELIVERY MODE AND TODDLERS’ EMOTIONAL AND BEHAVIORAL PROBLEMS: THE MEDIATING ROLE OF MATERNAL CHARACTERISTICS**

**Jasiulione J.S., Jusiene R.\***

*Vilnius University ~ Vilnius ~ Lithuania*

The aim of this study is to examine association between delivery mode and behavioral and emotional problems of children’s up to 2.5 years old and to assess the possible effect of maternal characteristics on this association. Two hundred seventy mothers and their children participated in the longitudinal study: 162 born after normal vaginal delivery in hospital, 30 born after normal vaginal delivery at home, 55 after urgent Cesarean section and 22 after scheduled Cesarean section. Maternal infant-rearing attitudes (Zeifman, 2003) and maternal emotional distress were assessed 3 months after delivery, and maternal self-efficacy (Van Ijzendoor, Bakermans-Kanenburg, & Juffer, 1999) was evaluated 1.5 year after delivery. The Child Behavior Checklist (CBCL/1½-5, Achenbach & Rescorla, 2000) was used for the assessment of behavioral and emotional problems at children’s age 1.5 and 2.5 years. Results showed that children born at home were rated by their mothers as having significantly less emotional and behavioral problems while children born from urgent Cesarean section had the highest scores of emotional ( $p = 0.03$ ) and behavioral ( $p = 0.007$ ) problems at the age 1.5 year old. At the age of 2.5 years children born from urgent Cesarean section were still rated as having significantly more emotional ( $p = 0.013$ ), but not behavioral problems in comparison with other groups. A regression analysis revealed that urgent Cesarean section significantly predicts children’s emotional and behavioral problems at the age of 1.5, but not at the age of 2.5 years. The risk of having more emotional and behavioral problem at the age of 1.5 years is also predicted by maternal distress, infant-rearing attitudes, maternal self-efficacy and child’s gender. While at the age of 2.5 years children’s emotional and behavioral problems are predicted by maternal distress and self-efficacy but not by childbirth or socio-demographic factors.

BOP07.6

### **INTERVENTION IMPACT OF THE CLOWNS HOSPITALIERS «LE RIRE MEDECIN’S CONFETTI FAMILY» IN A MATERNITY WARD**

**Tereno S.\*<sup>[1]</sup>, Behaghel A.<sup>[2]</sup>, Costa C.<sup>[2]</sup>, Simonds C.<sup>[3]</sup>**

<sup>[1]</sup>*Institut De Psychologie, Université Paris Descartes, Sorbonne Paris Cité; LPPS (EA 4057) ~ Paris ~ France,* <sup>[2]</sup>*Institut De Psychologie, Université Paris Descartes, Sorbonne Paris Cité ~ Paris ~ France,* <sup>[3]</sup>*Association Le Rire Médecin ~ Paris, ~ France*

Newborns depend completely on others to survive and they do not have access to the psychological tools needed to adapt to their new environment. Since the very first moments of live, they develop these tools through their relationship with their mother, from whom they activate caregiving responses in order to receive physical and emotional support. The hospital clowns of the Association « Le Rire Medecin’s Confetti Family » have spent 26 years in France devoted to children at the end of their life. Since September 2016, they cherish the privilege of intervening at the very beginning of life, for the first time in a maternity ward. The « Maternity Serenades » intervention purpose is to help newborns ease into a well-balanced and safe relationship with their birth environment

through gentle play and music. We present impact results of this pioneer program, concerning maternal anxiety and bonding to the newborn. In a preliminary phase, we assessed 32 mothers (mean age (sd) = 31,53 (4.81)) at two days after delivery. The “state anxiety” was assessed with the State Trait Anxiety Inventory (STAY; Bruchon-Schweitzer et Paulhan, 1993) and the “bonding quality” with their newborn with the Parental Bonding Instrument (PBI; Brockington, Fraser, et Wilson, 2006). Mothers answered the scales before and after the clowns’ intervention. Results showed that after the clowns intervention, the mothers’ level of “state anxiety” diminished very significantly ( $t(31) = 4.45$ ;  $p > 0.000$ ). They also evidenced a significantly improved “bonding” with their newborn. More precisely, the intervention seemed to decrease Relationship Changing ( $t(30) = 3.71$ ;  $n = 0.001$ ), Caregiving Anxiety ( $t(30) = 2.24$ ;  $n = 0.03$ ), and Rejection and Pathological Anger ( $t(30) = 2.54$ ;  $n = 0.02$ , but not Abusive Risk ( $t(30) = 1.0$ ;  $n.s.$ ) levels. In this presentation we present confirmatory or new results obtained with a larger sample, from data we’re still collecting. Globally, our results support the idea that clowns’ interventions should be more broadly used in maternity wards. Nevertheless, in very severe mother-child relationship’s disruption, namely in abusive risk situations, as expected, this kind of intervention seems not to be appropriate, since it does not have a therapeutic intention.

BOP07.7

### **HOW DOES MATERNAL CHILDHOOD ADVERSITY CAUSE ADVERSE BIRTH OUTCOMES?**

**Shreffler K., Wyatt T.\*, Tiemeyer S.**

*Oklahoma State University ~ Tulsa ~ United States of America*

Early maternal adverse life events, such as those captured by the adverse childhood experiences (ACEs: childhood abuse, violence, sexual assault, parental addiction, mental health problems, incarceration, and divorce) measures, can have important implications for birth outcomes. Yet, the mechanisms linking maternal ACEs and birth outcomes have not been explored. This study has two primary aims: 1) to delineate variation in behavioral (e.g., healthful behaviors during pregnancy, prenatal care) and physiological (e.g., allostatic load) prenatal exposures by maternal adverse childhood experiences (ACE score); and 2) to determine the relationship between maternal ACE score and adverse birth outcomes (e.g., pregnancy loss, pregnancy complications, pre-term birth, low birthweight, etc.) and ascertain the extent to which behavioral and physiological mechanisms mediate the associations between ACE score and adverse birth outcomes. We are currently conducting a longitudinal study of 150 pregnant women that includes survey, biomarker, and medical record data. By early spring, the majority of participants will have given birth, so we will have information on adverse birth outcomes. We propose a structural equation analysis to determine significant pathways. Utilizing a biobehavioral framework, results of this study are expected to inform clinical practice, programs and policies, and future research, thereby reducing negative outcomes such as preterm birth, low birthweight, and infant mortality. By better defining these pathways, the crucial factors that medical and mental health professionals must target will be identified in order to reduce the risk of adverse birth outcomes that follow maternal early adversity.

### **Workshop WS19 - WHY DO FATHERS FEEL LEFT OUT.....AND HOW TO CHANGE THAT!**

**Kasovac N.\***

*University of Puget Sound ~ Tacoma, WA ~ United States of America*

This workshop will present many examples across multidisciplinary fields that minimize, marginalize, or disrupt the relationship between father and infant. Once aware of these often unintended consequences, providers will be capable of taking steps to make changes. This workshop identifies why many fathers feel “left out” as a parent, with examples of how fathers are minimized,

marginalized, dismissed and even ignored. Yet, the societal expectation is for fathers to “step up” and be more “involved” in their child’s life. In short, fathers are getting mixed messages and have little recourse. Examples can be found in research, hospitals, pediatrics, labor & delivery, newborn education, and service programs. Once identified, providers can make changes and be more inclusive of fathers to make them feel important, welcomed, and inclusive. Solutions, recommendations, and problem-solving will be significant aspects of this presentation and subsequent discussions, in addition to some didactic learning.

### **Workshop WS20 - THE NATURE OF TODDLERS AND NURTURING FATHERS**

**Kasovac N.\*<sup>[2]</sup>, Daligga B.<sup>[1]</sup>**

<sup>[1]</sup>Michigan Association for Infant Mental Health ~ Detroit ~ United States of America, <sup>[2]</sup>University of Puget Sound ~ Tacoma, WA ~ United States of America

This workshop explores the “nature” of toddlers, the double meaning of “nurturing fathers,” plus challenges and opportunities for greater professional attunement to the relationships between toddlers and fathers. Two clinicians will share their experiences with fathers and toddlers in group and family prevention/intervention programs, using a relational, developmental approach. Practical learnings, video examples, and recommendations will be highlighted to better understand, attune and attend to the father-toddler dyadic relationship. Toddlers are entertaining and frustrating creatures whose behaviors can be challenging to understand, leaving parents frequently feeling incompetent and/or perplexed. Zero to Three’s National Parent Survey suggests parents expect their child’s capabilities to develop earlier than is typical. This poses significant dilemmas for parents of the “adolescents of babyhood.” Similarly, the contributions of fathers to infant-toddler mental health are often misconstrued, marginalized, or unacknowledged, leaving male parents without appropriate resources or responses to their needs. Despite a modest increase in the body of research on fathers and their impact on infant and early childhood development, the results have had less effect than might be expected on assumptions, priorities or practices in many of today’s families as well as in clinical and programmatic decision-making. The focus of media, and popular western culture continue to emphasize the relationship between mother and infant/toddler, overlooking many caregiving efforts fathers make. Healthy, secure attachment relationships are critical to infant and toddler development, yet the inclusion of father-infant/toddler dyads in research and in programming is still sadly insufficient.

### **Workshop WS25 - INTERGENERATIONAL TRANSMISSION OF MENTORING RELATIONSHIPS: OUR EXPERIENCES IN THE FIELD OF INFANT MENTAL HEALTH**

**Oppenheim D.\*<sup>[1]</sup>, Weatherston D.<sup>[2]</sup>, Puura K.<sup>[3]</sup>, Guedeney A.<sup>[4]</sup>**

<sup>[1]</sup>University of Haifa ~ Haifa ~ Israel, <sup>[2]</sup>Alliance for the Advancement of Infant Mental Health, Inc. ~ Southgate ~ United States of America, <sup>[3]</sup>University of Tampere ~ Tampere ~ Finland, <sup>[4]</sup>Hôpitaux de Paris ~ Paris ~ France

In this symposium we will extend the paradigm of intergenerational transmission to our growth as professionals in the field: How our experience as (metaphorical) infants and children in the field is passed on to the next generation when we are in the position of mentors. It is a natural part of professional growth that we have “early” relationships with “parental” figures and guides to whom we turn to learn, to guide our work, help us in times of distress and sometimes even crisis. Many of us can easily point out to these professional parental figures and recall high and low moments in our relationships with them. Over the years we have shifted to mentoring roles, and our past experiences has impacted how we assume these roles. This workshop is organized by four of us, IMH professionals, who have been engaged for many years in the field. In the first part we will briefly

present our own experiences, followed by a group activity in which the symposium participants, divided into small groups, will share with each other experiences related to the symposium theme. In the last part of the symposium one representative from each group will summarize what emerged in the group discussions. We hope this symposium will provide a window of time for self-reflection and sharing with other WAIMH delegates of an important part of our professional life: Building on our past experiences in order to foster growth and development in the next generation of IMH professionals.

## 13:15-14:45 General Sessions

### Symposium S02 - LONGITUDINAL EFFECTS OF EARLY CAREGIVING EXPERIENCES AND CHILDREN'S INTERNAL REPRESENTATIONS

Von Klitzing K.\*

*University of Leipzig ~ Leipzig ~ Germany*

The history of early child-caregiver interactions lay the foundation for representations that become generalized to new relationships and thereby provide an important basis for mental health. This symposium will focus on four longitudinal studies that examine different components of this fundamental proposal that lies at the heart of many developmental theories. Presentation 1 will focus on attachment security assessed in the Still Face Procedure and the Strange Situation, examining sex-specific effects on oppositional defiant disorder symptoms up to the age of 7 years. Presentation 2 focuses on the role of mother-infant vocal coordination in the intergenerational transmission of attachment. Presentation 3 shows the importance of preschool representations and how they become generalised to a physiological marker of expectations during peer interactions and provide a possible mechanism for the emergence of emotional disorders. Finally, Presentation 4 will focus on trajectories of children's representations from preschool to early school-age and their association with behavioural outcomes.

#### S02.2

#### **ATTACHMENT SECURITY ASSESSED IN THE STILL FACE AND THE STRANGE SITUATION, VAGAL REACTIVITY AND CHILD IRRITABILITY AT AGE 7 YEARS**

Hill J.\*<sup>[1]</sup>, Pickles A.<sup>[2]</sup>, Wright N.<sup>[2]</sup>, De Pascalis L.<sup>[2]</sup>, Bozicevic L.<sup>[2]</sup>, Sharp H.<sup>[2]</sup>

<sup>[1]</sup>*University of Reading ~ Reading ~ United Kingdom*, <sup>[2]</sup>*University of Liverpool ~ Liverpool ~ United Kingdom*

We have previously reported that the association between vagal reactivity in the Still Face (SF) at 29 weeks months and ODD symptoms up to 5 years is in opposite directions in boys and girls. We have also shown that attachment security based on emotion regulation in the transition from maternal unresponsiveness to re-engagement in the Still Face (SF) is associated with later attachment security in the Strange Situation (SST) and may therefore represent an early indicator of attachment security. Extending the outcome to ODD symptoms at age 7 years we examined whether the sex dependent association is modified by attachment insecurity. In a general population study of first time mothers recruited during pregnancy (N = 1233) a stratified subsample was assessed using the SF 29 weeks and the SST at 14 months. Mother reports of ODD symptoms were obtained at 7 years. Data on all measures were available for 211 children. There was a three way interaction between vagal reactivity in the SF, insecure attachment in both the SF and SST, and sex of child ( $p = .024$ ). In girls increasing vagal reactivity was associated with increasing ODD symptoms ( $R^2 = .04$ ,  $\beta = .20$ ,  $p = .038$ ) with no modification by attachment security. In boys there was an attachment by vagal reactivity interaction ( $p = .003$ ). There was a protective effect of increasing vagal reactivity only in boys secure either in the SF or SST ( $R^2 = .11$ ,  $\beta = -.33$ ,  $p = .023$ ) but among those insecure at both points the effect was in the opposite direction ( $R^2 = .09$ ,  $\beta = .31$ ,  $p = .051$ ). We find further evidence for a sex dependent effect of vagal reactivity in infancy on childhood ODD symptoms. For the first time we also find that this is modified in boys but not in girls, by early attachment security.

S02.3

### **MATERNAL ATTACHMENT STATE OF MIND, MOTHER-CHILD VOCAL COORDINATION IN 4 MONTHS INTERACTIONS, AND INFANT-MOTHER ATTACHMENT CLASSIFICATION AT 13 MONTHS**

**Tharner A.<sup>\*[1]</sup>, Harder S.<sup>[2]</sup>, Køppe S.<sup>[2]</sup>, Væver M.<sup>[2]</sup>**

<sup>[1]</sup>*Erasmus University Rotterdam ~ Rotterdam ~ The Netherlands*, <sup>[2]</sup>*University of Copenhagen ~ Copenhagen ~ Denmark*

Maternal state of mind with regard to attachment is thought to be an important predictor of infant-mother attachment security. However, mechanisms of transmission are not well understood. It has been shown that patterns of co-regulated interactions during the first year of life predict later attachment security. As vocal interaction are the primary channel for communication between mothers and infants, this study examines the role of vocal coordination between mother and infant during the first year of life in the intergenerational transmission of attachment. Participants were 60 low-risk mothers and their children from urban Copenhagen. Maternal attachment state of mind was assessed using the Adult Attachment Interview in the third trimester of pregnancy. Maternal and child vocalizations were micro-coded during three minutes of face-to-face interactions at 4, 7 and 10 months. Percentage of time spent in coordinated vocal interaction was calculated based on a previous study using this sample (Harder et al., 2015). At 13 months old, infant-mother attachment quality was assessed using the Strange Situation Procedure. Preliminary findings indicate that in dyads with insecure mothers, there is less vocal coordination in mother-infant interactions ( $\beta = -0.213$ ,  $p = 0.045$ ). However, no association is found between vocal coordination and infant attachment security at 13 months. Also, there were no direct or indirect (via vocal coordination) effects of maternal attachment state of mind on infant attachment security. Findings indicate that although maternal attachment state of mind might be related to mother-infant vocal coordination, vocal coordination did not seem to play a role in the intergenerational transmission of attachment. Future studies should examine whether the differences in vocal coordination between dyads with secure and insecure mothers translate to child outcomes at a later age, or to child outcomes other than infant-mother attachment, e.g. infant language abilities.

S02.4

### **WHOSE HEART BRAKES WHEN? PRESCHOOL PARENT REPRESENTATIONS PREDICT A PHYSIOLOGICAL MARKER OF EXPECTATIONS DURING PEER INTERACTIONS WHICH MEDIATES THE EFFECT ON EMOTIONAL DISORDERS**

**White L.<sup>\*[1]</sup>, Bornemann B.<sup>[2]</sup>, Crowley M.J.<sup>[3]</sup>, Von Klitzing K.<sup>[1]</sup>, Klein A.<sup>[1]</sup>, Otto Y.<sup>[1]</sup>**

<sup>[1]</sup>*University of Leipzig ~ Leipzig ~ Germany*, <sup>[2]</sup>*Max Planck Institute for Cognitive and Brain Sciences ~ Leipzig ~ Germany*, <sup>[3]</sup>*Yale Child Study Center, Yale University ~ New Haven ~ United States of America*

Children are thought to form mental representations and expectations from their earliest caregiving experiences. These representations are carried forward into new relationships and may lie at the heart of emotional disorders in childhood. Yet, few or no studies test these assumptions using physiological markers of expectations in early childhood. We aimed to connect measures of preschool representations to a direct physiological marker of expectation and, in turn, relate this marker to the emergence of emotional disorders. We used a longitudinal design in a cohort of 155 children who were oversampled for emotional symptoms from a population of 1738 preschoolers. We conducted the Preschool-Age Psychiatric Assessment (PAPA) to assess emotional disorders at age 5 (69.1% with Emotional disorder) and at age 8 (63.2% with Emotional disorder). At preschool-age, we assessed children's representations of their caregivers using the MacArthur Story Stem Battery (MSSB) and their verbal abilities. At school-age, children played the computerized ball-toss

game, Cyberball, ostensibly with unfamiliar peers over the internet who initially included, and then excluded the participant. As a physiological marker of expectancy violation, we assessed transient heart-rate changes to not-my-turn events (not receiving the ball) during exclusion vs. inclusion. Event-related transient cardiac slowing is a parasympathetically mediated response to salient or surprising stimuli that depart from one's mental set or schema (see Bradley, 2009). The more positively children represented their caregivers in their stories at preschool-age, the more cardiac slowing they showed for not-my-turn events during exclusion (controlling for verbal abilities, SES, and gender), suggesting that exclusion more strongly violated their expectancies ( $\beta = -.250$ ,  $p = .005$ ). Moreover, we found evidence for an indirect mediation effect from fewer positive parent representations through less cardiac slowing to increases of emotional disorders at school-age. We will discuss the clinical implications for importance of relational interventions in early childhood.

S02.5

### **DEVELOPMENTAL TRAJECTORIES OF NARRATIVE REPRESENTATIONS FROM KINDERGARTEN AGE TO MIDDLE CHILDHOOD**

**Stadelmann S.\*<sup>[1]</sup>, Bergmann S.<sup>[1]</sup>, Perren S.<sup>[2]</sup>, Von Klitzing K.<sup>[1]</sup>**

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In a number of developmental theories, it is suggested that children internalize important aspects of early caregiving experiences and that these internalizations (representations) then influence their behavior and the form and quality of relationships outside the family. Story stem methods have shown to be a useful way for assessing children's narrative representations. However, little is known about stability and change of narrative representations and whether narrative representations may predict children's behavior over time. In this longitudinal study we aim to investigate whether trajectories of narrative representations between kindergarten age and middle childhood and life events are both predictors of children's behavioral and emotional problems and social skills in middle childhood. A clinically enriched sample of 128 children (54 girls, 74 boys) participated in this study. Assessment of narrative representations and life events took place at the age of 5, 6 and 9. Narrative representations (positive and negative parental representations, narrative coherence) were assessed using eight story stems that reflect a range of socio-emotional dilemmas. Life events were assessed with a life event checklist (Coddington, 1972). At the age of 9, a multi-informant approach was employed to assess children's behavioral and emotional problems and social competences. Therefore, parents, teachers and children completed questionnaires. We found moderate stability of narrative representations during kindergarten age (age 5-6) and low stability of narrative representations between kindergarten and middle childhood. Further, preliminary results showed three different groups of trajectories for each kind of narrative representations (positive and negative parental representations, narrative coherence) which differentially predicted the level of behavioral outcomes in middle childhood. We will discuss how these social-cognitive processes over time may help us to explain adaptive and maladaptive outcomes in children.

### **Symposium S05 - HPA AXIS AND STRESS RESPONSIVENESS – PRENATALLY DETERMINED OR POSTNATALLY REPROGRAMMED?**

**Uusitupa H.\*<sup>[2]</sup>, O'Mahony S.<sup>[3]</sup>, Wibke J.<sup>[1]</sup>**

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Maternal prenatal stress (PS) has been associated with both infant negative affect and altered stress regulation, and has consequences on wide range of outcomes persisting into adulthood. Increased understanding of the effects of PS have indicated the need to reveal biomarkers for PS to enable the development of targeted practices and counseling in health care system focused to risk families. In this symposium the pre- and postnatal cortisol as a biomarker for stress as well as factors affecting stress transmission and resilience are discussed. The aim of the symposia is to generate a platform to discuss the magnitude of pre- and postnatal factors affecting stress transmission. Intergenerational measures on maternal care and the offspring's methylome, including the epigenetic clock, are discussed, as well as HPA axis reactivity in infancy. Understanding the role of cortisol prenatally and postnatally and the biochemistry of maternal care and breastfeeding will enable the development of early intervention and counseling practices, targeted to risk families, that prevent the intergenerational transmission of stress and its negative health trajectories.

S05.2

**FINNBRAIN BIRTH COHORT STUDY: HIGHER HPA-AXIS REACTIVITY AT 2,5 MONTHS POSTPARTUM IS ASSOCIATED WITH HIGHER FEARFULNESS AT 8 MONTHS POSTPARTUM IN GIRLS**

**Kortelnuoma S.\*<sup>[1]</sup>, Nolvi S., Korhonen L., Kataja E., Karlsson L., Karlsson H.**

*The FinnBrain Birth Cohort Study, Turku Brain and Mind Center, Institute of Clinical Medicine, University of Turku, Finland ~ Turku ~ Finland*

Maternal prenatal stress (PS) has been associated with both infant negative affect and altered stress regulation. All these factors are linked with later psychopathology in the offspring. The few attempts to clarify the possible interrelations between PS, stress regulation and negative affect have yielded mixed results. The study population comprised infants of mothers with PS and their controls from the Focus Cohort of the FinnBrain Birth Cohort Study (Karlsson et al. 2017). PS was measured by validated self-report scales of depressive and anxiety symptoms. Cortisol responses to an acute stressor (venipuncture and pediatric examination) of 2.5-month-old infants were measured by five saliva samples (baseline, 0, 15, 25, 35 minutes). Infant fearfulness at 8 months was observed using Laboratory Temperament Assessment Battery (Lab-TAB, Goldsmith & Rothbart, 1999) Masks episode. Cortisol concentrations of infants with high (n=96) or low (n=97) fearfulness (median split) were compared. Cortisol concentrations in all four samples after the stressor (0-35 minutes) correlated with fearfulness but only in girls (rs=0.23-0.41, p=0.0003-0.032). Moreover, cortisol concentrations of girls in the group of high fearfulness were elevated compared to all or some of the other groups (high/low fearfulness boys, low fearfulness girls) depending on the cortisol sample (15-35 min post stress, p=0.001-0.042). The baseline cortisol level was unrelated to fearfulness. Finally, no difference in cortisol concentrations or overall fearfulness among children exposed and not-exposed to PS was found. Preliminary results showed sex-specific positive association between cortisol responses to the stressor at 2.5 months and fearfulness at 8 months. More detailed analysis will be conducted to study interactions between PS exposure, cortisol and sex in predicting infant fearfulness.

S05.3

**IN SEARCH OF BIOMARKERS FOR PRENATAL STRESS – THE ROLE OF HAIR CORTISOL CONCENTRATION (HCC)**

**Mustonen P.\*<sup>[1]</sup>, Karlsson L.<sup>[1]</sup>, Scheinin N.<sup>[1]</sup>, Kortelnuoma S.<sup>[1]</sup>, Karlsson H.<sup>[1]</sup>, Coimbra B.<sup>[2]</sup>, João R.A.<sup>[2]</sup>**

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Maternal prenatal stress (PS) can have long-lasting effects on the behaviour, mental health and neurodevelopment of the offspring. Yet, the mediating mechanisms remain widely unknown. Altered maternal hypothalamus-pituitary-adrenal (HPA) axis functioning is hypothesized to play a key role but the studies assessing short-term cortisol concentrations have yielded inconsistent results. Hair cortisol concentration (HCC), a marker for long-term cortisol levels, could offer new perspective in this field of research. We review the literature on prenatal HCC studies and critically evaluate the potential of HCC as a biomarker for maternal PS and for HPA axis functioning during pregnancy. In addition, we briefly present results from the FinnBrain Birth Cohort Study regarding these associations. We have conducted a systematic review on the topic. Using the FinnBrain Birth Cohort data, we have analysed maternal HCC at gestational weeks (gwks) 24 (N=475) and 40 (N=242). PS has been measured with different self-report questionnaires (EPDS, SCL, PRAQ-R2, Daily Hassles, TADS, RDAS) at gwks 14, 24 and 34. Prenatal HCC has been measured in 15 studies, thus far, 6 of them assessing its associations to maternal PS. The results on associations between PS and HCC are inconsistent and several factors seem to affect the association, especially the timing of the measurements and type, duration, and severity of PS. Lifetime adverse events potentially program the HPA axis also affecting prenatal HCC. In FinnBrain, weak associations between HCC and some subtypes of PS (e.g. daily hassles) were observed, while other types of PS (e.g. maternal anxiety symptoms) were unrelated to HCC. HCC and self-reports of PS seem to assess partially different aspects of PS. The potential of HCC to predict trajectories in child development is of importance and further studies with repetitive, transgenerational, multidimensional measurements are needed.

S05.4

#### **BREASTFEEDING – IMPACT OF EARLY ADVERSITY, DEPRESSION AND IMPACT ON INFANT TEMPERAMENT AND CORTISOL**

**Wibke J.\*<sup>[1]</sup>, Bisceglia R.<sup>[2]</sup>, Viara M.<sup>[2]</sup>, Dundin A.<sup>[2]</sup>, Kennedy J.<sup>[3]</sup>, Meaney M.<sup>[4]</sup>, Atkinson L.<sup>[5]</sup>, Steiner M.<sup>[6]</sup>, Wazana A.<sup>[7]</sup>, Fleming A.<sup>[7]</sup>**

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Exclusive breastfeeding for the first six months postpartum is considered to be the best nutritious alternative for babies because of its positive effects on maternal and infant health. Despite this, there is considerable variation in the prevalence of breastfeeding. Participants (n=170) derive from a longitudinal Canadian study “Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN)”. Mothers provided data during pregnancy and first year postpartum on breastfeeding, early life adversity (CTQ), oxytocin gene and oxytocin gene receptor polymorphisms (OXT rs2740210, OXTR rs237885, OXT rs4813627), cortisol, depression and anxiety (CES-D, STAI), infant temperament (IBQ) and maternal sensitivity through videotaped mother-infant interactions at 3 and 6 m postpartum. Maternal early life adversity associated with a shorter breastfeeding duration and higher levels of depression in the mother. A moderated mediation analysis showed that the inverse

relation between mothers' early adversity and the duration of breastfeeding was mediated by mothers' depression level, but only in women carrying one variant of the oxytocin rs2740210 gene marker (CC genotype). When we explored the associations between breastfeeding at 3 months postpartum, maternal sensitivity and infant temperament, we found in a moderated mediation analysis that mothers who breastfeed at 3 months acted more sensitively towards their infants when they were 6 months old and they in turn had infants who at 18 months showed reduced negative affectivity. Finally, when considering the role of cortisol and breastfeeding, we found higher cortisol levels in infant mother dyads who breastfeed. Our results help to clarify the interdependence between early life experiences, mood and breastfeeding in the mother-infant emotional and physiological relationship and in child emotional development.

S05.5

#### **MATERNAL EARLY LIFE ADVERSITY AND OFFSPRING DNA METHYLATION**

**Unternaehrer E.\*<sup>[1]</sup>, Dass S.<sup>[2]</sup>, O'Donnell K.<sup>[1]</sup>, Bouvette--Turcot A.<sup>[2]</sup>, Chen L.<sup>[1]</sup>, Gaudreau H.<sup>[1]</sup>, Cost K.<sup>[3]</sup>, Maclsaac J.<sup>[4]</sup>, Mah S.<sup>[1]</sup>, Fleming A.<sup>[3]</sup>, Steiner M.<sup>[5]</sup>, Kobor M.<sup>[6]</sup>, Meaney M. on behalf of Mavan Study Team<sup>[7]</sup>**

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Maternal parenting has profound effects on offspring development, which are likely transmitted from one generation to the next. Epigenetic programming by maternal behavior might be one mechanism underlying this intergenerational transmission. The aim of this study was to explore the intergenerational effects of maternal care on the offspring's methylome, including an indicator of epigenetic aging, which was shown to be associated with stress-related disorders. We included a sample of 205 mother-child dyads participating in the Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN) project. Measures of maternal care in the first generation (g1) were derived from the Parental Bonding Instrument (PBI) and maternal sensitivity (Maternal Behavior Q-Sort) towards offspring was observed in the second generation (g2). Offspring DNA methylation was assessed in buccal epithelial cells of children aged 4 to 10 years using the Illumina HumanMethylation 450K Bead Chip array. DNA methylation age was quantified using the algorithm for DNA methylation age developed by Horvath et al. (2013). While we found intergenerational effects of a mother's rearing experiences (g1) on variation in her offspring's methylome, the effects of maternal sensitivity (g2) on offspring DNA methylation was less pronounced. Furthermore, we found that low maternal care as reported by the mother (g1) predicted greater age acceleration in her offspring. The results suggest an intergenerational programming of the methylome by maternal care.

#### **Symposium S08 - BRIDGING THE KNOWLEDGE TO PRACTICE GAP: DEVELOPING, IMPLEMENTING, AND VALIDATING ATTACHMENT MEASURES FOR USE IN COMMUNITY AGENCIES**

**Madigan S.\***

*University of Calgary ~ Calgary ~ Canada*

Despite the significant resources that governments and non-state institutions worldwide have dedicated to identifying children who are most at risk developmentally, there remains a discernable

lack of coherent, empirically-based, and standardized assessment tools that can be implemented in community agencies. Indeed, the lack of validated tools for use in community practice have been highlighted as one of the major challenges facing the research-to-practice gap (Cicchetti, 2006). There is an urgent, community-identified need, for more versatile and manageable assessment measures of parenting behavior, and parent-child attachment. The papers in this symposium will attempt to bridge the knowledge to practice gap by highlighting the adaptation of psychometrically sound measures, rooted in attachment theory, for use in community practices. The first two papers in the symposium discuss the use of Item Response Theory models in clinical scale refinement. The first paper examines the development and validation of a brief version of the Attachment Q-sort (AQS), an insecure attachment screening measure. The second paper describes the identification of a refined 45 item set for coding the Atypical Maternal Behavior Instrument for Assessment and Classification System (AMBIANCE) and results supporting the construct validity of the reduced set. The third paper describes an ongoing comparison of the utility of video-based versus text-based descriptions of scale anchors for coding parental sensitivity. This paper highlights the importance of developing efficient observational instruments for assessing parental behaviour. Finally, the last paper in the symposium reports on the effectiveness of the Newborn Behavioral Observations (NBO) system, a brief intervention tool designed to promote positive maternal-infant relations. Together these papers will highlight the crucial importance of developing and validating efficient and realistic assessment tools for use in applied settings. Practical implications and avenues for future research will be discussed.

S08.2

#### **THE BRIEF ATTACHMENT SCALE (BAS-16): USING ITEM RESPONSE THEORY TO CREATE A CLINICALLY USEFUL MEASURE OF ATTACHMENT**

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Insecure attachment in infancy is associated with a range of socioemotional problems later in development. It is important therefore to identify at-risk children so that appropriate support can be provided. However, the two gold-standard measures of attachment, the Attachment Q-sort (AQS) and Strange Situation Procedure, are both time-consuming and costly to administer. The aim of this study is to create a valid, short version of the AQS using contemporary psychometric techniques. Data was used from the NICHD Study of Child Care and Youth Development (n=1,364). The factor structure of the AQS was explored and Item Response Theory was used to create shortened scales. The validity of the shortened scales was then examined.

Two clear factors were identified, relating to harmonious interaction with the caregiver and proximity-seeking behaviours. Two scales of eight items each were created based on these factors. The shortened measure showed comparable convergent, discriminant and predictive validity to the full AQS. This brief version of the AQS shows good potential as a screening measure for insecure attachment in infancy.

S08.3

#### **DEVELOPMENT AND VALIDATION OF THE AMBIANCE-BRIEF PARENT-CHILD OBSERVATIONAL ASSESSMENT TOOL FOR USE IN APPLIED SETTINGS WITH FAMILIES AT HIGH SOCIAL RISK**

**Madigan S.\*<sup>[1]</sup>, Haltigan J.<sup>[2]</sup>, Cooke J.<sup>[1]</sup>, Eirich R.<sup>[1]</sup>, Racine N.<sup>[1]</sup>, Bronfman E.<sup>[3]</sup>, Bailey H.<sup>[4]</sup>, Borland--Kerr C.<sup>[5]</sup>, Plamondon A.<sup>[6]</sup>, Tarabulsy G.<sup>[6]</sup>, Cyr C.<sup>[7]</sup>, Mills--Koonce R.<sup>[8]</sup>, Lyons--Ruth K.<sup>[9]</sup>**

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The Atypical Maternal Behavior Instrument for Assessment and Classification System (AMBIANCE; Bronfman, Madigan, & Lyons-Ruth, 2009) is a gold-standard measure in developmental science for measuring high-risk caregiving behavior. Validity and reliability of the AMBIANCE are well established (Madigan et al., 2006). However, coding the AMBIANCE requires a substantial investment of time and resources. Therefore, a community need emerges for a brief assessment tool that focuses on the most central indicators of disturbed interaction, that is psychometrically sound, useful, and easy to administer and score by front-line staff in clinical and community-based settings. The primary aim of the current study was to identify a reduced set of behavioral indicators most central to the AMBIANCE coding system using latent-trait, item response theory (IRT) models. The secondary aim was to determine the convergent validity of the AMBIANCE-brief with the extended AMBIANCE measure. For the first aim, observed mother-infant interaction data previously coded with the AMBIANCE was pooled from laboratories in both North America and Europe (N = 343). For the second aim, a set of 100 mother-child interactions are in the process of being coded by two independently team, one using the AMBIANCE-brief derived from the IRT analysis, and the other using the full AMBIANCE measure. In regards to the first aim, a reduced set of 45 AMBIANCE items was identified through IRT analysis. Further, analyses exploring the initial construct validity of the refined 45-item set suggested that it performed similarly to the full AMBIANCE item set in relation to key validity criteria, including its association with infant attachment disorganization. Results of the second aim are expected early in 2018. The current work represents an initial step in the development of shorter protocols which are more efficient for clinicians and other practitioners to use in practice settings.

S08.4

#### **THE EFFECT OF VIDEO EXEMPLARS ON INTERRATER RELIABILITY IN ASSESSMENT OF PARENTAL BEHAVIOR**

**Forrer M.\*<sup>[1]</sup>, Schuengel C.<sup>[2]</sup>, Oosterman M.<sup>[2]</sup>**

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In the process of developing an observational instrument for assessing parental behavior for use in daily practice of child protection services and other institutions working with (at risk) families with young children, it is important to make sure that the scale instructions will reduce time of training and becoming a reliable coder as much as possible, that the format allows quick and efficient application in clinical use cases, and that repeated reliability checks can be easily configured to reduce coder drift. Establishing a positive user experience will also contribute to quick and efficient application. In order to gain information about what type of instruction, visual or written, will fit these requirements, the current study is being performed. The study tests whether videobased descriptions of scale anchors may contribute towards adapting rating scale instruments to become more efficient. Our hypothesis is that in the condition where raters use a video-scale, interrater reliability will be higher on average, interrater reliability will increase faster and the user experience will be more positive than in the condition where raters use a traditional written scale. The research is conducted with two groups of participants assigned to two research conditions, video-based anchors and text-based anchors. Each participant in both groups will observe six target videos and then rate parental sensitivity according to either the video-anchor scale or the text-anchor scale.

Also, they will answer a questionnaire about their user experience. Rater accuracy, interrater reliability, mean time needed for coding, and user experience will be calculated for each condition, and compared between the two conditions to establish whether they differ significant. Results of this study are expected beginning of 2018.

S08.5

### **THE EFFECTS OF THE NEWBORN BEHAVIORAL OBSERVATIONS (NBO) SYSTEM ON SENSITIVITY IN MOTHER-INFANT INTERACTIONS**

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The Newborn Behavioral Observations (NBO) system is a neurobehavioral observation tool designed to sensitize parents to infants' capacities and individuality, and to enhance the parent-infant relationship by strengthening parents' confidence and practical skills in caring for their children. The NBO's focus on relationship-building is intended for infant mental health professionals who strive for a relational, family-centered model of care versus a pathology-based model. This study assessed the impact of the NBO on the sensitivity of mother-infant interaction in the first four months of life. Primiparous mothers and their full-term infants were recruited for the study from postpartum units of a large urban teaching hospital and a community hospital in New England and randomized into experimental and control groups. The intervention group (mean maternal age = 29 years; 78% White, 11% African American, 11% Hispanic; 63% of infants were female, 37% male) participated in the NBO in the hospital within two days of birth and again at home at one month postpartum. The control group (mean maternal age = 28 years; 76% White, 6% African American, 18% Hispanic; 37% of infants were female, 53% male). At four months, dyads (n = 35) were videotaped during semi-structured play episodes, which trained psychologists coded using the CARE-Index (Crittenden, 2007) to assess parent-child sensitivity in interactions with one another. Results of logistic regression analysis showed that intervention infants were 2.8 more likely to be classified as "cooperative" (sensitive) compared to control group infants. Intervention mothers were 2.5 times more likely to be classified as sensitive than control mothers. These findings highlight the potential of the NBO to promote positive maternal-infant relations by influencing newborn behavior, and suggest that the NBO is an effective, time-limited intervention for strengthening relationships between parents and infants.

### **Symposium S11 - POSTPARTUM HEAMORRHAGE (PPH): A PARADIGM OF OBSTETRIC TRAUMA SITUATION**

**Courtaux M.\*<sup>[1]</sup>, Gustin P.<sup>[2]</sup>, Missonnier S.<sup>[1]</sup>, Gosme C.<sup>[1]</sup>, Gayat E.<sup>[3]</sup>, Mebazaa A.<sup>[3]</sup>, Ouma S.<sup>[4]</sup>**

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Even today, when women give life they also risk their own. Life and death coexist in a disturbing promiscuity. Postpartum heamorrhage (PPH) is defined as a uterine bleeding, that provokes blood loss estimated at least at 500 ml for a vaginal delivery or 1000 ml for cesarean. It is the first cause of maternal mortality but also the most avoidable. This is a complication heavily feared by caregivers because it is an occurrence sudden and unexpected. In the most cases, these newly-mothers are transferred urgently to another hospital with specific equipment. This emergency care implies a separation with the newborn that has to stay in maternity. There is also a risk of hysterectomy that cans definitely compromises fertility of women. The experience of these women has a traumatic potentiality that interrogates clinicians on the impact of such event in their life as a woman and

mother. We propose to explore the psychological repercussions of PPH and the consequences on the mother-baby bond. Therefore, this symposium includes a first presentation based on trauma's concept related with PPH, and then on a qualitative study on the singular experience of these women, but also on the PPH's impact on the "mother becoming process" and the mother-baby relationship (M. Courtaux, S. Missonnier). A second presentation focuses on a case study of a woman who underwent a PPH with hysterectomy (C. Gosme). The third presentation illustrates results of a large quantitative study carried out in France (E. Gayat, A. Mebazaa). Finally, for an opening on other situations of obstetric trauma, a final presentation bases on postpartum mental health symptoms following birth and mother-infant emotional availability in a developing country (Uganda) (S. Ouma). This symposium will be discussed by Pascale Gustin, Belgian psychologist and author of "moments of births with hurt" (2015).

S11.2

### **POSTPARTUM HEAMORRHAGE (PPH): A PARADIGM OF OBSTETRIC TRAUMA SITUATION?**

**Courtaux M.\*, Missonnier S.**

*Paris Descartes University PCPP EA4056 ~ Paris ~ France*

HPP affects mothers who are already severely weakened by emotions and exhaustion engendered by childbirth. Unfortunately, only few studies have focused on the psychological repercussions of PPH in these women. PPH, because of its characteristics (sudden, unpredictable event, involving a vital risk or serious bodily harm, etc.), refers to the concept of "trauma". Thus, the first part of this presentation, introducing this symposium, discusses the fundamental concepts of the notion of "trauma" to illuminate the inherent risk in this obstetric complications context. In a second part, we'll support our talk by a qualitative study based on PPH's impact on women, on "becoming mother process" and on mother-baby relationship. Our methodology is based on semi-directive interviews of women, 1 month and 3 months after childbirth. Our population is drawn from a cohort of 31 patients enrolled in a study carried out in a Parisian hospital, which specially takes care of PPH (Ricbourg, A et al., 2015). This initial cohort was reduced to 16 women who participated in the full study. The principal aim of this research is to obtain a detailed analysis of the semi-directive interviews with the NVivo® software, in order to explore the psychic processes of these women. The results of this study show how this traumatic context, related to the emergency care generated by this serious and potentially fatal event, impacts the femininity. This study also shows the psychic processes involved in disruption of the "becoming mother process" (death's fears; feelings of guilt and shame; baby's idealization as a counter-investment of aggressive movements; first movement of narcissistic restoration to be able, then, to become mothers and continue the investment of their baby). These results also inform us, on the processes in "normal" situations and on the prevention of the health of the child.

S11.3

### **POSTPARTUM HAEMORRHAGE AND HYSTERECTOMY: A CLINICAL CASE**

**Gosme C.\***

*Paris Descartes University PCPP EA4056 ~ Paris ~ France*

Postpartum haemorrhage is still the leading cause of maternal mortality in developing countries. Worldwide, it is responsible of 150,000 deaths a year. In France, and other developed countries, haemorrhage of delivery is the leading cause of maternal death. Among the management of this haemorrhage, the hysterectomy of haemostasis remains one of the essential techniques to save the mother and can be practiced following a delivery by the natural ways or following a caesarean. Although the use of hysterectomy has decreased in the past 30 years, there are still 1 in 1,000 births

and 1 in 211 Caesarean sections. In a case-control study carried out in 2011-2012 in an intensive care unit and in a maternity unit on the impact of postpartum hemorrhage on the mother, father and mother-baby relationship, we were asked to carry out clinical interviews 1 month and 3 months after the delivery of a woman who was taken in intensive care for a hemorrhage and then for which a hysterectomy of hemostasis was practiced. We wish to present here the case of this patient, explaining the traumatic scope of this event but also the problems that it raises both on the conjugal and maternal plane as well as the psychological upheavals inherent to the removal of the uterus. It will therefore be a monograph illustrating the psychic significance of hysterectomy and showing the interest of a systematic psychological care for these patients.

S11.4

#### **EMOTIONAL IMPACT OF POSTPARTUM HEAMORRHAGE (PPH): RESULTS OF THE HELP MOM STUDY**

**Gayat E.\* , Mebazaa A.**

*Saint-Louis Lariboisière Hospital ~ Paris ~ France*

The HELP MOM study is a prospective observational study conducted in France in 10 centers. Three hundred and thirty-two patients were included and followed for 6 months after an episode of severe postpartum heamorrhage. These patients received a 1,3 and 6-month mail-in questionnaire and provided information on 3 scales, one exploring the symptoms of post-traumatic stress disorder (Impact of Event Scale - Revised, IES-R), post-natal depression (Edinburgh Postnatal Depression Scale, EPDS) and anxiety (HADS, Hospital Anxiety and Depression Scale). The main objective of the study was to measure the incidence of emotional disturbances following an episode of PPH and to try to identify predictive factors in order to be able to detect patients at risk as early as possible. The study protocol was registred (ClinicalTrials.gov, NCT0211118038). Of the 332 patients included, one-third had a pathological level of post-traumatic stress and post-natal depression and one in four had pathological anxiety. We have found an improvement with time of the three scores but abnormal values still very important at 6 months. Among the factors studied, presenting obstetric pathology during pregnancy and the intensity of treatment received during haemorrhage (in particular, the number of red blood cells received) appear to be strongly associated with a negative emotional impact. The HELP MOM study shows the very high incidence of emotional disorders after postpartum heamorrhage. Impact studies testing the effectiveness of specific support for the most at-risk patients should be conducted in the future.

S11.5

#### **POSTPARTUM MENTAL HEALTH SYMPTOMS FOLLOWING BIRTH AND MOTHER-INFANT EMOTIONAL AVAILABILITY**

**Ouma S.\***

*Lira University ~ Lira ~ Uganda*

There is growing evidence of the presence and/or impact of mental health problems such as Posttraumatic Stress (PTS) symptoms or disorder and depression following childbirth, and impact on the subsequent relationships between the affected mothers and their infants. World Health Organisation reports and studies from several developing countries continue to show maternal health challenges especially during labour and delivery such as haemorrhage, prolonged labour, negative attitudes of health workers in many parts of the developing world. Despite the wide spread negative maternal experiences, a few studies have examined the impact of such experiences on maternal mental and the mother-infant relationships. As part of a large mixed methods study conducted in Uganda, we examined the association between postpartum mental health symptoms

(PTS and depression) and emotional availability between mothers and their babies. PTS and depression symptoms were assessed using self-rated Revised Impact of Events Scale (IES-R) and Edinburg Postnatal Depression Scale (EPDS) four months following birth. Labour and delivery experiences were used as the potential traumatic events in the assessment of PTS. A 10 minutes social interaction between mothers and their babies at home was video recorded and later coded using Emotional Availability (EA) scales. All mothers reported some PTS symptoms arising from their labour and delivery experiences. Compared with a few recent studies where IES/IES-R was used in childbirth, our sample had proportionally higher PTS symptoms. Similarly, up to 49% of the mothers scored 11 and above on EPDS meeting the criteria for clinically significant depression symptom. The majority of the mother-infant interactions were less optimal falling below 20 on the globally scored EA subscales. However, we did not see any association between either of the mental health symptoms and EA subscales. Our findings show risks of negative childbirth experiences on postnatal maternal mental health. The lack of association between postnatal mental health problems and EA might however be attributed to a small homogenous sample of high-risk mothers, as shown by all mothers reporting some PTS and depression symptoms.

### **Symposium S18 - DEVELOPMENTALLY SENSITIVE, NEUROBIOLOGICALLY INFORMED AND TRAUMA SPECIFIC PRACTICE WITH TRAUMATISED INFANTS IN CHILD PROTECTION SYSTEMS: THE APPLICATION OF THE NEUROSEQUENTIAL MODEL OF THERAPEUTICS ON THREE DIFFERENT CONTINENTS**

**Milburn N.\***

*Berry Street Take Two ~ Melbourne ~ Australia*

The sciences of infant mental health, neuro- and child- development have provided clear evidence for several decades now that the first 1000 days from conception to age 2 are crucial in determining the functioning of the child, adolescent and adult to be. Psychoanalytic theory has contributed a deep understanding of intra- and inter-subjective processes, the foundations of which are developed in infancy. Despite these decades of knowledge, many professionals as well as the bulk of the general public, seem to be unconvinced about the urgency of intervening as early in life as well as early in the problem as possible to address immediate distress and prevent impact on development. The Neurosequential Model of Therapeutics provides a holistic framework to record and evaluate the impact of trauma on development. Its great strength lies in the provision of a common language to communicate the impact of experience at particular times on specific areas of development, including relational functioning, which is then incorporated into an evaluation of present functioning and leading to targeted interventions. At the heart of the Neurosequential Model is the understanding that the brain develops hierarchically, with each developmental stage building on the one before. The model is comprehensive and focused on understanding the idiosyncratic functioning of the individual infant, child or adolescent and their relational milieu.

This understanding provides a platform for intervention with Child Protection and Care systems, Children's Courts and policy makers, as complex neuroscience and infant mental health concepts are communicated in a way that is accessible to the general public. This symposia will describe the NMT and use clinical material to demonstrate the effectiveness of the framework as applied to infant mental health practice with maltreated infants on three different continents, Australia, the USA and the UK.

S18.2

### **THE WHOLE BABY IN HIS WHOLE WORLD: USING THE NEUROSEQUENTIAL MODEL IN CLINICAL, FORENSIC, SYSTEMIC AND ADVOCACY WORK**

**Milburn N.\***

*Berry Street Take Two ~ Melbourne ~ Australia*

To demonstrate the efficacy of the neurosequential model of therapeutics as a framework for varied activities in infant mental health, including direct clinical work as well as advocacy to government and presenting expert testimony in courts. Human brain development is hierarchical and a complex interplay between biology and environment. Each developmental stage builds upon the one before, and is therefore dependent upon the past as well as the present. The brain changes in a use (experience) dependent way. These are some of the core concepts of neurobiology that are articulated into the Neurosequential Model of Therapeutics (NMT) that have become fundamental to the way that infant mental health specialists can communicate the urgency of need of the vulnerable infant to intervene before 'states become traits' (Perry, 2000). This presentation will introduce the core concepts of the NMT as a framework for a coherent narrative of infant development and mental health as it is applied to infant mental health practice and policy work for vulnerable infants in and on the cusp of the Child Protection System in Victoria, Australia. Practice and case examples will be provided from activities in multiple levels of the work, including:

- ¥ Direct clinical work with infants
- ¥ Psychoeducation with carers and parents
- ¥ Interventions with complex Child Protection systems.
- ¥ Presenting expert testimony in Courts.
- ¥ Advocacy with policy makers and government
- ¥ Advocacy with the general public.

S18.3

**BRAIN-BASED REFLECTIVE PRACTICE: INTEGRATING NEUROBIOLOGY PRINCIPLES INTO REFLECTIVE PRACTICE FOR FACILITATORS AND CLINICIANS.**

**Brandt K.\***

*University of California Davis ~ Davis, CA ~ United States of America*

Reflective practice in infant mental health has long been viewed as a core part of the work to aid in understanding the complex interplay of the baby, the parent, and the clinician, as well as that between the clinician or clinicians and the facilitator. There are a number of different influences on the way reflective practice is conceptualized in the United States which will be reviewed briefly. The neurobiological implications for reflective work are often overlooked by those engaging in solo, group, or one-to one reflective activities, and even by reflective facilitators and supervisors. This presentation will demonstrate how the neurobiological framework of NMT is integrated into reflective practice approaches at the Napa Infant-Parent Mental Health Fellowship Program at UC Davis to promote flexibility in approach. A key perspective of the presentation is that there are many ways to engage in reflection: to imagine, plan, thinking, dream, and wonder; which all need access to neocortical functioning. To recall in –context emotional content, activation, triggers, feelings, intuition, and body sensations, one must have access to limbic structures. Good reflective facilitation is a highly complex, nonprescriptive, improvisational endeavor in which the facilitator scaffolds the facilitate to find what he or she is seeking.

S18.4

**HOPE: USING THE NMT METRIC TO CHANGE A YOUNG CHILD'S PROGNOSIS AND TRAJECTORY IN THE CARE SYSTEM**

**Marks R.\***

*Integrated Families: National Centre for Child Trauma and Dissociation ~ Huddersfield ~ United Kingdom*

Most young children in England who are taken into the care system due to significant abuse and neglect, are ultimately adopted. The opportunity for adoption provides a permanent family and ensures the most stable future for the child in terms of consistent care and living in a family for life. There are often very young children who display disruptive and concerning behaviors in the initial foster placement, while the final decision regarding a potential adoption is being contemplated. Due to these behaviors some young children are often deemed 'unadoptable' as the carers are unable to control their behaviors. This situation potentially sentences the young child to a long-term existence in the care system, multiple foster placements and at times ultimately living in a residential home. This presentation will follow the path of one child, aged 2 years where the use of the NMT caused a rapid and major change in the long-term planning and outcome for this child.

### **Symposium S21 - CAREGIVING RISK, MATERNAL PSYCHOPATHOLOGY, AND COMPLICATED GRIEF: INTERGENERATIONAL TRANSMISSION OF MATERNAL AND CHILD DYSREGULATION**

**George C.\*<sup>[1]</sup>, Acereto R.<sup>[2]</sup>, Røhder K.<sup>[3]</sup>, Nyström--Hansen M.<sup>[5]</sup>, Harder S.<sup>[3]</sup>, Kizziar S.<sup>[4]</sup>, George C.<sup>[1]</sup>**

<sup>[1]</sup>Mills College ~ Oakland ~ United States of America <sup>[2]</sup>Epiphany Center ~ San Francisco ~ United States of America, <sup>[3]</sup>University of Copenhagen ~ Copenhagen ~ Denmark, <sup>[4]</sup>Mills College ~ Oakland ~ United States of America, <sup>[5]</sup>University of Copenhagen ~ Copenhagen ~ Denmark

This symposium presents research that examines caregiving risk from the perspective of the caregiving system. Contemporary attachment theory emphasizes that the attachment and caregiving systems are not isomorphic (George & Solomon, 2008) and risk should be considered in the context of both the maternal attachment and caregiving experience. Yet there is a paucity of research that examines the intersections of these maternal behavioral systems. Paper 1 examines risk factors related to maternal compromised care. Results emphasize the associations between current partner trauma, psychological distress, and emotion regulation problems and dysregulated maternal caregiving representations. Paper 2 examines the associations between maternal risk factors and antenatal caregiving representations. Emotional abuse, current maternal psychopathology, parent mental illness in the family of origin are significantly related to compromised caregiving representations. Papers 3 and 4 examine the development of the caregiving system. The results of Paper 3 demonstrate that predicted associations between maternal adult attachment and child attachment are disrupted by maternal complicated grief and current attachment trauma with parents. Transmission pattern analyses show that maternal caregiving risk, complicated grief, and current maternal attachment trauma with parents are the main predictors for child attachment disorganization. Paper 4 examines for the first time in the field the development caregiving risk in young children. Mothers and children were observed in a caregiving context (a life-like infant doll). Results show significant continuity between the quality of maternal caregiving with their children and the quality of their children's care for the baby. The largest association is between child dysregulation and mother abdication. Differences between children's caregiving groups on care-quality ratings (e.g., sensitivity, rejection, abdication) are significant in theoretically predicted directions. These studies punctuate the central role of the caregiving system, grief, and current trauma in models of attachment and infant mental health intervention.

#### S21.2

### **MATERNAL COMPROMISED CARE: RISK AND PROTECTIVE FACTORS ASSOCIATED WITH MOTHERS' REPRESENTATIONS OF CAREGIVING**

**Acereto R.\***

*Epiphany Center ~ San Francisco ~ United States of America*

Mothers with a history of traumatic life experiences, impaired psychological well-being, and poor maternal self-efficacy may be at risk for dysregulated caregiving representations of self as a caregiver. This is the first study to examine these factors in combination as associated with caregiving representations, conceived as central parenting regulating mechanisms (following George & Solomon, 2008). One hundred fourteen mothers between 19 and 46 years ( $M = 31$ ) with infants between 11.2 to 33.2 months ( $M = 20.7$ ) completed the Caregiving Experiences Questionnaire (CEQ, Brennan & George, 2016) and measures of attachment trauma (ATQ, Keeling & George, 2013), psychological well-being (GSI scale – BSI, Derogatis, 1993; DERS, Gratz & Roemer, 2004), and maternal self-efficacy (MEQ, Teti & Gelfand, 1991). Results showed a positive association between partner trauma and compromised caregiving (Helplessness,  $r = .35$ ,  $p < .001$ ; Heightened,  $r = .22$ ,  $p < .05$ ). The significance of trauma with partners – and not attachment figures – was an important and unexpected finding given the field’s emphasis on trauma with attachment figures. Psychological distress and emotion regulation problems were directly related to Helplessness (GSI,  $r = .44$ ,  $p < .001$ ; DERS,  $r = .56$ ,  $p < .001$ ) and inversely related to Enjoyment (DERS,  $r = -.28$ ,  $p < .01$ ). Maternal self-efficacy was also inversely related to compromised caregiving representations (Helplessness,  $r = -.65$ ,  $p < .001$ ; Discourages Closeness,  $r = -.46$ ,  $p < .001$ ), and directly related to Enjoyment ( $r = .61$ ,  $p < .001$ ) and, surprisingly, Role Reversal ( $r = .54$ ,  $p < .001$ ). These results provide a multidimensional perspective on caregiving risk (psychological distress, emotion regulation) and protective factors (maternal self-efficacy). This nuanced understanding of the mother-infant relationship can strengthen Infant Mental Health interventions that support mothers’ caregiving skills in the context of reducing individual and relationship-based risks.

S21.3

### **PREDICTORS OF ANTENATAL CAREGIVING REPRESENTATIONS IN A SAMPLE OF MOTHERS WITH SEVERE MENTAL DISORDERS**

**Røhder K.\*, Nyström--Hansen M., Harder S.**

*University of Copenhagen ~ Copenhagen ~ Denmark*

Several studies have shown that maternal antenatal representations about the future relationship with their infants predict the quality of postnatal caregiving behavior and infant attachment classifications. Mothers with a lifetime history of psychopathology are at increased risk of experiencing difficulties in motherhood. Studies have shown that higher levels of depressive symptomatology are associated with non-optimal antenatal representations but research involving other factors and clinical groups is needed in order to better understand the mechanisms affecting mothers’ transition to motherhood. The aim of the current study is to explore predictors of antenatal caregiving representations in a sample of mothers with a history of psychosis, bipolar disorder, depression, and a non-clinical control group. We expected childhood abuse and neglect to be risk factors and social support during pregnancy to be protective factors. The study is a sub-study of the WARM study. During pregnancy, 67 mothers participated in maternal interviews assessing DSM-V diagnosis and symptom severity. Mothers also filled out questionnaires regarding antenatal caregiving representations (PCEQ), satisfaction with social support (SOS), adverse childhood experiences (ACEs). Results showed that different factors predicted non-optimal antenatal caregiving representations. Heightened caregiving was best predicted by childhood emotional abuse and current psychopathology. Helplessness was predicted by current psychopathology and having had a parent in prison during childhood; role reversal was predicted by social support during pregnancy and having had a parent with mental illness during childhood. The study contributes new knowledge to our understanding of life-long factors affecting mothers’ transition to motherhood. This knowledge can contribute to the understanding of the different risks associated with the

development of non-optimal antenatal representations. In addition, it can guide the development of preventive interventions aimed at supporting women during pregnancy with different needs.

S21.4

**CAREGIVING AND ATTACHMENT DISORGANIZATION: THE DYSREGULATING EFFECTS OF MATERNAL FAILED MOURNING AND CURRENT ATTACHMENT FIGURE TRAUMA**

**Kizziar S.\*, George C.**

*Mills College ~ Oakland ~ United States of America*

There is an established robust association between maternal risk adult attachment representations (unresolved) and dysregulated (disorganized) children's attachment patterns. However, contemporary attachment theory emphasizes that attachment and caregiving are not isomorphic (George & Solomon, 2008), and children's attachment risk should be considered in the context of both the maternal attachment and caregiving behavioral systems. The central aim of this study was to investigate the contributions of attachment trauma and complicated grief to maternal caregiving and children's attachment risk. Mothers (N=73; M age = 36 years) of 4- and 5-year-old children (M = X mo.; 56% girls) participated in a laboratory study on the development of caregiving. Adult attachment and complicated grief, in particular failed mourning, were assessed using the Adult Attachment Projective Picture System (AAP, George & West, 2011); child attachment was assessed using the Attachment Doll Play Assessment (ADPA, Solomon et al., 1995). Caregiving was assessed using a modified version of Britner et al.'s (1995) caregiving pattern classification system and behavior rating scales from observations of a 12-minute caregiving situation during which mothers were instructed to assist their children as needed to dress and play with 'Real Baby' (infant doll that cries). Unresolved grief showed expected classification group correspondences between maternal adult attachment, caregiving, and child attachment disorganization. However, expected correspondences were disrupted for mothers with failed mourning, a form of complicated grief transformation of dismissing attachment. There was a 69% cross-over rate for mothers with failed mourning; 43% of mothers with failed mourning had children with disorganized attachment. Logistic regression showed that the covariate accounting for this effect was mothers' reported current traumatic experience with attachment figures. Childhood attachment trauma was not a significant contributor. These results demonstrate the importance of integrating failed mourning and current attachment trauma as caregiving system dysregulators in infant mental health intervention.

S21.5

**THE DEVELOPMENT OF THE CAREGIVING SYSTEM YOUNG CHILDREN: MATERNAL COMPLICATED GRIEF AND CHILD CAREGIVING DYSREGULATION**

**George C.\***

*Mills College ~ Oakland ~ United States of America*

According to attachment theory, children develop representations of caregiving in the context of their relationships with attachment figures. Research has established associations between children's developmental risk and maternal adult attachment and caregiving. The primary aim of this study was to fill in a gap in the risk literature to examine the transmission of caregiving from mothers to children. A secondary aim was to examine the contribution of maternal complicated grief, in particular failed mourning, to these patterns. The sample was 73 mother-child dyads participating in a laboratory Children were 4- and 5-years old (M = X mo.; 56% girls). Maternal adult attachment and complicated grief were assessed using the Adult Attachment Projective Picture System (AAP, George & West, 2011); child attachment was assessed using the Attachment Doll Play Assessment (ADPA, Solomon et al., 1995). Maternal and child caregiving were assessed using Britner

et al.'s (1995) caregiving classification system using observations of a 12-minute caregiving situation during which mothers were instructed to assist their children as needed to dress and play with 'Real Baby,' a life-like doll. Results showed significant four-way associations between mother adult attachment child caregiving groups, however, analysis that included maternal complicated mourning showed discontinuous patterns. This effect was prominent for mothers with complicated grief. In particular, mothers with failed mourning had children who abdicated caregiving. Children's caregiving mirrored their mothers (88% correspondence rate). The largest association was between children's dysregulated care and maternal caregiving abdication (which predicts disorganized attachment). Finally, caregiving behavior differentiated among child caregiving groups in theoretically predicted ways, including dysregulated behavior. These findings demonstrate the development caregiving risk factors in early childhood and punctuate the importance of intervention not only for children's development, but also for interrupting intergenerational cycles of caregiving abdication at a young age that may affect future generations.

### **Symposium S23 - BRINGING THE DATA TO LIFE! ENHANCING REFLECTIVE FUNCTIONING IN PARENTS AT RISK**

**Renk K.<sup>[2]</sup>, Lowell A.<sup>[2]</sup>, Zayde A.<sup>[4]</sup>, Borelli J.<sup>[3]</sup>, Suchman N.\*<sup>[1]</sup>, Decoste C.<sup>[1]</sup>**

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Parental reflective functioning (PRF) encompasses (among other things) a parent's capacity to make sense of emotional states triggered during stressful parenting interactions and also the ability to recognize a child's emotional states and needs for a secure attachment. PRF is now recognized as an important target in attachment-based interventions, particularly with high risk parents. For parents with mental illness and substance use disorders in particular, enhancing PRF assists parents in regulating emotion and preventing relapses to substance use and psychiatric symptoms. Here we will present findings from four promising interventions for parents with mental illness and substance use disorders that target the PRF capacity. Beyond presenting data on targeted outcomes, we combine statistical and phenomenological approaches to understand better how interventions that target change at the representational level function and manifest. Kimberly Renk and Amanda Lowell will present outcome data from a Circle of Security trial with substance using parents with special attention to clinical process. Amanda Zayde will present outcome data from the Mentalization-Based Parenting Program (MBPP) pilot study completed with mothers in treatment for mental illness, including verbatim narratives that illustrate shifts in PRF capacity. Jessica Borelli will present narrative data from a Savoring Relationships intervention pilot study completed with Latina mothers. Nancy Suchman and Cindy DeCoste will present outcomes on maternal representations of the child from the second randomized clinical trial testing Mothering from the Inside Out (MIO) with mothers in substance use treatment, including qualitative findings about the nature of representational change. Together, these presentations will inform attendees about groundbreaking clinical work with high risk populations that shows promise for altering longstanding patterns of insecure attachment. They will also open a line of inquiry to how and why the interventions might work and how they might be improved.

#### **S23.2**

#### **USING CIRCLE OF SECURITY-PARENTING TO BUILD REFLECTIVE CAPACITY FOR PARENTING IN MOTHERS WHO ARE SUBSTANCE-INVOLVED**

**Renk K.\*, Lowell A.**

*University of South Florida ~ Tampa ~ United States of America*

Substance misuse is an important consideration in 25 to 80 percent of child welfare cases (Child Welfare Information Gateway, 2003). As parents who are substance-involved have histories of childhood maltreatment (Kang, Magura, Laudet, & Whitney, 1999) and high rates of symptomatology (Swendsen & Merikangas, 2000), these parents likely would benefit from parenting interventions that foster improved reflective capacities in addition to building skills. As a result, the utility of Circle of Security-Parenting (CoS-P) was examined using both statistical and phenomenological approaches in a sample of mothers who were receiving residential substance treatment. CoS-P is an innovative 8-week evidence-based, attachment-focused parenting program that teaches about attachment and gets parents reflecting on their own upbringing and their parenting struggles. Mothers (N=130; mean age=29.34-years) with at least one young child between 0- and 5-years of age began participation in CoS-P groups offered at their residential substance treatment program. Approximately 33% completed pre- and post-group measures of variables of interest. These mothers demonstrated significant increases in their endorsements of their own emotional neglect and emotional regulation awareness as well as significant decreases in general activity level. These mothers also demonstrated marginal increases in conscientiousness and parental locus of control as well as marginal decreases in sleep and neuroticism from pre- to post-group. Measures of mothers' reflective functioning also were related significantly to their own childhood maltreatment and to different components of their emotion regulation and personality. Changes in reflective functioning also were represented in qualitative changes in these mothers' Working Model of the Child Interview. These findings will be discussed in terms of the importance of examining both behavioral and representational changes in mothers who are substance-involved as they proceed through parenting interventions meant to build their reflective capacities. Particular interpretations of these findings will be offered in terms of the clinical process provided by Circle of Security-Parenting.

S23.3

**PARENTS LEARNING TO REFLECT ON THE SELF AND THE OTHER: A GROUP MENTALIZING JOURNEY  
Zayde A.\*, Nikitiades A., Polanco L.**

*Montefiore Medical Center/ Albert Einstein College of Medicine ~ New York ~ United States of America*

The Mentalization-Based Parenting Program (MBPP) is a mentalization-based group intervention for mothers of children who receive mental health services in the Bronx, New York, the poorest urban county in the country (U.S. Census Bureau, 2010). These families are at heightened risk for attachment trauma, as chronic trauma exposure inherent in urban impoverished environments negatively impacts family structure, relations, and coping, resulting in intergenerational transmission of trauma (Kiser & Black, 2005). MBPP aims to create a safe, containing environment where mothers come together, share their stories, and observe and recognize their own, and each other's, internal experience. This process serves to increase mother's capacity for reflective functioning, leading to more sensitive parenting, and a decrease in psychiatric distress in both mother and child. In this presentation we will discuss ways in which the group context is a major component of the therapeutic process, as participants share similar cultural and socioeconomic backgrounds, as well as mentalizing and parenting challenges. Qualitative data in the form of audio recordings will be used to highlight in the moment shifts in mentalizing that help elucidate quantitative outcomes. Preliminary statistical findings indicate that among mothers, overall psychiatric symptoms decreased from pre-treatment (M = 62.25; SD = 11.44) to post-treatment (M = 62.00; SD = 7.70) and parental stress decreased from pre-treatment (M= 101.25; SD = 15.84) to

post-treatment (M= 87.50; SD = 16.34). Among children, emotional problems decreased from pre-treatment (M= 6.00; SD = 2.83) to post-treatment (M=3.00; SD = 2.83), and prosocial behaviors increased from pre-treatment (M= 6.00; SD = 1.41) to post-treatment (M= 9.00; SD = 0.00). Due to the limited size of the pilot sample, effect sizes were examined; data collection is ongoing and we expect a much larger sample by the time our findings are presented.

#### S23.4

##### **RELATIONAL SAVORING: PROVIDING SAFE PASSAGE INTO THE CHILD'S MIND**

**Borelli J.\*<sup>[1]</sup>, Kerr M.<sup>[3]</sup>, Butitta K.<sup>[5]</sup>, Smiley P.A.<sup>[2]</sup>, Rasmussen H.F.<sup>[4]</sup>, Pedroza M.<sup>[1]</sup>**

<sup>[1]</sup>University of California Irvine ~ Irvine ~ United States of America, <sup>[2]</sup>Pomona College ~ Claremont ~ United States of America, <sup>[3]</sup>University of Wisconsin ~ Madison ~ United States of America, <sup>[4]</sup>University of Southern California ~ Los Angeles ~ United States of America, <sup>[5]</sup>Claremont Graduate University ~ Claremont ~ United States of America

Relational savoring (RS) is a novel intervention in which clinicians assist parents in completing a focused reflection on a moment of positive connection with a child, ideally an experience in which the parent provided sensitive care for the infant. Grounded in the principles of attachment theory and positive psychology techniques, RS has demonstrated impressive short-term impacts among parents, but has yet to be tested for longer-term effects. By providing a non-threatening way for a parent to “enter a child’s mind,” relational savoring is theorized to enhance parental reflective functioning (RF). In the current study, in the PI’s first RCT, we tested the feasibility and impact at 3-month follow-up of RS compared to a control (personal savoring [PS]) among N=130 mothers of 18-24 month-olds, oversampling for low-income Latino/as. Mothers were assessed at baseline, then randomized to 4 in-home sessions of PS or RS. We measured mothers’ continued savoring practice, the content of their RS narratives, and at follow-up, life satisfaction and meaning in parenting. Compared to PS mothers, RS mothers produced narratives that highlighted their roles as attachment figures and regulators of their children’s experiences, as well as their efficacy in the parenting role, suggesting that RS affects conceptualization of the caregiving role. We illustrate these quantitative effects through the presentation of mothers’ relational savoring narratives, as well as how narratives change over the four sessions. At the 3-month follow-up, RS mothers reported greater satisfaction with life and RS Latina mothers reported using savoring more frequently than PS. Finally, among mothers beginning the study with low parental RF, RS was associated with greater meaning in parenting at FU. We discuss the adaptation of this protocol for use with new populations, including parents of children on the autism spectrum and infants in the NICU.

#### S23.5

##### **MOTHERING FROM THE INSIDE OUT: QUANTITATIVE AND QUALITATIVE FINDINGS ON MATERNAL REPRESENTATIONS FROM THE 2ND RANDOMIZED TRIAL**

**Suchman N.\*, Decoste C.**

*Yale University ~ New Haven ~ United States of America*

Mothering from the Inside Out (MIO) is an evidence-based intervention for mothers in treatment for substance use disorders and caring for children birth to five. MIO targets a mother’s capacity for Reflective Functioning (RF) – to make sense of her own emotional distress during stressful parenting episodes and tune into her child’s attachment needs. Because chronic substance use co-opts neurological reward centers rendering parenting less rewarding and more stressful, MIO aims to restore a mother’s capacity to think reflectively and maintain her emotional equilibrium so that she can think clearly about her child’s challenging emotions and behaviors. In this presentation, we will present findings from the second randomized trial in which MIO was compared with an active

intervention that matched MIO in format (frequency, duration, intensity) but differed in approach (psychoeducation about child development and parenting strategies rather than targeting mentalization). Eighty seven mothers caring for a child 11-60 months old were randomized to 12 sessions of MIO versus Parent Education (PE-active comparison). Maternal reflective functioning, representations of caregiving, mother-child interaction quality, and child attachment were evaluated at baseline and post-treatment and 3-month follow up. Mother-child interaction quality was assessed again at 12-month follow up. Our talk will focus on quantitative and qualitative data collected with the Working Model of the Child Interview (WMCI) at baseline, post-treatment and 12 week follow up. We will report statistical findings on treatment outcomes (ANCOVA at post  $F = 6.95$ ,  $p < .05$  and follow up  $F = 12.07$ ,  $p < .01$ ) and process (RF improvement predicted representation improvement  $R^2 = .11$ ,  $\eta^2 = .42$ ,  $p < .05$ ). We will also present qualitative findings on the nature and patterns of representational change (in caregiving sensitivity, openness, and acceptance) across the three time points including patterns in child-mocking, considering emotional states, and embodying the parenting role. Mothers in addiction treatment benefit from mentalization-based therapy, showing improvement in the nature and quality of representations of their children that indicate promise for fostering more secure child attachment.

#### **Symposium - S26 APPLICATION OF ADVANCES IN DEVELOPMENTAL RESEARCH IN INFANTS TO PSYCHOTHERAPEUTIC WORK WITH CHILDREN AND ADOLESCENTS - PART 1**

**Sachdeva S.\*<sup>[1]</sup>, Donson N.<sup>[3]</sup>, Schechter D.<sup>[2]</sup>, Zatina Egan D.<sup>[3]</sup>**

<sup>[1]</sup>Kansas University Medical Center ~ Kansas city ~ United States of America, <sup>[2]</sup>New York University School of Medicine ~ New York ~ Switzerland, <sup>[3]</sup>YCS Institute for Infant and Preschool Mental Health ~ East Orange ~ United States of America

Advances in developmental infant research mandate that now, more than ever, the failed mastery of early developmental tasks must be a consideration for clinical assessment and treatment with older children and adolescents. There remains an important gap in its application to clinical work with preschool and school age children, and adolescents. Daniel Schechter, MD will discuss findings from the Geneva Early Childhood Stress Project and Parent-Child Interaction Project which underline the importance of targeting clinical interventions for families exposed to domestic violence. These studies focus on both the caregiver's post-traumatic stress disorder (PTSD) and her mentalizing capacity as related to the quality of her attachment relationships. A manualized brief psychotherapy - Clinician Assisted Videofeedback Exposure Approach Therapy (CAVEAT) - was developed based on the technique Schechter used in a Prior New York Project, the Clinician Assisted Videofeedback Exposure Session (CAVES). CAVEAT integrates principles of a number of evidence-based psychotherapies such as Interaction Guidance, Prolonged Exposure Therapy for PTSD, Child-Parent Psychotherapy and Minding the Baby. Dayna Egan, Psy. D will aim to show how relationship-based work with young children and their parents/families are the foundations of infant mental health research are at the core of all clinical work, regardless of whether the patient is an infant, young child, adolescent, or adult. Further, both the child and parents' treatment needs are very similar, with both lacking the basic early childhood relationships that are so necessary for optimal development. She will discuss use of both group and dyadic modalities to address these experiences and unmet needs in both the parents as well as the child, in an effort to alter any intergenerational transmission of problems in their relationships, and stop the cycle. Attachment research provides ways of understanding how early developmental disruptions influence later behaviors, and may suggest more appropriate interventions with child, caregiver and family.

S26.2

**INTEGRATING EXPOSURE THERAPY, INTERACTION GUIDANCE, AND PSYCHODYNAMIC PRINCIPLES TO ADDRESS MUTUAL EMOTIONAL DYSREGULATION IN TRAUMATIZED PARENT-CHILD RELATIONSHIPS**

**Schechter D.\***

*New York University School of Medicine ~ New York ~ Switzerland*

This presentation will aim to show how relationship-based clinical work with young children and their parents/families must be multifaceted, and that the foundations of infant mental health research are at the core of all clinical work, regardless of whether the patient is an infant, young child, adolescent, or adult. So many young parents continue to yearn for secure attachments and relational learning opportunities that they were deprived of when they were chronologically the age of their child. For all parents the arrival of their baby reawakens their own early life experiences, for those who missed out on these fundamental relational milestones these losses are always further intensified with the arrival of their own child. Mother-baby work highlights how often both a child's and parent's treatment needs are similar, since both may lack the basic nurturing relationships so necessary for sturdy early childhood developmental achievements. Dyadic treatment goals and modalities must therefore be focused on repairing early relationship trauma for both adult and child, in order to meet developmental needs of both infant and toddler. So often we need to focus on unspoken needs of a parent whose adult development may be arrested within their infant or toddler place of mind. Our work uses both group and dyadic modalities to address these unmet needs and experiences in both parent and child, in an effort to diminish the intergenerational transmission of parental traumatic relationships.

S26.3

**FOUNDATIONS OF INFANT MENTAL HEALTH RESEARCH AND RELATIONSHIP –BASED CLINICAL WORK**

**Zatina Egan D.\***

*YCS Institute for Infant and Preschool Mental Health ~ East Orange ~ United States of America*

This presentation will aim to show how relationship-based clinical work with young children and their parents/families must be multifaceted, and that the foundations of infant mental health research are at the core of all clinical work, regardless of whether the patient is an infant, young child, adolescent, or adult. So many young parents continue to yearn for secure attachments and relational learning opportunities that they were deprived of when they were chronologically the age of their child. For all parents the arrival of their baby reawakens their own early life experiences, for those who missed out on these fundamental relational milestones these losses are always further intensified with the arrival of their own child. Mother-baby work highlights how often both a child's and parent's treatment needs are similar, since both may lack the basic nurturing relationships so necessary for sturdy early childhood developmental achievements. Dyadic treatment goals and modalities must therefore be focused on repairing early relationship trauma for both adult and child, in order to meet developmental needs of both infant and toddler, and on unspoken needs of a parent whose adult development may be arrested within their infant or toddler place of mind. Group and dyadic modalities address these unmet needs and experiences in both parent and child, in an effort to diminish the intergenerational transmission of parental traumatic relationships.

## **Symposium S27 - APPLICATION OF ADVANCES IN DEVELOPMENTAL RESEARCH IN INFANTS TO PSYCHOTHERAPEUTIC WORK WITH CHILDREN AND ADOLESCENTS- PART 2**

**Donson N.\*<sup>[2]</sup>, Sachdeva S.<sup>[1]</sup>, Berg A.<sup>[3]</sup>, Sossin M.<sup>[4]</sup>**

<sup>[1]</sup>*Kansas University Medical Center ~ Kansas City ~ United States of America,* <sup>[2]</sup>*YCS Institute for Infant and Preschool Mental Health ~ East Orange ~ United States of America,* <sup>[3]</sup>*University of Cape Town and Stellenbosch University ~ Cape Town ~ South Africa,* <sup>[4]</sup>*Pace University ~ New York ~ United States of America*

Advances in developmental infant research mandate that now, more than ever, the failed mastery of early developmental tasks must be a consideration for clinical assessment and treatment with older children and adolescents. There remains an important gap in its application to clinical work with preschool and school age children, and adolescents. Mark Sossin, Ph.D will discuss how the choreographic complexity of co-regulation in parent-infant interaction may be useful to psychotherapists for nonverbal ports of entry for preventative and clinical interventions. Considerations of “attunement,” “reciprocity,” “mutuality,” and “synchrony,” together with recent neuroscientific advances, highlight the role of mirror neurons in fostering early motor and affective resonance. He will describe the utility of the Kestenberg Movement Profile (KMP), originally derived from Laban’s Effort-Shape dance-movement notation interwoven with Kestenberg’s contribution to developmental theory, as explicating facets of the embodied meaning-making process. KMP informs the psychotherapist’s identification and assessment of focal behavioral patterns and intervention-choices, and adds utility to the use of video-feedback. Astrid Berg, MD will discuss Infant Observation as part of the training of child psychotherapists at the Tavistock Clinic. The observations occur in a naturalistic setting as opposed to the laboratory-based observations that are quantified in one way or another. Over time, a large volume of research has been generated in this way and has put onto an empirical foundation many of the hypotheses made by psychoanalysts. The notion of ‘containment’ received particular attention in the Infant Observation literature is pivotal in psychodynamic formulations. A vignette will illustrate how the weekly observing the infant, structure and thereby containment was provided to a delicate and fluid situation and paved the way for psychotherapy sessions when the child reached toddlerhood. Attachment research provides ways of understanding how early developmental disruptions influence later behaviors, and may suggest more appropriate interventions with child, caregiver and family.

### **S27.2**

#### **CO-REGULATION IN PARENT-INFANT INTERACTION**

**Sossin M.\***

*Pace University ~ New York ~ United States of America*

Mark Sossin will discuss how the choreographic complexity of co-regulation in parent-infant interaction may be useful to psychotherapists for nonverbal ports of entry for preventative and clinical interventions. Considerations of “attunement,” “reciprocity,” “mutuality,” and “synchrony,” together with recent neuroscientific advances, highlight the role of mirror neurons in fostering early motor and affective resonance. Recognition of the centrality of meaningful, temporally-organized nonverbal gestural exchanges in early intersubjective experience reveal the properties of a shared movement/nonverbal language. Dr. Sossin’s presentation describes the utility of the Kestenberg Movement Profile (KMP), originally derived from Laban’s Effort-Shape dance-movement notation interwoven with Kestenberg’s contribution to psychoanalytic developmental theory, as explicating facets of the embodied meaning-making process. KMP-identified patterns of change in both parent and child influence levels, types, and rhythms of tension, body-contours, attitudes to the environment, and linear and planar movements within parent’s and child’s kinespheres - and are

linked to attachment processing of infant temperament, parent personality and stress, early proclivities for coping and defense reactions, and parental emotional states. Thus parent and child bring their own movement repertoires to bear, each inclined to sequential phrasing patterns, as in the dyad. Implications of this research for the child and adolescent psychotherapist will be described as the KMP informs the psychotherapist's identification and assessment of focal behavioral patterns and intervention-choices, and adds utility to the use of video-feedback.

S27.3

### **INFANT OBSERVATION AS AN INLET TO PSYCHOTHERAPY IN OLDER CHILDREN**

**Berg A.\***

*University of Cape Town and Stellenbosch University ~ Cape Town ~ South Africa*

Astrid Berg, MD will talk about Infant Observation was developed by Ester Bick in 1948 as part of the training of child psychotherapists at the Tavistock Clinic. The discipline of Infant Observation fulfils the criteria for being a qualitative research method through which new knowledge is generated. The observations occur in a naturalistic setting as opposed to the laboratory-based observations that are quantified in one way or another. Over time, a large volume of research has been generated in this way and has put onto an empirical foundation many of the hypotheses made by psychoanalysts. Thus, for example, the notion of 'containment' received particular attention in the Infant Observation literature. The concept of 'container-contained' is pivotal in psychodynamic formulations. A vignette will illustrate how the method of Infant Observation provided a helpful entry point into a complex clinical situation of an infant born to a child-mother. By weekly observing the infant, structure and thereby containment was provided to a delicate and fluid situation and paved the way for psychotherapy sessions when the child reached toddlerhood.

### **Poster Workshop PW03 - CROSS-CULTURAL USE OF PICCOLO OBSERVATIONAL MEASURE**

PW03.1

#### **A CROSS-CULTURAL EXAMINATION OF PARENT-CHILD INTERACTION WITH CHILDREN WITH DISABILITIES USING THE PICCOLO**

**Vilaseca Momplet R.M.\***

*University of Barcelona ~ Barcelona ~ Spain*

Introduction: This session addresses the nature-nurture theme of the conference by examining the relational and malleability aspects of parent-child interaction for children with disabilities. For infants and toddlers with a disability good parenting and positive parent-child interactions is predictive of good outcomes (Innocenti et al., 2013). The Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO, Roggman et al., 2013), an observational measure of parent-child interaction for infants and toddlers, has gained use in global research studies because of its strong psychometric characteristics (Innocenti et al., 2013; Roggman et al., 2013). PICCOLO predicted school outcomes ten years after initial data collection, when the child had an identified disability (Innocenti, 2013). Whenever a measure is used cross-culturally issues of appropriateness for any given culture arise and those who adapt measures need to be sure translations capture linguistic nuances; this may be especially true for parenting behaviors. Adaptations of the PICCOLO are taking this issue into account (e.g., Bayaoglu et al., 2013; Farkas et al., 2017). Aim: This poster symposium will examine the PICCOLO as used for understanding parent-child interaction and for use as an intervention and outcome measure in different countries when the child has a disability: Spain, Italy, Turkey, and the United States. Method: The commonality across all these studies is the use of the PICCOLO as a research measure to better understand

parent-child interaction. This allows not only for a common measure across the presented research from different countries but also for a cross-cultural look at this very important variable. Results: PICCOLO appears to be a useful tool for working with parents who have a child with a disability. Conclusion: This poster symposium will provide useful information for those interested in parenting children with disabilities and in our understanding of cross-cultural differences in parenting.

PW03.2

**THE IMPORTANCE OF EARLY PARENTING FOR LATER CHILD OUTCOMES: A STUDY WITH SPANISH FAMILIES WITH CHILDREN WITH DISABILITIES**

**Vilaseca Momplet R.M.\*, Rivero Garcia M.M., Bersabe R., Navarro--Pardo E., Ferrer F., Pastor C., Cerro Villanueva J.**

*University of Barcelona ~ Barcelona ~ Spain*

Children with different disability conditions have varied developmental trajectories, which perhaps influences parent-child interaction. For these and all infants, an optimal home environment that includes good parenting and positive parent-child interactions predicts better developmental outcomes (Spiker et al., 2005). Interventions using a family-centered, parenting-focused approach result in better parenting behavior that contributes to improved early child development (Avellar & Suplee, 2013; Roggman & Cardia, 2016). Information on parent-child interaction patterns is needed to guide intervention in natural contexts of families (Fuligni & Brooks-Gunn, 2013). Parent-child interaction data were collected from 44 mothers and 35 fathers interacting with their children (23 to 47 months) who had a disability and were in one of eight Spanish Early Interventions Centers. Mothers and fathers, separately, auto-recorded 10-minute play sessions at home. Parental interactions were assessed using PICCOLO (Roggman et al., 2013), a standardized measure of parenting. Two independent observers coded the interactions; strong intra-class correlation coefficients were found (.82 to .97 for mothers, .77 to .89 for fathers). The BSID-III scales (Bayley, 2015) assessed children's development. Mothers scored slightly higher than did fathers. Scores varied by PICCOLO domains but were consistent with other PICCOLO studies of typical developing children (Roggman et al., 2013). Mother and father's scores correlated indicating that the higher the scores of mothers in any dimension correlated with those of the parents combined. Positive significant Pearson correlations were found between parenting and child's development with different patterns of father and mother domains predicting better language and cognitive outcomes. Further analyses with larger samples of parents with children with disabilities are needed. Although barriers to optimal parenting need further investigation, PICCOLO can be a useful tool to support optimal parenting.

PW03.3

**PARENT-CHILD INTERACTION IN CHILDREN WITH DISABILITIES IN TURKEY**

**Bayoglu B.U.\*, Aksu S., Unal O.**

*Bayindir Hospital Pediatric Department ~ Ankara ~ Turkey*

Developmental problems in Turkey are reported in 10-25% of children. Developmental delays negatively affect children's cognitive, language, motor and social development skills. Positive parenting skills are much more important for the child with developmental delays.

In this study we examined parent-child interaction of Turkish parents who have a child with developmental disabilities. Thirty parent-child interaction were observed using the Turkish PICCOLO scale. We observed 39 mother-child dyads in interaction during free play time. Staff of the Pediatric Neurology and Metabolic Department diagnosed nine of the children with Autistic Spectrum Disorders, five with Cerebral Palsy, 20 with Developmental Retardation.

There were no difference between the three diagnostic groups in terms of PICCOLO scores. Overall, the sensitivity scores of the mothers were the lowest and teaching scores were highest. These scores will be contrasted with the data from the U.S. It is important for children with developmental delays to receive early intervention services. Parents are the most important partner for early intervention. The PICCOLO can be used to support a family-centered approach to intervention for children with disabilities.

PW03.4

**DADS' PARENT INTERACTIONS WITH CHILDREN: CHECKLIST OF OBSERVATIONS LINKED TO OUTCOMES (PICCOLO-D): EXPLORING ASSOCIATIONS WITH COGNITIVE, LANGUAGE, AND SOCIAL-EMOTIONAL OUTCOMES FOR CHILDREN WITH DISABILITIES**

**Anderson S.\*<sup>[1]</sup>, Roggman L.<sup>[2]</sup>**

<sup>[1]</sup>Weber State University ~ Ogden, UT ~ United States of America, <sup>[2]</sup>Utah State University ~ Logan, UT ~ United States of America

Early father-child interactions may influence outcomes for children with disabilities and be an important point of intervention that can strengthen the family system (Cabrera et al., 2014; Fox et al., 2015). Practitioners using family-centered practices need strength-based psychometrically strong tools for supporting positive father-child interaction. This study explored how the quality of father-toddler interaction measured by Dads' Parent Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO-D; Anderson et al., 2013) was associated with child cognitive, language, and social-emotional outcomes, for children with disabilities. The data source includes 26 observations of fathers and their toddlers with an identified or suspected disability and outcome data at age 3, prekindergarten, and fifth grade from the Early Head Start Research and Evaluation Project (Administration for Children & Families, 2002). The PICCOLO-D Affection, Responsiveness, Encouragement, and Teaching domains reflect fathers' developmentally supportive interactions with toddlers. Interobserver reliability was 93%; scale reliability ranged from .66 to .91 (Anderson et al., 2013). PICCOLO-D domain and total measure scores were associated with age 3, prekindergarten, and fifth grade language development, fifth grade math and reading achievement, and prekindergarten attention regulation ( $r = 0.36$  to  $.76$ ). Multiple regression models examined the influence of father PICCOLO-D interactions on child outcomes, when controlling for father level of education. The quality of father Teaching interaction with toddlers predicted child language development into fifth grade ( $\beta = 0.42$ ). The PICCOLO-D total score predicted fifth grade reading ( $\beta = 0.49$ ) and math achievement ( $\beta = 0.70$ ). Father Encouragement predicted child prekindergarten attention regulation ( $\beta = 0.48$ ). These exploratory results suggest that the quality of early father interaction with children with disabilities, as measured by PICCOLO-D, predicts children's long-term language, cognitive, and social emotional outcomes. PICCOLO-D may be a useful strengths-based tool for practitioners working with fathers.

PW03.5

**PARENTS OF CHILDREN WITH A DISABILITY: FAMILY AND RISK FACTORS AND PICCOLO SCORES**

**Innocenti M.\*<sup>[1]</sup>, Roggman L.<sup>[1]</sup>, Cook G.<sup>[2]</sup>**

<sup>[1]</sup>Utah State University ~ Logan, UT ~ United States of America, <sup>[2]</sup>California State University Stanislaus ~ Turlock, CA ~ United States of America

All children benefit from parenting behaviors that support child development (Spiker et al., 2005). For children with disabilities, the child's characteristics can make positive parenting challenging, and yet, these interactions need to be a focus of early intervention to promote optimal family and child development (DEC, 2014). Although programs realize the importance of supporting parent-child

interaction, it is rarely emphasized or measured as an outcome in most early intervention programs (Peterson et al., 2007). We address the challenge of measurement of parent-child interaction by examining predictors of observed developmentally supportive parenting behaviors with toddlers. The Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013) has shown strong psychometric characteristics (reliability and validity) with parents of young children aged 1-3 with identified disabilities and predicted these children's academic outcomes at ages 3, 5, and 11 (Innocenti et al., 2013). Recent examination of extant data from the Early Head Start Research and Evaluation Project (EHSREP) examined predictors of parenting behavior among 236 children in the EHSREP sample identified with a disability while in Early Head Start. Current analyses of the EHSREP sample of parents of children with disabilities shows the impact of family factors and risk indicators on parenting behaviors observed when these parents were interacting with their toddlers. Generally, demographic factors indicative of risk, especially teen parenting and low education, as well as psychosocial factors, such as parenting stress and limited knowledge of child development, predict fewer developmentally supportive parenting interactions with young children with disabilities. Understanding the impact of varied family and risk factors on parent-child interaction will help improve interventions designed to improve parenting. Parents facing specific demographic and psychosocial stressors require the targeted use of family-centered practice within the context of each family's unique characteristics.

PW03.6

**WORKING WITH ITALIAN PARENTS WHO HAVE A CHILD WITH A DISABILITY: USING THE PICCOLO AS MEASURE OF THE PRE-POST CHANGE OF AN EARLY INTENSIVE PARENTAL INTERVENTION**

**Montiroso R.\*, Giusti L., Di Minico G.S., Bonfanti A., Guida E., Desalvo P., Borgatti R.**

*0-3 Centre for the at-Risk Infant ~ Lecco ~ Italy*

For a parent of a child with a disability, the child's characteristics and possible limitations can make positive parenting behaviors challenging. Early parental interventions (EPI) are effective in sustaining short- and long-term development in children with developmental disabilities (Spittle et al., 2015). For practitioners working with parents who have a child with developmental disabilities, it is critical to use a practical, observational, psychometrically-grounded tool to measure the use and quality of specific parenting behaviors during parent-child interactions. The PICCOLO (Roggman et al., 2013) has demonstrated robust psychometric properties in several samples including parents who have a child with a disability (Innocenti et al., 2013), which makes it potentially suitable even in a pre-post-intervention design. We report preliminary data of an EPI implemented during two-weeks hospitalization of children at the child neurorehabilitation unit of our Institute. Mothers of a small group of toddlers who were classified as having developmental disabilities (N = 10) participated in an individual interview that lasted about 1.5 hr, with a total of eight intervention sessions. During these sessions mother-infant interactions were videotaped. The video material was used in the next session. In a collaborative approach, mothers and a trained psychologist analyzed the video fragments of the previous session in order to promote maternal sensitivity to the infants' behaviors focusing on different aspects of mother-infant interactions. Post-intervention assessment indicated significant increases in parents' responsiveness and teaching. Findings support initial evidence for the use of the PICCOLO within a clinical context in a pre-post assessment of parents who have a child with a developmental disability participating to an intensive EPI.

PW03.7

**USING PICCOLO TO COMPARE TELE-INTERVENTION AND IN-PERSON INTERVENTION IN CHILDREN WITH HEARING LOSS**

**Cook G.\*, Rothstein T., Cohoon M., O'Conner C.**

*California State University Stanislaus ~ Turlock, CA ~ United States of America*

Early parent-child interactions are a critical part of typical speech and language development and interactions can be negatively affected if a child is deaf or hard of hearing (Lam & Kitamura, 2010). A primary goal of early intervention (EI) delivered in person or through tele-intervention (TI) is to support parent-child relationships through a parent-coaching model. Increased skills and confidence in promoting child's language and listening are an important parenting outcome in early intervention. Unfortunately, families of children with hearing loss may have limited access to EI with specialized providers. Therefore, TI can be a beneficial method for enhancing access and providing another method of supporting parent-child interactions. One aspect of early intervention that has not been well-documented is the influence of different delivery methods of intervention on parents' interactions with their children. The purpose of this presentation is to examine parent-child interactions based on the domains of the Parenting Interactions with Children: Checklists of Observations Linked to Outcomes (PICCOLO; Roggman, et al., 2013) by comparing two delivery methods (in-person intervention with tele-intervention). Using a sample of 20 home visits (10 TI and 10 EI), we will examine two questions: 1) Do families who received tele-intervention services feel equally supported, knowledgeable, and confident in fostering their child's development as families who received in-person services? 2) Do families who received tele-intervention demonstrate similar levels of parenting skills as families who received in-person services as measured by PICCOLO? Preliminary results in a 6-month study of "virtual home visits" indicate that tele-intervention shows promise in supporting coaching and parent-child interactions as well as child language outcomes. Tele-intervention can be an effective approach for supporting parenting confidence and competence. Information on how parenting practices can be supported using tele-intervention will be discussed.

PW03.8

### **EXAMINING RESPONSIVENESS AND TEACHING IN PREDICTING LANGUAGE OUTCOMES OF TODDLERS WITH DEVELOPMENTAL DELAYS**

**Boyce L.\*<sup>[1]</sup>, Ortiz E.<sup>[1]</sup>, Roggman L.<sup>[1]</sup>, Jump Norman V.<sup>[1]</sup>, Cook G.<sup>[2]</sup>, Innocenti M.<sup>[1]</sup>**

<sup>[1]</sup>Utah State University ~ Logan, UT ~ United States of America, <sup>[2]</sup>California State University Stanislaus ~ Turlock, CA ~ United States of America

Contingent responsiveness is highly related to language acquisition for toddlers with and without language delays (Abraham, Crais, & Vernon-Feagans, 2013). The bidirectional relationship between parent language use and responsivity and the communication abilities of young children within social interactions contribute to children's language (Chapman, 2000). However, this may be difficult if children are not active participants. This study examined the association between maternal responsiveness and language outcomes and whether maternal teaching may moderate this association. The sample included 89 mother-toddler dyads who participated in the study when they were approximately 24 and 36 months old. Families were recruited from intervention programs serving families with children with disabilities. The primary sources of data used in this study include the Preschool Language Scale-4 (PLS-4; Zimmerman, Steiner, & Pond, 2002) and the responsiveness and teaching subscales from the Parent Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman, Cook, Innocenti, Jump Norman, & Christiansen, 2013). A multiple regression model was tested to examine the influence of maternal responsiveness, teaching, and the interaction between responsiveness and teaching at 24 months on children's language development at 36 months. Children's language scores at 24 months, child gender, and maternal education were all entered into the model as control variables. The results indicate that the variables explained 53% of the variance ( $R^2 = .53$ ,  $F(6, 89) = 17.72$ ,  $p < .000$ ). Prior language scores

( $\beta = -.62$ ,  $t = 7.82$ ,  $p = .00$ ), responsiveness ( $\beta = -.34$ ,  $t = 2.78$ ,  $p = .01$ ), and the interaction ( $\beta = -.24$ ,  $t = 2.03$ ,  $p = .04$ ) were statistically significant predictors. A scatterplot of the interaction effect suggests that maternal responsiveness is related to higher language scores for mothers in the moderate teaching group. Observable parent responsiveness and teaching reflect important supports for early language development.

**Video Presentation V03 - THERAPEUTIC GROUP IN EARLY INFANT MENTAL CARE : SEVERAL GROUP MODELS ADAPTED TO DYADIC INDICATIONS IN AN 0 TO 3 INFANT MENTAL HEALTH UNIT**  
**Viaux--Savelon S.\***, Rabain D., Wendland J., Couetoux F., Camon--Senechal L., Khun--Franck L.  
*APHP 0 to 3 Unit Vivaldi, Department of Child and Adolescent Psychiatry, Pitie Salpêtrière ~ Paris ~ France*

This presentation aims to present the evolution of therapeutic group models after a 20 years experiment of our 0 to 3 unit « Vivaldi » to take care of early specific troubles in early childhood. In this period of the life the clinic is groupal per se, with trans generational and societal components. Baby comes to the unit in a groupal dimension with his/her mother, father, grandparents and all the family is welcome by the multidisciplinary team with transactional group device that include cross analysis of the familial system. In this video presentation, we propose to present different therapeutic group devices, developed by our unit regarding observation/evaluation or specific conjoint care. The « Open group » is an open, preanonymous group (only infant name) which allows us to observe and give first evaluation of child and family functioning. Family can come by themselves or be referred by the perinatal network. This device can give the first care before orientation towards individual care or more specific group. Specific groups have been created for specific indications: attachment disorder, developmental disorders, autistic symptoms with Denver method, neglectness. These groups are weekly and often during 10 months. Each of them have their specific structuration and multidisciplinary team adapted to the child and his/her parents' symptomatology using all the efficient concepts for the pathology as empowerment, intersubjectivity, insightfulness, synchrony interactive, attachment, and developmental model, video feedback. We will present for each group their model and structuration with video illustration.

**Workshop WS85 - FROM DISSONANCE TO DANCING DIALOGUE: NAVIGATING THE NATURE NURTURE PARADIGM USING DANCE, MUSIC AND PLAY TO BUILD THE ATTACHMENT RELATIONSHIP IN A 5-YEAR TRIADIC TREATMENT**

**Tortora S.\*<sup>[1]</sup>, Keren M.<sup>[2]</sup>**

*<sup>[1]</sup>Memorial Sloan-Kettering Cancer Center ~ NY ~ United States of America, <sup>[2]</sup>Geha Mental Health Center, Tel Aviv University Medical School ~ Tel Aviv ~ Israel*

How do parents navigate all the professional voices that enter their lives when worried something is wrong with their baby? Conceived through fertility medication and intrauterine insemination, a whirlwind of fears, diagnoses and directives begins when seeking help for their 14-month old they describe as bright, engaged, loving, curious, determined, perceptive, empathic, happy; but highly irritable, inflexible, clinging, skittish/overwhelmed by the world; sleeps only 30 minutes; shows no interest in toys; and screams to communicate. The infancy researcher suggests holding off on neurological testing, referring a psychoanalytically-trained therapist, who interprets the difficulty as Mom's problem merging and resisting baby's autonomy due to abandonment fears. The neurologist notes infant colic, irritability, and social avoidance, diagnosing self-regulatory difficulties and "at-risk" for autism. The Early Intervention Specialists' evaluations state sensory sensitivities, highly significant range for Anxiety Disorders, but not ASD, diagnosing Emotional Disorder of Childhood NOS. Mom and Dad reflect on their difficulty together as a threesome; acknowledge anxiety and

ASD exists in the family history; but these divergent professional opinions leave them feeling blamed, unheard and exasperated. Using a nonverbal assessment and intervention tool developed by the presenter and a triadic treatment model, participants will learn how careful attention to qualitative elements of each mover's nonverbal expression/repertoire, described as "vitality affects" by Stern, were used to transform the attachment relationships, using dance/movement and music, creating a playful environment that supported self-expression and developmental growth. A pediatric psychiatrist leads the discussion of this longitudinal case study spanning age 1.2 – 5 years old.

## **Brief Oral Presentations BOP02 - METHODS OF INTERVENTION WITH INFANTS & FAMILIES**

BOP02.1

### **OUT OF THE MOUTH OF BABES: DEVELOPING THE CAPACITY FOR FREE FLOATING ATTENTION VIA BICK'S METHOD OF INFANT OBSERVATION**

**Hatzor T.\***

*Director of the Parent Infant Psychotherapy Program of Columbia University ~ New York City ~ United States of America*

Bick's Infant Observation method prepares clinicians working with babies to carry in their mind the necessary frame and mental attitude via the observing stance of free floating attention that is essential to understand the preverbal emotional communications between infants and parents. Bick uses this idea of 'free floating attention' as central to the observing stance and the psychoanalytic attitude required of the observer confronted with a situation of intense emotional impact in the room with parents and their infant. The need to develop this capacity of intense focus while suspending judgment, an 'evenly suspended' attitude, that is taught via Bick's method of observation, is fundamental for the clinician's capacity to provide a containing/thoughtful mind that enables understanding, from which interventions and solutions arise. I will provide a short summary of this method and bring an example from clinical work with a baby with feeding troubles where the application of the technique of mental availability is applied.

BOP02.2

### **A RANDOMISED CONTROLLED TRIAL OF AN EMOTION-FOCUSED PARENTING PROGRAM - TUNING IN TO TODDLERS™**

**Havighurst S.\*<sup>[1]</sup>, Kehoe C.<sup>[1]</sup>, Harley A.<sup>[1]</sup>, Rae T.<sup>[2]</sup>, Nicholas A.<sup>[3]</sup>**

*<sup>[1]</sup>University of Melbourne ~ Melbourne ~ Australia, <sup>[2]</sup>Bond University ~ Gold Coast ~ Australia,*

*<sup>[3]</sup>University of Oregon ~ Portland ~ Australia*

Parenting young children is a stressful and challenging experience for many parents and is a time when environmental influences play a significant role in shaping children's development. Parenting that is emotionally responsive, empathic and assists children to learn about emotions (emotion coaching) has been found to play an important role in shaping children's emotional competence. Tuning in to Toddlers™ (TOTS) is a universally delivered parenting group program that teaches parents' skills in regulating their own emotions, responding to their children's emotions and reducing emotion dismissive parenting practices. The study aimed to evaluate the efficacy of the TOTS program. A randomised controlled trial of TOTS was conducted in Melbourne, Australia with a community sample of 306 parents of children aged 18 and 36 months from childcare centres and maternal child health clinics. Measures were conducted at baseline and then parents were allocated into intervention or 15-month wait-list control. Intervention parents participated in the 6-session TOTS program delivered for 2-hours a week by two facilitators using a structured manual. Follow-

up measures were then re-administered 15-months after baseline for all participants. Measures included parent self-report questionnaires, direct observation of parenting, and hair cortisol analysis to measure systemic stress in parents and toddlers. Analysis of outcome data showed parents in the intervention condition reported significant reductions in emotion dismissive parenting as well as improved empathy and emotion coaching compared to control participants who did not report changes. Parents who took part in the intervention also reported greater improvement in child behaviour and social competence. Cortisol analyses showed greater reductions in both parental and child stress for intervention parents compared with waitlist control parents. These findings suggest that parents of toddlers were receptive to and able to learn parenting skills that are expected to improve children's emotion competence and behaviour. TOTS offers a new efficacious evidence-based program for parents of young children.

BOP02.3

### **RETURNING MUSICALITY TO PARENTS: CONSTRUCTING A PARENT STRATEGY FROM THERAPIST LEAD INTERVENTION**

**Shoemark H.\***

*Temple University ~ Philadelphia ~ United States of America*

“Time Together” is a parent education program to develop the capacities of parents to use their voice to meet the needs of their hospitalized or at-risk infants. This paper will report on two feasibility trials, one in the NICU and another in the community. Trial 1: The program was delivered individually to 13 mothers with newborn infants in the NICU, without the infant present. Participant interviews were analyzed using Program Evaluation (Rallis & Rossman, 2003). Trial 2: 22 community based mothers and their healthy infants participated in group sessions with 3 - 5 mother-infant dyads. Pre-post program, participants completed the Edinburgh Postnatal Depression Scale (EPDS), the State & Trait Anxiety Inventory (STAI), the Mother-Infant Bonding Scale (MIBS), the Karitane Parenting Confidence Scale (KPCS), and the Musical Heritage, Thinking and Action survey, and participated in a semi-structured interview. Trial 1: NICU participants reported the overall program to be useful, with the most positive response for the content about infant behavioral cues for interaction. Findings indicated that the program provided meaningful learning about parent-infant interaction in one session. Trial 2: No significant difference in the the EPDS and STAI or MIBS. Significant change on KPCS (0.002). Qualitative analysis is being finalized, but preliminary themes include empowerment to soothe and engage, realization and delight in infant expressive capabilities. Early indications are that the community-based participants demonstrate greater spontaneous translation to partners and extended family, and reported useful implementation. The feasibility trials confirmed a suitable translation of information about infant and adult behaviors, and use of voice for parents. The increase in parenting confidence suggests that the single session program is sufficiently useful to warrant further investigation.

BOP02.4

### **INFANT MOTOR PERFORMANCE ENHANCED BY RESPONSIVE PARENT-CHILD INTERACTION**

**Schiffman R.\*, Moerchen V.**

*University of Wisconsin-Milwaukee ~ Milwaukee, Wisconsin ~ United States of America*

The parent-child interaction (PCI) has historically not been considered as a primary context for early motor development as it has for the early development of language and cognition. This gap reduces the ease of including concurrent infant stimulation for social-emotional development that would integrate infant mental health into early motor intervention for infants with global developmental delays. The purpose of this study was to examine the impact of the presence and quality of maternal

responsiveness on the motor performance of infants. The aim was to demonstrate a potential relationship between responsive/non-responsive maternal interaction and infant motor performance. Participants were 12 mothers and their typically developing 8-10 month old infants who were cruising 1-5 steps but not yet walking. The design was a balanced, two interaction conditions four sequence crossover. For the motor context, mothers supported their infants for four 60-second trials of stepping on an infant treadmill, with steps and interaction captured using 4 synchronized videocameras. PCI was scored with the NCAST Parent Child Interaction – Teaching Scale during a natural teaching task and during the supported treadmill motor activity. Step frequencies were normalized to individual infant total steps across all trials. RM-ANOVA and t-test were used to examine motor responses and PCI, respectively. Parental responsiveness significantly impacted the quality and quantity of infant stepping. Infants took significantly more steps and steps that were more motorically complex when mothers were responsive ( $p < 0.01$ ). Additionally, mothers demonstrated significantly more social-emotional growth fostering behaviors during the responsive treadmill trials than during the baseline assessment of the parent-child interaction ( $p < 0.05$ ). Parental responsiveness may play an important role in adapting motor interventions for the individual child, allowing for concurrent social-emotional stimulation, supportive of efforts to integrate infant mental health into early intervention services

BOP02.5

### **MOTHERHOOD STEP BY STEP - THE EVALUATION OF POLISH PROGRAM OF BREASTFEEDING SUPPORT AND PSYCHOTHERAPY CENTER FOR NEW PARENTS**

**Chrzan--Detkos M.\*<sup>[1]</sup>, Pietkiewicz A.<sup>[2]</sup>**

<sup>[1]</sup>*Institute of Psychology ~ Gdansk ~ Poland*, <sup>[2]</sup>*Copernicus Hospital ~ Gdansk ~ Poland*

Postpartum and prenatal depression affect, worldwide, approximately 13% of women (Gaynes et al., 2005; O'Hara & Swain 1996). The long term consequences of maternal prenatal and postpartum depression are well documented. However, the consciousness of this problem in Poland is still low. According to National Health Fund in 2014 the depression in the first year after birth was diagnosed in 6 387 women; in 2015 – 5 133, whereas, as the simple statistics basing on the number of childbirths show that 47, 667 women would be potentially affected by postpartum depression and the very same number should be diagnosed with prenatal depression (GUS, 2015). Program Motherhood Step by Step which was funded by the City of Gdańsk is one of the first in Poland aiming to offer complex help for pregnant women and new families. We aim to popularize knowledge concerning mental health in prenatal and postpartum period among nurses and midwives by conducting regular workshops and lectures; provide free breastfeeding counseling and short term psychotherapy (up to 11 sessions) for pregnant women or women/men in postpartum period. Additionally we offered supervision for nurses and midwives. The effectiveness of lectures for medical personel, breastfeeding support as psychotherapy was evaluated. The psychotherapy participants ( $n=28$ )\_ completed GHQ - 28; Parental Stress Index - SF 3rd version, and RFQ (Fonagy et al., 2016) before and after short term psychotherapy. The breastfeeding support participants ( $n=120$ ) completed GHQ - 28 and Breastfeeding Self - Efficacy Scale - SF, before and one month after the first consultation. In general the participants improved in mental health index after the psychotherapy, but also after the breastfeeding support.

1. The cooperation between breastfeeding support personel and psychotherapists enabled the access to the new mothers who were depressed, but did not seek the psychological assistance.
2. The possibility of supportive relationship with psychotherapist but also breastfeeding support personel seems to be the main protective factor toward the mental health index among participants.

### **Workshop WS03 - BABY BRIGADE: ENGAGING COMMUNITIES TO SUPPORT VETERAN PARENTS**

**Yeary J.\***

*ZERO TO THREE ~ Washington DC ~ United States of America*

In the USA, children under the age of 5 make up 37.5% of the dependent children in military families. Veterans who have left active and select reserve forces continue to have children, although exact numbers are not available. Without support, the young children in these households may be at risk. Transitioning out of military service can be difficult with 61-68% of veterans reporting adjustment difficulties. Rates of PTSD are estimated at 30% and traumatic brain injuries at 10% for post-9/11 veterans. Transitioning from active service often leads to a move away from military neighbors, friends, and other support systems. These young men and women are also parenting young children. This presentation will discuss Baby Brigade, a curriculum designed for communities to offer a supportive, informative, and engaging environment for their veteran parents that serves to promote attuned parenting and parental resilience. Baby Brigade was developed by ZERO TO THREE in response to the need to support the young children of veteran parents while also supporting the parent. In this workshop, we will present the design of Baby Brigade, a community-based, parent psycho-educational curriculum. We will share a brief synopsis of initial implementation and the downloadable resources that are included as a part of the curriculum. Discussion will include problem solving challenges of engaging of veteran parents, the successes of this new curriculum, and the unique design of using paired facilitators: one from the agency and one veteran parent/veteran partner parent.

### **Workshop WS04 - WORKING WITH WOMEN WITH BORDERLINE PERSONALITY DISORDER AND THEIR INFANTS**

**Sved Williams A.\*<sup>[1]</sup>, Apter G.<sup>[2]</sup>**

*<sup>[1]</sup>University of Adelaide ~ Adelaide ~ Australia, <sup>[2]</sup>University of Normandy , Le Havre Hospital ~ Le Havre ~ France*

Introduction: Borderline personality disorder (BPD) occurs in at least 2% of the population and at much higher rates during the peripartum. The area is highly under-researched with few currently available guidelines for working with this population. Many of these women also present with a diagnosis of postnatal depression (PND) but need different work to those with PND. There is a high risk of distortion of interactions and of dysregulated relationships impeaching both infant emotional development and maternal mental health.

Description of the work: The workshop will provide the following information:

- What is (and causes) BPD
  - What problems can be caused for infants and children of mothers with BPD?
  - What problems happen to mothers with BPD when their infants cry?
  - What are the mechanisms by which this happens
  - How to get started working with the mother-infant: providing information about the diagnosis, providing psychoeducational material, moving women towards accepting the need for therapy
  - How to work directly with the mother-infant, showing videos of work with mothers and infants
- Conclusions: working with these dyads is challenging, intense and time-consuming but may be highly rewarding since life-long patterns of emotional dysregulation may be averted as their infants move along a better developmental trajectory.

### **Workshop WS09 - CO-LOCATION OF COMPREHENSIVE EARLY CHILDHOOD MENTAL HEALTH (ECMH) SERVICES IN A FULL-DAY PRE-KINDERGARTEN PROGRAM**

**Kurtz S., Foley G.\*, Safyer M., Trotter N.**

*Adelphi University Institute for Parenting ~ Garden City, NY ~ United States of America*

This workshop introduces implementation of an Early Childhood Mental Health clinic in a high-need pre-kindergarten program, emphasizing the importance of co-locating mental health services to support social-emotional development in a school setting. Gains in developmental neuroscience tell us that brain growth, from birth to age five, is in its most rapid and crucial phase and is foundational for the formation of all subsequent developmental capacities. When teachers understand and feel successful managing children's behaviors, they have more positive perceptions and better quality relationships with children. Furthermore, quality preschooler-teacher relationships can become a protective factor supporting healthier trajectories for children with behavioral and/or developmental challenges resulting from insecure attachment with their primary caregivers. As such, this pilot program co-locates a comprehensive ECMH clinic in a full-day pre-kindergarten promoting healthy social-emotional development for children and supporting teachers. The school year begins with developmental screenings to identify potential delays across various domains; simultaneously serving as an internship site for ECMH graduate students. Following screenings and teacher referrals, preschoolers with social-emotional concerns receive a range of services including programmatic and/or case specific classroom consultation and therapeutic services i.e., individual play therapy, parent guidance, and dyadic therapy. Preschoolers with other developmental delays are identified and referred for special education services in conjunction with school personnel and parents/guardians. This program is a collaboration of two federal grants, one for personnel preparation in infant mental health and the other to expand preschool programs in high-need communities. Design, implementation, highlights and challenges of the program will be discussed.

#### **Workshop WS10 - WHY REFLECTIVE SUPERVISION IS PRIORITY FOR FRONTLINE STAFF**

**Dawson N.\*<sup>[1]</sup>, Frost K.<sup>[1]</sup>, Khumalo T.<sup>[1]</sup>, Mokolutlo Z.<sup>[1]</sup>, West J.<sup>[2]</sup>**

<sup>[1]</sup>*Ububele Educational and Psychotherapy Trust ~ Johannesburg ~ South Africa, <sup>[2]</sup>Two Lillies Fund ~ New York ~ United States of America*

The Ububele Home Visiting Project (UHVP) is a preventative infant mental health intervention, shown to have a significant impact on maternal reflective functioning. The intervention is provided by lay practitioners in a context with high levels of toxic stress. Reflective supervision is seen as a critical component for the success of this intervention. This workshop will provide an overview of the UHVPs two-tiered structure of reflective supervision, motivating for the need to prioritize reflective supervision for frontline staff in the face of worldwide plans to scale up infant mental health interventions. The workshop will share live material as presented by supervisees and a live demonstration of the supervision process and the weaving together of the themes that emerge from the work. The supervision structure will be explained where frontline workers are thought about in individual and group supervision spaces which provide different levels of support, and where the supervisory team receive supervision on their supervision so that an additional space is prepared to further hold and metabolise the challenges inherent in such work. For this workshop, the funder's perspective will also be provided. She has supported the programme's use of reflective supervision and had chosen to fund the project for that specific purpose. The funder, who is also a clinician, acknowledges the invisible power behind supervision's closed doors, that enables the frontline work to be effective.

#### **Workshop WS15 - DEVELOPMENT OF THE PARENT-CHILD EARLY RELATIONAL ASSESSMENT-SHORT FORM (ERA-SF) TO FOCUS RELATIONAL INTERVENTIONS AND RESEARCH IN CLINICAL, COMMUNITY, AND HOME CONTEXTS**

**Clark R.\*, Poehlmann--Tynan J.**

*University of Wisconsin ~ Madison ~ United States of America*

The Parent-Child Early Relational Assessment (ERA) (Clark, 1985, 2015) has been used in more than 500 research studies and clinical programs on 6 continents, with good reliability and validity across cultures and risk groups. The ERA captures the affective and behavioral quality that the parent and child bring to the interaction as well as the nature and tone of the dyad. Contributions to risk in the developing relationship may come from the parent (depression, trauma history, substance use), or the infant/young child (prenatal stress exposure, prematurity, developmental disabilities), or the family/environmental context (poverty, NICU, parental incarceration). Although the ERA is 65 items, which offers depth and richness, there has been a need for a briefer version, especially to focus therapeutic interventions for relationships at risk. Video illustrations and copies of the ERA-SF exercise will be provided. Participants will engage in an exercise to practice coding areas of concern and strength in parent-child interactions from video recordings. Short and long forms will be compared and contrasted for use in clinical and translational research settings. De-identified item-level data from approximately 1400 dyads were compiled across 9 longitudinal studies with normative and risk samples. Factor and item analyses are being conducted, and construct validity examined, comparing the ERA and the ERA-SF. The ERA-SF preserves the richness and depth of the ERA and psychometric analyses have maintained the integrity of the original factor structure. The ERA-SF, including video replay, can be used as a tool to respectfully engage parents of infants/young children to collaboratively partner to develop therapeutic intervention goals.

#### **Workshop WS16 - ARE WE CONNECTED? SIMPLE VIDEO CODING FOR IMMEDIATE FEEDBACK ON THE QUALITY OF RELATIONSHIPS IN NATURAL SETTINGS**

**Feder J.\***

*Fielding Graduate University ~ Santa Barbara, California ~ United States of America*

Video coding of parent-child-interactions supports relating and communicating and guides nurturing interventions with infants and children with developmental challenges, trauma and neglect. This workshop teaches participants to code videos of parent-child interactions using The Fielding Connection Coding Paradigm (FCCP), a simplified approach to determine the quality of regulation/co-regulation; affective connection/engagement; meaningful flow of reciprocal interaction; and the balance of repair of interactions between parents and children. These foundational elements of caregiver-child interactions are needed for relating, communicating, learning, and healthy attachment. This approach also highlights individual differences of a parent or child impacting their ability to interact, e.g., sensory, motor, receptive/expressive communicative abilities, visual spatial, emotional and executive function. Participants will learn to use the FCCP on any video, and how to use an app that trains people to good inter-rater reliability, rapid coding and immediate feedback. We will review the rationale and research on its design, then code videos using the tool. We will highlight how the method helps us to understand the challenges of parent and child and the dynamics of relating and talk about how this helps us improve our efforts to support those relationships. Participants will learn how the FCCP gives useful feedback to clinicians, caregivers and researchers to support evidence based developmental, relationship-based practices for a range of clinical situations ranging from developmental challenges to displacement, trauma and neglect, and how this approach can be used for tracking response to ongoing treatment as well as for testing effectiveness of new interventions.

## Brief Oral Presentations BOP05 - INFANTS AND AUTISM SPECTRUM DISORDERS

BOP05.1

### **VARIATION IN THE EARLY TRAJECTORIES OF AUTISM SYMPTOMS IS RELATED TO THE DEVELOPMENT OF LANGUAGE, COGNITION, AND BEHAVIOR PROBLEMS**

**Visser J.\*<sup>[1]</sup>, Rommelse N.<sup>[1]</sup>, Martijn L.<sup>[2]</sup>, Servatius--Oosterling I.<sup>[1]</sup>, Greven C.<sup>[3]</sup>, Buitelaar J.<sup>[4]</sup>**

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Autism spectrum disorders (ASD) represent a highly heterogeneous group of neurodevelopmental disorders. Heterogeneity is expressed in inter-individual variation in severity of core symptoms, but also cognition and language, and co-occurring behavioral and emotional problems. Over time, ASD develop into increasingly complex sets of behaviors that are difficult to disentangle and complicate interventions. Therefore, prospective research starting in early childhood is highly relevant. Objective: To model more homogeneous subgroups within ASD based on early trajectories of core symptoms, and to further characterize these subgroups in terms of trajectories of language, cognition, co-occurring (attention-deficit/hyperactivity disorder [ADHD]-related) traits and clinical outcome diagnosis. Method: Children (N = 203) referred for possible ASD at ages 1 to 4 years were assessed at three time points at intervals ranging from 9 months to 3 years. Assessments included standardized measures for ASD (Autism Diagnostic Observation Schedule [ADOS]), (NV-IQ; different tests adequate to chronological/mental age), and parent-reported behavioral problems (Infant-Toddler Social and Emotional Assessment, Child Behavior Checklist). Results: Latent-class growth curve analysis based on ADOS scores led to identify three stable- and two small improving groups: a severe-stable group (19.5% of sample) showed persistent low NV-IQ and marked increase in attention problems over time; a moderate-stable group (21.7%) showed below-average increasing NV-IQ; and a mild-stable group (48%) showed stable-average NV-IQ and the highest scores on ADHD-related traits, with ASD outcome-diagnoses increasing despite stable-low ASD scores. Two groups (each 5.4%) improved: one from severe to moderate ASD scores, and the other from moderate to mild/non-spectrum scores; both groups also improved on the other characteristics. Conclusion: Results support the high stability of ASD symptoms, but also highlight the significant contribution of characteristics outside the ASD domains in defining and explaining the different ASD trajectories. Taking these characteristics into consideration is a prerequisite for individualized interventions.

BOP05.2

### **EARLY PARENT TRAINING INTERVENTION TO PROMOTE DEVELOPMENT OF SOCIAL COMMUNICATIVE SKILLS IN ASD CHILDREN: UNIQUE USE OF VIDEO MEDIA**

**Bitton R.\***

*Child Development Center ~ Eilat ~ Israel*

In recent years the diagnosis of ASD is on the rise significantly. Early identification allows for early intervention at a very young age. The parent is the primary agent of change in the child's life, creating a need to build a program for them. In the framework of the Child Development Center in Eilat, Israel, a unique program has been implemented that focuses on the development and encouragement of parent-child interaction for children recently diagnosed with ASD. The program is accompanied by a speech therapist and an occupational therapist and includes ten sessions. These

sessions provide parents with guidance on self-regulation, sensory processing, communication and interaction. In each session, interaction between the parent and the child is recorded, and the interaction analysis is performed by watching the video at the next session. The purpose of the analysis is to make information accessible, use common terminology, identify factors that encourage prevent / block continued interaction. All these are implemented in the next session which is facilitated by the SLP and the OT to discuss goals. Parent reports at the end of the program show an improvement in their ability to cope with their daily lives and their understanding of their child. In the lecture we will present the program in its entirety, we will screen parent-child interaction videos and we will present the process and its results.

BOP05.3

### **VISUAL PATTERN AS A 'BIOLOGICALLY-ORIENTED' OUTCOME IN THE FIELD OF EARLY INTERVENTION OF THE AUTISM SPECTRUM DISORDER (ASD): CAN THE EYE-TRACKER PROVIDE USEFUL SUGGESTIONS?**

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Eye-tracking characterize ASD at an unique level, with links 'down' to underlying neurocognitive networks, as well as 'up' to everyday function and dysfunction. Because it is non-invasive eye-tracking is useful for the study children. Twenty 24-30 months old children at their first diagnosis of ASD were recruited and their visual pattern was studied at T0 and at T1 after 6 months of intervention. The eye-tracking tasks consisted in the presentation of short video sequences involving Responding (RJA) and two initiating Joint Attention (IJA). Gaze accuracy, transitions and fixations were analyzed. Age-matched typical children were also compared at T0 and T1. In RJA task children with ASD improved their engagement with target object showing an increased fixation at T1 compared to T0 ( $p=.02$ ). In IJA1 children with ASD significantly improved their ability of disengage and explore space: increased transitions from non-target object to target object ( $p=.01$ ), tended to look more to non-target object ( $p=.06$ ) and decreased fixations at face ( $p=.01$ ). At T1 their still made more transitions at the target object compared to the non-target one ( $p=.02$ ) respect to typical children (higher transitions score) while they did not show any more decreased attention at non-target object. As regards IJA2 ASD children did non show significantly improvement in visual pattern and they still made more transitions then typicals between target object and face. From a clinical point of view, at T1 children showed a significantly improved in terms of ADOS-2 comparison score (CS). Also developmental level, language and adaptive behavior showed significant gains. For our knowledge this was the first trial that used the eye-tracking as outcome measure to demonstrate that early intervention was associated with progressive normalized visual pattern and with improvements in social behavior in young children with ASD.

BOP05.4

### **NURTURE OVER NATURE: THE IMPORTANCE OF EARLY INTERVENTIONS WITH AVOIDANT AND AUTISTIC BEHAVIOURS IN INFANTS AND THEIR FAMILIES**

**Acquarone S.\* , Poppi K., Jimenez Acquarone I.**

*WAIMH UK ~ London ~ United Kingdom*

The quality of nurturing has a profound effect on an infant's ability to attach to its care giver and relate, understand and engage with the world around them. Three presentations examine how early intervention and support change and are able to overcome delayed or non-productive behaviours. Methods of evaluation including scales based on observational behaviours and paediatric

assessments which enable individual tailor made interventions that promote and establish productive relationships in order for them to be fully integrated and interactive in main stream nurseries. Disability and labelling are addressed focusing on the reality of individual needs and requirement for steady progress. A neurophysiological perspective is put forward and a breakdown of techniques and case studies are presented in order to support the importance of early family interventions and its huge impact on infant mental health.

#### **BOP05.5**

#### **AUTISTIC-LIKE SYMPTOMS IN CHILDREN BORN WITH EXTREME PREMATURETY: NEURODEVELOPMENTAL DISORDER OR DEVELOPMENTAL TRAJECTORIES OF ATYPICAL SOCIAL COGNITION? A PRELIMINARY REPORT**

**Kmita G.\*<sup>[1]</sup>, Kiepora E.<sup>[2]</sup>, Prazmowska D.<sup>[2]</sup>, Rutkowska M.<sup>[2]</sup>, Bekiesinska--Figatowska M.<sup>[2]</sup>**

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There is a growing body of evidence linking extreme prematurity with increased risk of autism spectrum disorder (ASD) and atypical development of social cognition. At the same time, diagnostic and ethical questions are raised due to the excessive number of false positive results of screening tests for ASD, as well as a specific clinical picture of autistic-like symptoms in children born with extreme prematurity. Some authors postulate distinct mechanisms of ASD in the case of prematurity, encompassing insults to the developing CNS, atypical early experience, altered brain development, and their possible interrelations. The aim was to analyse the relationship between extreme prematurity and the risk as well as clinical presentation of autism spectrum disorder. The objectives were to:

- 1) analyse developmental trajectories of children with increased risk of ASD
- 2) analyse relationships between clinical presentation of ASD and specific neonatal and relational factors.

Data of two cohorts of extremely premature infants were used. In the first study, developmental trajectories of 30 children were prospectively analysed from birth. In the case of 4 children symptoms of ASD were identified and confirmed by the age of 5. In the second study, 52 babies were enrolled. Neonatal data were collected, together with the results of magnetic resonance imaging. At the corrected age of two years children were assessed with STAT, an interactive measure of child's social- communicative behaviours (a screening tool for ASD in 24-36 month-olds). Developmental assessment was performed and interviews with parents were conducted. In the next step (at the age of 4) ADOS-2 assessment will be carried out and child's interactions with both parents will be recorded and analysed with Observer XT. The analysis is still in progress. Mixed-method approach is used. Preliminary results will be presented. The title question will be addressed in the discussion.

#### **Symposium S14 - CAREGIVING ENVIRONMENT FOR INFANTS WITH DISABILITIES AND SPECIAL MEDICAL NEEDS LEFT WITHOUT PARENTAL CARE**

**Muhamedrahimov R.J.\***

*St. Petersburg State University ~ St. Petersburg ~ Russian Federation*

Introduction. The intervention project implemented and maintained in one of St. Petersburg's (RF) institutions for children aged 0-4 years (Baby Homes, BH) showed that the improvement in sensitivity, responsiveness and stability of the caregiving environment led to improvements in children including those with disabilities (The St.Petersburg-USA Orphanage Research Team, 2008). Based on these results a Resolution of the Government (№481, 2014) was issued to

organize a family-like environment in all Russian institutions. Although special efforts are made to develop a system of family-based care, many children still live in BHs, especially children with disabilities and special medical needs who are difficult to place in substitute families. The project has not analyzed what additional caregiving competencies and early intervention activities are needed in order to meet their special needs. This symposium will provide presentations on specificity of the caregiving environment for children with disabilities and medical needs reared in the post-intervention BH. Method. Speakers will present characteristics of institutional environments for children and the development of infants with disabilities, preterm infants in the post-intervention BH, including an example from clinical work on an infant with cirrhosis of the liver: 1) Robert McCall. Characteristics of Institutional Environments for Infants and Young Children. 2) Christina Groark. Preparing Caregivers in Institutions to Care for Infants and Children with Disabilities. 3) Daria Chernego; Marina Vasilyeva; Rifkat Muhamedrahimov. Effect of social-emotional intervention on development of preterm infants in institutions. 4) Maria Solodunova. Family-like environment for children with special needs: is it enough to survive? Results. Although the BH intervention program led to improvements of all groups of children, those with disabilities were still delayed substantially, and preterm infants scored lower than full-terms. Additional caregiving activities were provided in the post-intervention BH to meet the special needs of an infant with cirrhosis of liver. Conclusion. These presentations show that children with disabilities and special medical needs living in BHs need sensitive, responsive and stable family-like caregiving environments plus individualized early intervention activities, and the BH caregivers need training in sophisticated professional competencies to care for this group of children.

S14.2

#### **CHARACTERISTICS OF INSTITUTIONAL ENVIRONMENTS FOR INFANTS AND YOUNG CHILDREN**

**McCall R.B.\***

*University of Pittsburgh Office of Child Development ~ Pittsburgh, PA ~ United States of America*

An estimated 2-8 million children worldwide are housed in institutions. Although family care systems, adoption, and foster care are increasing in many countries, research shows the number of children residing in institutions is not decreasing, even in the countries that have made major progress toward providing family environments. Further, transitioning a country to family care can take a decade or more even under ideal conditions. Lastly, children with disabilities are usually the most difficult to place in families, so the percentage of children with disabilities remaining in institutions is increasing. Thus, it is likely that institutions will be present in many countries for quite some time, and the percentage of resident children with disabilities will continue to increase. Reports in the literature and our experience in several countries around the world indicate that institutionalized infants and young children are typically reared in groups of 10-12 (but sometimes as many as 50) of homogeneously-aged children, children experience many and changing caregivers (as many as 60-100 different caregivers by the time they are 20 months old), and infants/children-to-caregiver ratios are 6/8+:1 during the day. Children with disabilities reside in separate wards or institutions, and professional and caregiving staff see no hope for their development. Mainly, caregivers don't engage children with sensitive and responsive interactions. Meta-analyses show developmental quotients, including social-emotional subscales, average about 70, and 20-25 for those with the full range of disabilities. But quasi-experimental interventions have made a few institutions more family-like in structure and provided fewer and more consistent caregivers who behaved more parent-like. When implemented, these improvements produce children with developmental quotients that can approach typical family-reared children, and those children with

disabilities improve substantially even without training caregivers in specialized practices. Children improve substantially when a family-like caregiving environment is implemented in institutions.

S14.3

### **PREPARING CAREGIVERS IN INSTITUTIONS TO CARE FOR INFANTS AND CHILDREN WITH DISABILITIES**

**Groark C.J.\***

*University of Pittsburgh Office of Child Development ~ Pittsburgh, PA ~ United States of America*

In our experience in several counties, infants and young children raised in institutions are typically housed in separate wards or facilities from children without disabilities. They are housed in relatively large groups, and experience a changing cast of numerous caregivers that provide basic caregiving and little else. Most limiting is caregiver belief that little can be done to improve these children's development or lives, so they are "abandoned in their cribs and playpens." Institutionalized infants and young children with disabilities are rarely studied. However, one of the most comprehensive intervention projects created smaller groups, integrated children with disabilities with typically developing children, and provided fewer more consistent caregivers over the children's residential tenure. Importantly, caregivers were trained and encouraged to provide engaged, sensitive, and responsive caregiving. Although they were taught how to handle, position, and feed children with disabilities, they were not given training in more sophisticated methods of caring for children with disabilities. Battelle developmental scores for children with disabilities (except those with microcephaly and hydrocephaly) increased from 23 to 42 DQ points; two-thirds improved 12 points and one-third more than 20 points. A simple scale that reflects the extent children with disabilities are appropriately handled, positioned, and integrated into daily activities was created and used in a separate study in another country. This scale showed that the minimum training of caregivers described above could produce more appropriate care, and children with disabilities improved in their development. These studies show that the development of institutional children with a range of disabilities can be improved with better general care, limited basic caregiver training in positioning and handling, and integration in groups of typically developing children.

S14.4

### **EFFECT OF SOCIAL-EMOTIONAL INTERVENTION ON THE DEVELOPMENT OF PRETERM INFANTS IN INSTITUTIONS**

**Chernego D.I.\*, Vasilyeva M.J., Muhamedrahimov R.J.**

*St. Petersburg State University ~ St. Petersburg ~ Russian Federation*

Children born preterm experience a variety of developmental deficits in different domains. Estimated data showed that 25-38% of preterms were annually placed in St Petersburg (RF) Baby Homes (BHs). A social-emotional intervention was implemented in one of St. Petersburg BHs and produced developmental improvements in physical and developmental domains for children (The St. Petersburg-USA Orphanage Research Team, 2008). Despite the presence of preterm children in orphanages, this group has never been studied specifically. This study examined the effect of a social-emotional intervention on the general behavioral development of preterm children during their first two years of life. The study included preterm (N = 56) and full-term (N = 93) children from the BH with intervention and from the BH with no intervention. Children were assessed at 3, 6, 9, 12, 18 and 24 months of age with the Battelle Development Inventory (LINC Associates, 1988). The results showed that the intervention positively influenced the general behavioral development of preterms throughout their first two years of life compared to preterms from the no-intervention

BH. Also, results indicated that the intervention effect was developmentally similar for preterm and for full-term children, but preterms consistently scored lower than full-terms during their first two years. Nevertheless, even being institutionalized and in the intervention, preterm children still had developmental deficits and exhibited lower levels of general behavioral development during their first two years of life compared to full-term children living under the same environmental conditions. Perhaps, because of the biological immaturity at birth, preterm children need to be involved in an additional or more intensive early intervention that should be created specifically for preterm children in BHs.

S14.5

#### **FAMILY-LIKE ENVIRONMENT FOR CHILDREN WITH SPECIAL NEEDS: IS IT ENOUGH TO SURVIVE?**

**Solodunova M.\***

*St. Petersburg Baby Home 13; St. Petersburg State University ~ St. Petersburg ~ Russian Federation*

The St.Petersburg-USA Project showed positive impact of stable and sensitive caregiving on the development of institutionalized children, while for those with specific medical needs it might be not enough to live in family-like environment to survive. The aim of this report is to present a clinical case of an orphan young girl transferred to the institution at the age of 3 months with the diagnosis of cirrhosis of the liver. The only chance for the child to stay alive was with liver transplantation surgery. According to the RF Legislation, for an orphan a transplant can come only from a deceased donor. So, the only opportunity for her was to wait until the appropriate transplant was found. The girl waited for five months; all the time she had to stay at the hospital under the doctors' assistance. During the whole period the same caregiver (an institution employee) was living with her in the hospital. This caregiver took mother's functions for the girl. Mostly due to this, the child not only survived until the surgery, but was successfully transplanted and quickly recovered. In three months later a domestic family adopted the girl. This example showed that the support systems for children with special medical needs may require professional resources and qualities that lie beyond a family-like environment in an institution. The early intervention for such children must include additional resources to meet the very specific needs of each child.

#### **Brief Oral Presentations BOP08 - EVOLUTION OF PREGNANCY - PART I**

BOP08.1

#### **"PERFORATED" STORIES: TRAUMA AND TRANSGENERATIONALITY IN THE CONTEXT OF PREGNANCY AND BIRTH OF A BABY**

**Caetano Da Silva Leão L.\*<sup>[1]</sup>, Nunes Mousquer P.<sup>[1]</sup>, Martini I.I.<sup>[2]</sup>, Alves De Alves A.C.<sup>[1]</sup>**

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Present and discuss a case of parents-infant psychological support at a hospital which is reference in assistance to high-risk pregnancies located in Porto Alegre, southern Brazil, focusing on maternal traumatic and transgenerational experiences. The case refers to Anne, 32 years-old and her husband, assisted by a multidisciplinary team (obstetricians, nurses, psychologist and psychoanalyst) from the end of pregnancy to hospital discharge of the baby. About a year before becoming pregnant, Anne had suddenly lost her mother, an experience that could not be felt, named, metabolized, and minimally elaborated. In the sequence, Anne have discovered the gestation of twins, one of whom died intrauterus, at 16 weeks. At 34 weeks, due to a suspect of ascites in the fetus, Anne was hospitalized. In this scenario, from a fetal ultrasound, the ultrasonographer found evidence of a very serious clinical situation with the baby, still without a

defined diagnosis. In view of the severity and threat of fetal death, Anne underwent an emergency cesarean section, and it was verified that the baby presented the same condition as the one that caused the death of Anne's mother: a perforation in the intestine. From this, the baby was admitted to the NICU, undergoing various interventions and surgeries, totaling two months of hospitalization. It is highlighted in this case the potential of multidisciplinary team intervention: through care and assistance from the various professionals, the patient could be received in her own history, composed of transgenerational traumatic experiences, and gradually re-signifying it.

BOP08.2

### **THE USE OF EVALUATIVE FUNCTIONS IN THE NARRATIVES OF THREE GENERATIONS OF BEDOUIN ARABIC WOMEN**

**Kabya R.\***

*Speech communication rhetapist ~ Meilat ~ Israel*

The narrative genre is common both in oral bedouin culture. The term "evaluative functions" refers to linguistic means that includes the expression of a reflective position regarding the actions and deeds of another, assumptions about internal mental and emotional conditions, and also a causative connection between the events and the motives and impulses. Various studies have shown that the use of evaluative functions is influenced by cultural and social values along with the type of narrative being told. This topic has not yet been studied in the Arab population. The present study closely examines the use of evaluative functions in the narrative of a sub-group of the Arab population – women of the Bedouin society that live in north of Israel. This study closely examine the narrative of three generation of Bedouin women who lives in the north of Israel from three groups of age (average age of: 89.6, 62, 30.4) that significantly different from one another in literacy level, cultural conventions and norms they are subject to, in spite of the fact that these women live in the same time period and often under the same roof. Each subject told three different stories to a child: a folktale, a personal story, and a picture-book story. All the stories were analyzed for use of evaluative functions. The findings showed that the use of evaluative functions is more common in a folktale and in a personal story than in a picture-book story. The level of literacy does not affect the frequency of evaluative functions use in socio-cultural norms does. The qualitative analysis of the narratives showed that the "frequency of evaluative function" index does not necessarily indicate the quality of the story. The most interesting conclusion is That telling a good story with qualitative use of evaluative function is relating to the experience of the teller and if he perceive himself as a stories teller.

BOP08.3

### **PREGNANCY AND CHILDBIRTH-RELATED ANXIETY AND ITS ASSOCIATED FACTORS: A SYSTEMATIC REVIEW**

**Mudra S.\*, Stuhmann L.Y., Claus B., Schulte--Markwort M.**

*Department of Child and Adolescent Psychiatry and Psychotherapy, University Medical Centre Hamburg ~ Hamburg ~ Germany*

There is growing evidence of an impact of prenatal anxiety on birth outcomes and the health of mother and child. Further, the concept of pregnancy-related anxiety (PrA), defined as concerns about pregnancy, infant's health, future parenting and childbirth, has attracted clinical and research attention as a distinct clinical phenomenon with a link to preterm birth, postpartum depression and long lasting effects on infant development. Conflicting findings exist on causal pathways and conceptualization of terms. Since pregnancy-related concerns may also occur as physiologic condition in transition to parenthood and no worrisome level of PrA is defined so far, a closer

evaluation of severity and correlates of PrA is needed. Thus, the aim of this systematic review was, first, to assess the extent of PrA and second, to identify factors that were associated with pregnancy- and childbirth-related anxiety in the current literature. A systematic literature search was conducted in the online databases Medline/PubMed and PsychInfo from 1980 up to 2015 using combinations of the key terms “pregnancy”, “prenatal”, “antenatal”, “childbirth”, “anxiety” and “fear”. We included cross-sectional and prospective studies on  $n \geq 20$  women reporting data on the extent of study-defined PrA and its associated factors, collected at any point during pregnancy by specific quantitative PrA-measurements. Studies focusing exclusively on samples of high risk without a normative control or on conventional symptoms of general anxiety only were not included. Eleven thousand three hundred and ninety five articles (11,395) were identified via database and reference search. After abstract review, 712 articles were assessed for eligibility. Studies written or published in English, German, Chinese, Spanish and Danish were included. A quality index was used based on the NIH Observational Assessment Tool. Data extraction of the remaining 159 studies resulted in 48 samples with quantitative data on PrA and 53 on fear of childbirth, in particular. We were able to identify several sociocultural as well as personal and obstetric factors that were associated with the extent of PrA. Findings are discussed in terms of further strategies in research and prenatal care in order to contribute to a deeper understanding of the concept of PrA and to promote parent-infant mental health from pregnancy on.

BOP08.4

#### **FETAL BIOMAGNETOMETRY – A NOVEL NON-INVASIVE APPROACH TO STUDY THE EFFECTS OF CHRONIC STRESS DURING PREGNANCY ON FETAL DEVELOPMENT**

**Kieu J.\*<sup>[1]</sup>, Chandra P.<sup>[1]</sup>, Gustafson K.<sup>[2]</sup>**

*<sup>[1]</sup>University of Missouri-Kansas City ~ Kansas City ~ United States of America, <sup>[2]</sup>University of Kansas Medical Center ~ Kansas City ~ United States of America*

Chronic stress during pregnancy affects development of the fetus, which may be a precursor for neuropsychiatric problems later in childhood or adulthood. Ultrasound, MRI and other imaging methods have been used to study the effects of chronic stress during pregnancy on fetal neurobehavioral, physiological and structural changes. Biomagnetometry is a non-invasive technique that detects magnetic fields within body tissues and allows for the study of fetal neurobehaviors safely during pregnancy. The magnetic fields generated by the bioelectric currents associated with various physiological processes within the fetal body (cardiac activity, diaphragmatic muscular activity, sucking and swallowing) are measured outside the maternal abdomen. We searched Ovid Medline and PubMed databases with the terms 'biomagnetometry' and 'fetal' which yielded 5 results. 'Stress' added as a search term yielded no results. Fetal biomagnetometry has been used to characterize the development of neurobehaviors such as movement, non-nutritive suck, periodic breathing and heart rate variability (HRV). Metrics of HRV, derived from longitudinal fetal magnetocardiograms, have been used to measure the effect of growth restriction, gestational diabetes, maternal exercise and specific nutrients on fetal outcomes. To our knowledge, biomagnetometry has not been used to measure fetal autonomic development and neurobehaviors in women experiencing psychological and social stress. Because the maternal and fetal cardiac cycles are being recorded simultaneously with high temporal resolution one can also study the effects of chronic stress on the maternal-fetal interactions. Fetal biomagnetometry is a powerful tool that can contribute to the study of neuropathology in the prenatal period. It may provide novel information for the study of adverse maternal conditions such as depression and anxiety, and the effects of chronic stress on fetal development.

BOP08.5

**"PREGNANCY CHANGED ME FROM A KID TO A MOM:" A QUALITATIVE EXPLORATION OF TEENS' PRENATAL HEALTH AND ATTACHMENT IN THE CONTEXT OF CUMULATIVE ADVERSITY**

**Payne N.\***

*Nancy Payne ~ New York ~ United States of America*

While outcomes for teen mothers and their infants on various psychosocial indicators are found to be less positive than for older mothers, questions remain as to why this is so. Pregnant teens experience cumulative adverse childhood experiences (ACEs), violence, poverty, and mental health problems at a greater rate than older mothers. The impact of these risks on prenatal health has been studied in older women, but not in teens. This qualitative study involved pregnant teens in New York City, receiving services from a nurse home visiting program. It was concerned with exploring teens' perspective on their pregnancies and pregnancy health and the possible impact of ACEs and violence exposure on their mental health, attachment, and health behaviors. This study was developed a grounded theory of how teens perceive their pregnancies in the context of cumulative adversity. Twenty-three teens were interviewed about ACEs, attachment and support relationships, mental health, health behavior, and future plans. All data was transcribed verbatim and Atlas.ti was used for coding and analysis. Teens saw pregnancies in a positive light, as a means to become healthier and more responsible overall, and develop solid future plans. In addition, more ACE exposure co-occurred with positive and resilient perspectives, but also, mental health problems. Teens with fewer ACEs, were somewhat less resilient and had more concerns about being pregnant. They also had more family support over time. Two path models of influence were developed to display these trajectories.

In contrast to dominant views, teens in this study evinced positive views of pregnancy and convincing changes in their health behavior. Strong evidence of resilience emerged from their narratives. However, teens in the US are not given support to parent effectively. Questions regarding the impact of ACEs, mental health problems, and the poverty-related stressors on their pregnancies and parenting require further study.

**Workshop WS21 - CREATING PROTECTIVE AND COMPENSATORY EXPERIENCES (PACES) TO BUFFER THE DAMAGING EFFECTS OF EARLY LIFE ADVERSITY**

**Hays--Grudo J.\*, Morris A.**

*OKAIMH ~ Stillwater ~ United States of America*

This workshop summarizes research on ten protective and compensatory experiences (PACES) that buffer the effects of early life adversity and provides participants opportunities to explore the use of PACES in practice and research. Adverse childhood experiences (ACEs) significantly increase the likelihood of lifelong physical and mental health problems. Early life adversity negatively affects brain development, impairing cognitive, social and emotional development, and create cycles of adversity in subsequent generations. However, basic and applied developmental research has established the mitigating effects of protective and compensatory experiences (PACES). We will review the research supporting 10 PACES, 5 relationship-based and 5 resource-based, and provide opportunities to use the PACES measure to identify sources of resilience, to create an ACEs and PACES genogram in order to identify intergenerational patterns of adversity and protection, and to create a PACES plan, in order to increase protective experiences available to children and parents coping with trauma and adversity. Presenters are Jennifer Hays-Grudo, PhD and Amanda Morris, PhD, IMH-E®(IV). Both Jennifer and Amanda are developmental psychologists and Regents Professors in the Department of Human Development and Family Science at Oklahoma State University. Jennifer's work focuses on the effects of parents' ACEs on child biobehavioral stress

regulation. She is PI of the NIH-funded Center for Interdisciplinary Research on Childhood Adversity. Amanda's work focuses on parenting and the development of emotion regulation. She is a core scientist at the Laureate Institute for Brain Research, where she is a co-Investigator of a national longitudinal study of children's brain development.

### **Workshop WS22 - EMDR CLINICAL AND RESEARCH IMPLICATIONS IN THE FIELD OF EARLY TRAUMA**

**Ammaniti M.\*, Fernandez I.**

*Rome University ~ Rome ~ Italy, MEDR Italy Association ~ Milan ~ Italy*

The aim is the presentation of EMDR, a first-line trauma treatment in the international practice guidelines of several organizations, including the American Psychiatric Association (2004). The clinical effectiveness of EMDR for treatment of trauma in adults has been documented in several randomized controlled studies (EMDR International Association, 2014); furthermore, and an incremental effect of EMDR has been also observed in children (Rodenburg et al., 2009). Our recent research has evidenced that, after EMDR, early traumatized children showed increased activity in cerebral areas implicated in high-order cognitive processing when passively viewing pictures of adults' emotional expressions. These changes were associated with the decrease of depressive and traumatic symptoms, and with the improvement of emotional-adaptive functioning over time (Trentini et al., 2015). In light of these results, we will discuss the implications of EMDR in clinical practice, highlighting the importance of focusing interventions with traumatized children on cognitive processing of emotions.

### **Workshop WS26 - ACKNOWLEDGING AND CONTAINING FEAR IN INFANT MENTAL HEALTH TRAINING, SERVICES AND SUPERVISION**

**Foley M.<sup>[1]</sup>, Ribaudo J.\*<sup>[2]</sup>**

*<sup>[1]</sup>Child, Family and Organisation Consultancy Services ~ Geneva ~ Switzerland, <sup>[2]</sup>University of Michigan ~ Ann Arbor ~ United States of America*

Attachment theory provides a framework to examine the experience of fear and fear regulation in infant mental health training (IMH), practice and supervision. The secure base system of care is central to the thesis of attachment. Within this overarching system, Bowlby (1973) identified a fear system. In optimal conditions, the experience of fear is met with protection from the caregiving system. However, when fear in the infant is repeatedly unacknowledged and uncontained, the infant's emotional, physical and relational world is vulnerable to developmental delays and distortions. Similarly, students, trainees and supervisees need protection at times of fear. Unacknowledged/ unidentified fear in the trainee-trainer or supervisee-supervisor relationship can impede the personal and clinical development of the clinician. This workshop will explore ways that trainees and trainers, supervisees and supervisors, students and teachers, can enhance their capacity to: a) identify and acknowledge the experience of fear; and b) provide containment and protection from which to explore the material/experiences underpinning fear within the training, therapeutic and/or supervisory space.

1. Literature review findings and cross-national case study examples will illustrate the role, function and effect of the experience of fear in IMH training and supervision;
2. Clinical examples will illustrate experiences of fear and its influence on the therapeutic process and outcomes;
3. Participants will have the opportunity to examine their professional development and clinical experiences of fear; and

4. Video clips will facilitate an experiential opportunity to observe the spectrum of ways fear manifests itself in clinical practice and within the supervision process.

#### **Workshop WS27 - DELIVERING A TRAUMA BASED SERVICE TO UNDER 5'S: THE TRANSLATION OF THE NEW ORLEANS INTERVENTION MODEL FOR THE UK CONTEXT**

**Cosgrave N.\*<sup>[1]</sup>, Lamb C.<sup>[2]</sup>, Colaico J.<sup>[3]</sup>**

*<sup>[1]</sup>Consultant Clinical Psychologist and Clinical Director London Infant Family Team NSPCC ~ London ~ United Kingdom, <sup>[2]</sup>Consultant Psychiatrist ~ ~ United Kingdom, <sup>[3]</sup>Team Lead & Social Worker. London Infant & Family Team. NSPCC ~ London ~ United Kingdom*

Infants are vulnerable to the effects of maltreatment and responsive to early intervention. The workshop outlines a relationship focused assessment and intervention model for infants and their carers who are in the care system because of maltreatment. We illustrate the tools we use to improve infant attachment and caregiver responsiveness, and discuss with participants how they might apply this model for their particular context. The LIFT intervention is unique in the UK as it targets the mental health needs of under 5's in care proceedings, and provides intervention for children, their parents and foster carers under the auspices of the Family Courts. This masterclass describes the methods used to assess mental health and attachment in children, and the treatments we deliver. Through video footage, attendees will follow a clinical case from referral to discharge. We highlight how infants miscue their emotional needs, and detail strategies to increase caregiver responsiveness and sensitivity. We discuss the impact of our work on the professional system, including increased understanding of trauma in infants. The model is being evaluated as part of a randomised control trial (RCT) and preliminary evaluation indicates it can: aid decision making; enable better permanency; identify unmet need in infants and adults; increase caregiver sensitivity; promote infant mental health and secure attachments; increase professionals' knowledge of the impact of maltreatment on infants. The challenge of delivering trauma focussed services and the policy implications for partnership models between Mental Health, the Judiciary, and Social Care are discussed.

## 15:15-16:45 General Sessions

### Invited Symposium IS1 - INTERNATIONAL PERSPECTIVES ON PUBLIC POLICY AND INFANT MENTAL HEALTH

**Maguire C.<sup>[2]</sup>, Fitzgerald H.\*<sup>[1]</sup>**

*<sup>[1]</sup>Michigan State University ~ East Lansing ~ United States of America, <sup>[2]</sup>~ Cork ~ Ireland*

Moderator Hiram Fitzgerald opens the symposium with brief comments on Dye's (1972) definition of social public policy as "anything a government chooses to do or not to do" (Dye, 1972, p.1). Dye's definition describes well the extent to which countries have national policies related to infant mental health services. The WAIMH's recent publication "Declaration of Infants' Rights." is an intentional effort to provide coherence for the extraordinary variation among countries with respect to issues promoting healthy social-emotional development during the earliest years of development. This symposium provides four case examples of that cover much of the range of Dye's definition. Catarina Furmark reviews efforts to strengthen policies and practices across the Nordic countries (Finland, Norway, Denmark, Iceland, and Sweden). Catherine Maguire draws attention to intra-governmental agency early childhood policies and practices in Ireland that lack co-ordination and thus are limited in their collective impact nationally. Jane Barlow draws attention to infant mental health programming in the UK, reviewing how it is attempting to "catch up" after failing to act on early childhood initiatives in the past. David Willis notes the history of policies in the United States affecting early childhood education, and its new policies related to home visiting programs and new efforts designed to implement policies reflecting an infant mental health perspective. Our discussant, Deborah Weatherston comments on the generative movements in these and other countries with respect to infant mental health relationship-ship based home-visiting and how it has broad applications to all situations where infants and very young children receive care.

#### IS1.2

### **COURSES OF ACTION TO STRENGTHEN INFANT MENTAL HEALTH WORK IN THE NORDIC COUNTRIES--SIMILARITIES AND DIFFERENCES**

**Furmark C.\***

*Karolinska Institute ~ Stockholm ~ Sweden*

Primary level Child Health Care (CHC) is well organized similarly across the Nordic countries: Finland, Norway, Denmark, Iceland and Sweden. Government funded universal CHC-clinics serve families and children to promote healthy child-development & support functioning family relationships. Reasonable parental leave, financial support for both parents and affordable day-care play an important role. Quality follow-up at national/regional levels is recommended. When first-line services are not sufficient, referrals are to be made to secondary and tertiary levels. These vary in the different Nordic countries: from child- and adolescent psychiatric out-patient clinics, habilitation centres for disabled children, family guidance clinics, special baby teams, ambulatory clinics and perinatal psychiatric teams to hospital wards with highly specialized IMH staff. Even though many clinics are of high standard and have built a solid IMH expertise base over the years, now only few clinics actually specializing in work with the youngest remain – their very existence is threatened. Clinics specializing in parent-infant relationship treatment are forced to close, IMH networks are shut down and government funding for clinics and research is cut. Structural support is lacking, leaving the continuation of IMH work in a vulnerable position. Platforms for knowledge, research and specialized training should be organized and continually funded, IMH networks encouraged, teams and clinics supported in a coherent chain of action. Resources for infants and their parents should be earmarked. In the Nordic countries, different steps of action are being taken and will be

discussed here.

IS1.3

### **CRYING OUT FOR ACTION: THE OPPORTUNITIES AND CHALLENGES OF IMPLEMENTING AN EARLY YEARS POLICY FRAMEWORK IN IRELAND**

**Maguire C.\***

*Young Knocknaheeny Area Based Childhood Programme ~ Cork ~ Ireland*

In Ireland, national early childhood strategy documents across a range of government departments collectively acknowledge the important pre-birth and early childhood period in giving every child the best start in life, but have lacked specificity on a cohesive implementation plan for implementing recommendations. Some prevention and early intervention programmes have been developed, however there is considerable variability in the models across the country. Dedicated leadership is required to determine the most effective models of prevention and early intervention. Despite the creation of government strategy and policy frameworks, the provision of mental health services for infants and toddlers remains scattered, resulting in delayed recognition of risk and missed opportunities for prevention and early intervention. There is limited availability of infant mental health service frameworks and the required interdisciplinary training and workforce capacity building to deliver these services. Appropriate levels of funding investment and human resources have not always followed strategy or policy frameworks. Competing needs from other health population sectors have overshadowed the needs of infants and young children who come to attention only when symptomatic. Historically in Ireland, emphasis has focused on parental rights with lesser understanding on the rights of the child, a narrative that now requires open discussion. This paper will discuss the opportunities and challenges of implementing an early childhood policy framework in Ireland.

IS1.4

### **BRINGING UP THE REAR: INFANT MENTAL HEALTH POLICY IN ENGLAND**

**Barlow J.\***

*University of Oxford ~ Oxford ~ United Kingdom*

Over the past decade in the UK, there has been increased recognition at a governmental policy level of the importance of the perinatal period in promoting children's longterm wellbeing. This was initiated by a Labour government that produced a range of policy documents accompanied by significant funding, aimed at promoting the wellbeing of all children. It also began the first significant policy focus on parents as the most important mediators of change. However, a specific focus on infancy was not achieved until more recently with a number of policy documents that emphasized the importance of this period in terms of the impact of the environment, and parenting in particular, on the child's early neurological development. These policy recommendations were gradually embedded in practice partly as a result of the implementation of the Healthy Child Programme, which all health authorities were required to commission, and which provided practitioners with a guide to the delivery of evidence-based practice and services from pregnancy to five years. Policy making culminated most recently in the development of a cross-party manifesto entitled '1001 Critical Days'. This paper will critically examine the role of government policy in promoting infant mental health in a country such as the UK, where such policy has typically lagged behind practice on the ground.

IS1.5

## **PUBLIC POLICY AND INFANT MENTAL HEALTH IN THE UNITED STATES**

**Willis D.\***

*United States Maternal and Child Health Bureau ~ Washington DC ~ United States of America*

The recognition of the critical importance of infant mental health in US public policy for the First 1000 Days is gaining ascendancy across federal, state and local jurisdictions. As the scientific and medical communities have increasingly focused on early childhood, toxic stress and adverse childhood experiences as the drivers of life course, population health and educational disparities, there has been a simultaneous and expanded prevention focus on promoting healthy parent-child relationships, positive parenting, and strengthening families across programs and policy. Beginning in 2010, the federal government has invested in the Federal Maternal Infant and Early Childhood Home Visiting Program (MIECHV). MIECHV has 2 Generational focus with evidence-based home visiting programs in all 50 states, DC and 5 territories. that partner with families to support their maternal and child health, strengthen their relational health, promote healthy child development and address risk and needs. MIECHV has established a high degree of accountability and rigor with the requirements for a performance measurement system, an emphasis on continuous quality improvement, a multi-level research agenda and an emphasis on strengthening local early childhood systems. HHS/HRSA has also invested with in the development of a Center of Excellence in Infant Early Childhood Mental Health Consultation. Thus, new MCH public policy focuses to advance, scale and spread infant mental health and relational health within public health, communities, child health and early childhood programs.

## **Invited Symposium IS2 - INFANTS AND FAMILIES IN NEED ACROSS THE WORLD: DEVELOPING INFANT MENTAL HEALTH TRAINING AND SERVICES IN COUNTRIES WITH LIMITED RESOURCES**

**Paul C.\***

*Royal Children's Hospital ~ Victoria ~ Australia*

The symposium will address innovative ways of developing training frontline workers and delivering mental health services for children in countries with extremely limited mental health and health resources. Specific infant health services are extremely limited in the most populous countries of the world. The needs of babies in very young children maybe even more intense and profound in the context of limited access to family life essentials such as housing, income and education. WAIMH has an important role in recognising the emotional and developmental risks confronting infants, and in supporting the development of infant mental health services in all areas of the world. The three presentations will discuss innovative ways of training non-mental health clinicians to work with very vulnerable infants and their families.

IS2.2

## **PERSPECTIVES OF INFANT MENTAL HEALTH IN INDIA: ESTABLISHING A CHILD MENTAL HEALTH NGO IN SOUTH INDIA**

**Porpavai K.\***

*Pathways Foundation Kovai ~ India*

The 2011 Indian official statistics estimate the population of children under 4 at 9.7 percent, in the second highly populated country in the world. There is an estimated 27 million births every year. There is increasing evidence to indicate that emotional and behavioural problems for children are increasing in India. There are limited child and adolescent mental health services in India, which are restricted to big cities and tertiary level organisations. Access to mental health services for children with mental, emotional, developmental or behavioural disorders are substandard, not provided

early enough and only accessible to a small fraction of the child and adolescent population. Identifying problems early and intervening at the right time will be cost effective, as this will prevent further deterioration and disability, as they grow older. Despite the increasing need, there is no training available for people working in the frontline with children and adolescents especially infants. To address this deficit Pathways Foundation was set up in 2014 as an NGO with a primary aim to improve literacy in infant, child and adolescent mental health. Since then Pathways has been conducting training workshops for parents, teachers and professionals regarding parenting and various aspects of early life mental health. In this symposium the presenter will discuss the experience of working in the voluntary sector in the field, associated challenges and successes.

IS2.3

### **INVENTING MENTAL HEALTH SERVICES FOR INFANTS AND YOUNG CHILDREN IN INDONESIA**

**Wiguna T.\***

*University of Indonesia ~ Jakarta ~ Indonesia*

Indonesia is a huge country and consists of thousands of islands divided into 37 provinces with different local languages and cultures. The important obstacle in developing mental health services for infants and young children in Indonesia is lack of available resources, especially human resources. Mental health professionals are limited and not distributed appropriately in every province across Indonesia. Most mental health professionals live in the big cities, therefore a lot of mental services are unmet in the rural areas, especially for infants and young children. To fulfill the needs of mental health services for infants and young children, the Indonesian Ministry of Health through the Directorate for Child Health developed a module and training for pediatricians, midwives, and nurses. The training is called as 'Module of Managing and Referral Pathway for Children with Growth and Developmental Problems'. The training is conducted by social pediatrician, child psychiatrist, consultant in child rehabilitation, occupational therapist, speech therapist and developmental psychologist. This comprehensive mental health service module includes several topics such as physical growth and developmental problems (including gross and fine motor problems, hearing problems, and visual problems). From the perspective of infant psychiatry, the issues of autism and intellectual disability are put together. The training is using an active participatory model combined with real cases practicing at dr. Cipto Mangunkusumo General Hospital, Jakarta, Indonesia. Several provinces have already sent their team (Pediatricians, midwives, nurses and occupational therapist, etc.) to participate and are charged to develop such services in their own working place. The training, with direct supervision, has been delivered several times now, with good feedback. It is intended that the training will continue and improve.

IS2.4

### **CREATING INDIVIDUALIZED MODELS OF INFANT MENTAL HEALTH TRAINING: AN EXAMPLE FROM INDIA**

**Harrison A.\***

*Harvard Medical School ~ Cambridge, MA ~ United States of America*

The Infant Mental Health Mini-Course, "Protect, Nurture, and Enjoy" (PNE) was designed to equip health workers with the knowledge and motivation needed to facilitate positive parent-infant interactions during routine clinical contacts with families of infants. The PNE has now been taught in India, China, Peru, and Grenada. The basic module of the training includes lectures about infant mental health emphasizing early development, clinical demonstrations of the Newborn Behavioral Observation, and interviews of new parents. The PNE is created on site, in collaboration between PNE consultants and personnel from the local institution. Key features of the PNE include sensitivity

to different cultural contexts, adaptability to the unique needs and aims of the institution, and long-term engagement with a consultation team to support sustainability. In Uttar Pradesh, India, where the needs of infants are frequently unmet, it has been taught three times to nursing students during their maternity rotation. A study of the effectiveness of the training is underway in U.P. The study assesses the behavior of nursing students towards new mothers through the administration of questionnaires to mothers and to the nursing students. The process of creating the PNE, establishing the collaboration with the hospital and nursing school, teaching the course, and evaluating the students will be described. Qualitative and quantitative data from the India study of the effectiveness of the PNE intervention will also be presented.

### **Invited Symposium IS3 - DC:0-5 TRAINING AND PROFESSIONAL DEVELOPMENT SUPPORT AROUND THE WORLD: LESSONS LEARNED FROM DEVELOPERS, TRAINERS AND AUDIENCES**

**Mulrooney K.\***

*ZERO TO THREE ~ Washington, D.C. ~ United States of America*

This symposium aims to share lessons learned from audiences outside the U.S. who participated in DC:0-5 training efforts in an effort to illustrate the responsiveness of audiences to the new diagnostic classification worldwide, highlight efforts to adapt training to be more culturally relevant and meaningful to international audiences and share continued issues and new directions around DC:0-5 training efforts worldwide. This 90 minute symposium will feature a panel including developers of DC:0-5, DC:0-5, an international DC:0-5 Expert Faculty member, and a clinician participant of DC:0-5 Training outside of the US. Information about development of the curricula with international audiences in mind including selection of international Expert Faculty as well as efforts to adapt the curricula to suit the language needs, learning practices and cultural sensitivities of different groups around the world will be shared. The audience will learn from experiences of DC:0-5 Expert Faculty members as well as from participant recipients of the training who can comment both on their training experience and experiences in applying DC:0-5 to their current practice.

IS3.2

### **DC:0-5 TRAINING AND PROFESSIONAL DEVELOPMENT SUPPORT AROUND THE WORLD: PERSPECTIVES FROM A DC:0-5 DEVELOPER**

**Keren M.\***

*Tel Aviv University Medical School ~ Tel Aviv ~ Israel*

This brief panel presentation will provide information from one of the diagnostic classification revision task force members around consideration in designing DC:0-5 of diverse international users and training needs. Presenter will share insights into how DC:0-5 was intended for a world wide audience and ways in which training issues were identified in the process of the development of DC:0-5.

IS3.3

### **DC:0-5 TRAINING AND PROFESSIONAL DEVELOPMENT SUPPORT AROUND THE WORLD: PERSPECTIVES FROM EXPERT FACULTY TRAINERS**

**Kowalenko N.\***

*ZERO TO THREE ~ St. Leonards ~ Australia*

This brief panel presentation will share perspectives of International DC:0-5 Expert Faculty who have provided training outside of the U.S. to share effective ways of adapting training content to international audiences and participants response to the new diagnostic classification system.

Presenter will share information about planning training, adaptation made to accommodate language and learning differences and reflections on process and response of audience.

IS3.4

**DC:0-5 TRAINING AND PROFESSIONAL DEVELOPMENT SUPPORT AROUND THE WORLD:  
DEVELOPING CURRICULA WITH INTERNATIONAL AUDIENCES IN MIND**

**Mulrooney K.\***

*ZERO TO THREE ~ Washington, D.C. ~ United States of America*

This portion of the panel presentation will feature information about the efforts to create training curricula that could be shared with fidelity but also embrace diversity around cultural, linguistic and teaching/learning strategies around the world. Panelist will present efforts to standardize curriculum and develop supports for learning in different international communities. Efforts to recruit and select international faculty will be outlined and an overview of the number and types of DC:0-5 Training efforts for clinicians around the world will be shared. This panelist will serve as facilitator of the symposium and the panel will include three other panelists: a member of the Diagnostic Classification Revision Task force (developers of DC:0-5), a DC:0-5 Expert Faculty Member, and a clinician who participated in one of the DC:0-5 Trainings outside of the U.S.

IS3.5

**DC:0-5 TRAINING AND PROFESSIONAL DEVELOPMENT SUPPORT AROUND THE WORLD:  
REFLECTIONS FROM CLINICIAN PARTICIPANTS**

**Visnapuu--Bernardt P.\***

*Marienthal Clinic ~ Tallin ~ Estonia*

This brief presentation aims to share responses from clinicians who participated in the official DC:0-5 Training outside of the US in terms of the training itself and the application of new knowledge to clinical practice. Presenter will share insights from training experience in Estonia regarding the content and application of information about the use of DC:0-5 in clinical practice.

## 17:15-18:45 General Sessions

### Symposium S03 - TOWARDS A PSYCHODYNAMIC ASSESSMENT IN INFANCY AND EARLY CHILDHOOD: THE PDM-2

**Speranza A.M.\*<sup>[1]</sup>, Seligman S.<sup>[2]</sup>**

<sup>[1]</sup>*Department of Dynamic and Clinical Psychology, Sapienza University of Rome ~ Rome ~ Italy,*

<sup>[2]</sup>*University of California ~ San Francisco ~ United States of America*

Diagnosis represents one of the most difficult issues for clinicians working with infants and children: relational and developmental features of child psychopathology, as well as specificity of symptomatology, interweave with the complexity of individual and family functioning, requiring a consideration of specific characteristics for this age group. The aim of this Symposium is to present the Psychodynamic Diagnostic Manual (PDM-2, 2017) and its special section dedicated to mental health disorders in infancy and early childhood (IEC 0-3). The first presentation will present the general structure of the PDM-2 and its approach to diagnosis in order to better contextualize the following presentations on the PDM-2 section on Infancy and Early Childhood (IEC) and its clinical application for case formulations. The second presentation will illustrate the assessment process in infancy and early childhood proposing a diagnostic system grounded on a biopsychosocial developmental model. IEC offers a comprehensive and multi-axial approach to the diagnosis, which integrates the description of symptom patterns with their underlying dynamics and the individual's subjective experience, relational patterns, and emotional functioning, highlighting how the different axes contribute to the primary diagnosis, how to deal with the diagnostic process and the formulation of the clinical case in infancy. The third presentation will propose a prospective clinical case of a child who showed early lack of appetite/interest in food and malnutrition and who was followed-up during school age. The child's assessment at age 2 is based on the IEC multiaxial approach that includes the child's emotional development, the regulatory-sensory processing capacities and the quality of parent-infant relationship. The follow-up assessment at age 10 includes the child's mental functioning profile, the emerging personality and the subjective experience of symptom patterns. The fourth presentation will illustrate, according to the PDM-2 assessment, two clinical cases with early mood dysregulation due to acute trauma as well as some indicators for a progressive development due to crises interventions and professional support of early parenthood in the frame of a first arrival institution for traumatized refugees. A clinician, expert in developmental psychopathology, will discuss these presentations.

#### S03.2

### **THE PSYCHODYNAMIC DIAGNOSTIC MANUAL (PDM-2): MAKING DIAGNOSIS MEANINGFUL**

**Lingiardi V.\***

*Department of Dynamic and Clinical Psychology, Sapienza University of Rome ~ Rome ~ Italy*

For decades many clinicians have resisted thinking about their patients in terms of categorical diagnoses. In the current era, they find themselves having to choose between reluctantly "accepting" the DSM diagnostic labels, "denying" them, or developing alternatives more consistent with the dimensional, inferential, contextual, relational, and biopsychosocial diagnostic formulations characteristic of psychodynamic approaches. The purpose of this contribution is to present the general structure of the PDM-2 and its approach to diagnosis in order to better contextualize the following presentations on the PDM-2 section on Infancy and Early Childhood (IEC) and its clinical application for case formulations. The Psychodynamic Diagnostic Manual (PDM) reflects an effort to articulate a psychodynamically oriented diagnosis that bridges the gap between clinical complexity and the need for empirical and methodological validity. It provides an alternative

framework that attempts to “characterize an individual’s full range of functioning – the depth as well as the surface of emotional, cognitive and social patterns” in an effort to describe “what one is rather than what one has”. Moreover, it tries to promote integration between nomothetic understanding and idiographic knowledge, emphasizing individual variations as well as commonalities. The first edition of the PDM was published in 2006. The second edition (PDM-2), completely revised (over 90% new) and sponsored by a larger broader “Alliance of psychoanalytic organizations”, was published in 2017. Schematically, except when evaluating infants and preschoolers (assessed with a specific multi-axial system), clinicians are encouraged to assess the following in all patients (according to their ages: children, adolescents, adults, and elderly): Level of personality organization and prevalent personality styles or disorders (P Axes); Profile of mental functioning (M Axes); Symptom patterns and the patient’s subjective experience of them (S Axes). Explicitly oriented toward case formulation and treatment planning, PDM-2 offers practitioners an empirically based, clinically useful complement to DC:0-3R, DC:0-5, DSM and ICD categorical diagnoses.

S03.3

### **DIAGNOSIS IN INFANCY AND CHILDHOOD: TOWARDS A PSYCHODYNAMIC ASSESSMENT**

**Speranza A.M.\***

*Department of Dynamic and Clinical Psychology, Sapienza University of Rome ~ Rome ~ Italy*

Diagnosis during infancy and childhood represents one of the most difficult issues for clinicians: relational and developmental features of child psychopathology, as well as specificity of symptomatology, interweave with the complexity of individual and family functioning, requiring a consideration of specific characteristics for this age group. The aim of this work is to present the assessment process in infancy conducted on the basis of the Second Edition of Classification of Mental Health and Developmental Disorders in Infancy and Early Childhood (IEC 0-3) of the Psychodynamic Diagnostic Manual (PDM-2, 2017). The special section dedicated to mental health disorders in infancy and early childhood (IEC) proposes a diagnostic system grounded on a biopsychosocial developmental model. This section offers a comprehensive and multi-axial approach to the diagnosis, which integrates the description of symptom patterns with their underlying dynamics and the individual’s subjective experience, relational patterns, and emotional functioning. Furthermore, this section has been expanded with the introduction for each axis of clinician-friendly assessment scales whereby the clinician could formulate a clinical relevant profile of the infant or the child. Moreover, most relevant assessment tools for clinical use complete each axis. A Psychodiagnostic Chart that summarizes the outcome of the assessment process will be illustrated. The Chart includes: functional emotional developmental capacities (Axis II), regulatory-sensory processing capacity (Axis III), relational patterns and disorders (Axis IV), and other medical and neurological diagnoses (Axis V) as determinant components of a multi-axial diagnosis to infant disorders (Axis I). The IEC of the PDM-2 represents a great improvement in the diagnosis and treatment of mental disorder in infancy and provides significant advantages to the assessment from a psychodynamic perspective. Further example of the assessment process in infancy are needed since they show great utility for the clinicians.

S03.4

### **THE CHILD WHO RARELY SHOWS SIGNS OF HUNGER: A PROSPECTIVE CLINICAL CASE FROM EARLY CHILDHOOD TO SCHOOL AGE**

**Chatoor I.\*<sup>[1]</sup>, Lucarelli L.<sup>[2]</sup>**

<sup>[1]</sup>Children's National Medical Center, The George Washington University School of Medicine ~ Washington DC, USA ~ United States of America, <sup>[2]</sup>Department of Pedagogy, Psychology, Philosophy, University of Cagliari ~ Cagliari ~ Italy

Approximately 25 percent of otherwise normally developing young children experience eating problems. These may not only be disruptive to the child's physical and emotional development, they also may affect the whole family. Assessment of an infant's eating difficulties should begin with an extensive clinical interview with the caregivers to evaluate the infant's eating difficulties, the developmental, medical, and family history. This interview should be followed by direct observations of the child with the caregivers during feeding and play. Observations of play interactions enable the clinician to determine whether problematic feeding interactions reflect more fundamental problems in the infant-parent relationship. A prospective clinical case of a child who showed early lack of appetite/interest in food and malnutrition and who was followed-up during school age, will be discussed. The child's assessment at age 2 and later at age 10 will be based on the PDM-2 framework, and the treatment model of "facilitating internal regulation of eating" will be described. This treatment model of "facilitating internal regulation of eating" helped the parents establish regular mealtimes, refrain from distractions and from coaxing the child to eat, and set limits on inappropriate mealtime behaviours, which helped the child to become more aware of internal signals of hunger and fullness, to increase her food intake and gain weight. At follow-up, at 10 years of age, the child demonstrated no eating problems, good physical and emotional health. The follow-up assessment of feeding and eating disorders is based on a multi-axial approach that includes, for children ages 0-3, the child's emotional development and regulatory-sensory processing capacities and the quality of parent-infant relationship, and for children ages 4-11, a child's mental functioning profile, the emerging personality and the subjective experience of child symptom patterns. Attending to these interrelated components is pivotal in conceptualizing effective treatments.

S03.5

#### **MOOD DYSREGULATION AND TRAUMA**

**Leuzinger--Bohleber M., Lebigler--Vogel J.\***

*Sigmund-Freud Institut, Frankfurt ~ Frankfurt ~ Germany*

In the project STEP-BY-STEP supporting traumatized refugee families in a first arrival institution in Darmstadt we see many babies and small children suffering from trauma and early development of mood dysregulation. So called FIRST STEP groups try to offer support for traumatized mothers and their babies in order to prevent the chronification of early mood dysregulations due to acute trauma. Systematic documentation of observations made in the mother-baby-groups are compared with psychoanalytically gained insights in the crises interventions with the mothers or other members of the families. The development of the children will be subject to a long-term study. In this panel two case reports will illustrate early mood dysregulation due to acute trauma according to the PDM-2 assessment as well as some indicators for a progressive development due to crises interventions and professional support of early parenthood in the frame of a first arrival institution for traumatized refugees. Based on interdisciplinary and psychoanalytical knowledge of acute trauma and its transgenerational transmission STEP-BY-STEP was able to contribute to reduce mood dysregulations in babies of traumatized refugees.

#### **Symposium S06 - THE IMPORTANCE OF SENSITIVE CAREGIVERS IN AT-RISK FAMILIES AND OUT-OF-HOME PLACEMENTS ESPECIALLY ON THE SOCIO-EMOTIONAL DEVELOPMENT OF CHILDREN**

**Nowacki K.\*<sup>[1]</sup>, Soares I.<sup>[2]</sup>**

[1]University of Applied Sciences and Arts ~ Dortmund ~ Germany, [2]University of Minho ~ Braga ~ Portugal

Sensitive behaviour of main caregivers is important especially for the socio-emotional development of children. This becomes even more relevant in difficult family situations, in which the children are either still living with their highly stressed parents or even after having been placed in out-of-home care. In the study by Nowacki, Remiorz, and Mielke, a sample of German fathers, who grew up in out-of-home placements, showed lower sensitive behaviour compared to a community sample, with their children having lower attachment security scores measured with the Attachment Q-Set. The protective role of fathers with respect to attachment representations, oxytocin levels, and social support within the family system was explored in a subsample of fathers within a study of a birth cohort in Germany by Buchheim et al. Jacobsen et al. show in a group of Norwegian foster families an improvement of foster parents' sensitive behaviour after a year of placement, with an increase in positive affect of the foster children at three years of age. The study by Mesquita et al. of institutionalized pre-schoolers in Portugal shows an effect of lower child-caregiver quality on emotional processing, and consequently for the children's socio-emotional adjustment. The results contribute to the research of the importance of caregivers' sensitivity in general and in particular in extreme settings like at-risk families and out-of-home placement. Implications for prevention and treatment will be discussed.

S06.2

**PATERNAL SUPPORTIVE BEHAVIOUR OF FATHERS WHO GREW UP IN OUT-OF-HOME CARE: DIFFERENCES BETWEEN SELF-ASSESSED AND OBSERVED SUPPORTIVE BEHAVIOUR AND CORRELATIONS WITH CHILD'S ATTACHMENT**

**Nowacki K.\*, Mielke V., Remiorz S.**

*University of Applied Sciences and Arts ~ Dortmund ~ Germany*

Children who have to be placed in out-of home care often experienced difficult family situations with presumably less parental support. Becoming parents themselves it is interesting to look at their relationship towards their own children. Especially with fathers research is scarce, so this study examined a group of 126 men, who grew up in foster- or group-homes and a comparison sample of 37 fathers. 60% of the main sample still had regular contact with their children and in 43 cases a consent for observational studies was given. Supportive behaviour was measured with the Parental Behavior Inventory (Lovejoy et al., 1999) and with a rating of the instrumental support in a play situation (Matas et al., 1978). The attachment behaviour of the child was assessed with the Attachment Q-Set (Waters & Dean, 1985). The results showed that the fathers of the main sample described themselves as highly supportive with no difference to the comparison group. The observation of the father-child play showed in contrast significantly lower supportive behaviour in the main sample (mean 3.8; SD 1.4) compared to the comparison sample (mean 5.0; SD 1.1) ( $F(1, 69)=13.9$ ;  $p = .000^{**}$ ;  $R .40$ ) and no correlations with the self-assessment measure in the main sample. The children of the comparison sample showed a slightly higher secure attachment behaviour towards their fathers (mean .34; SD .23) than those of the main sample (mean .24; SD .25). The instrumental behaviour of the father explained 25% variance of the child's attachment behaviour (mean age of the child: 3.7; SD 2.6). As a result, fathers with difficult family histories showed lower supportive behaviour with their children having lower security attachment scores. On the other hand the fathers describe themselves as highly supportive which might be interpreted as a positive motivation, useful in interventions for these fathers.

S06.4

### **EFFECT OF CHILD-CAREGIVER INTERACTION QUALITY ON EMOTIONAL FACE PROCESSING OF INSTITUTIONALIZED PRESCHOOLERS**

**Mesquita A.\*<sup>[1]</sup>, Belsky J.<sup>[2]</sup>, Pinal D.<sup>[1]</sup>, Baptista J.<sup>[1]</sup>, Sampaio A.<sup>[1]</sup>, Soares I.<sup>[1]</sup>**

*<sup>[1]</sup>University of Minho ~ Braga ~ Portugal, <sup>[2]</sup>University of California ~ Davis ~ United States of America*

Institutionalization of children at risk remains an overused form of alternative care in Portugal, where around 8000 children and adolescents were still institutionalized in 2016. Indeed, such intervention continues to occur despite extensive evidence of adverse effects of institutionalization, namely at the neural developmental level. Nevertheless, there is considerable heterogeneity in child's response to this early adverse experience, some of which is accounted by the quality of the proximate caregiving relationship. To further illuminate such quality-of-care effects, we investigate links between child-caregiver interaction quality and children's neural activity in response to emotional faces. Specifically, we assessed neural activity of 68 institutionalized children (34% girls; mean age = 57 months 60% institutionalized > 12 months) using an Event-Related-Potential paradigm when children were shown caregiver faces posing different emotions (happy, neutral, angry). Caregiver sensitivity and cooperation was observationally assessed during a 15min interactive task. Results revealed that children cared by low responsive caregivers display longer latencies of N170 ( $F(1,65) = 4,954$ ;  $p = 0,030$ ) and P250 ( $F(1,65) = 5,499$ ;  $p = 0,022$ ) than children cared by high responsive caregivers. Additionally, an interaction between depicted emotional expression and caregiver responsiveness was also observed ( $F(2,130) = 3.109$ ;  $p = 0.048$ ), more specifically children who experienced less responsive care displayed longer P1 latency in response to angry faces than those who experienced high responsive care ( $p = 0.047$ ). These results will be discussed in light of the relevance of quality of relational care on developmental changes of face emotional processing, and consequently for child's socio-emotional adjustment.

S06.5

### **THE PROTECTIVE ROLE OF FATHERS IN A COHORT OF MOTHERS WITH CHILDHOOD MALTREATMENT- FIRST RESULTS FROM THE PROJECT "MY CHILDHOOD – YOUR CHILDHOOD"**

**Buchheim A.\*<sup>[1]</sup>, Doyen--Waldecker C.<sup>[2]</sup>, Krause S.<sup>[2]</sup>, Ramo L.<sup>[2]</sup>, Kindler H.<sup>[3]</sup>, Kolassa I.<sup>[4]</sup>, Fegert J.<sup>[5]</sup>, Ziegenhain U.<sup>[5]</sup>, Waller C.<sup>[2]</sup>, Gündel H.<sup>[2]</sup>**

*<sup>[1]</sup>Universität Innsbruck ~ Innsbruck ~ Austria, <sup>[2]</sup>Department of Psychosomatic Medicine and Psychotherapy, Ulm University ~ Ulm ~ Germany, <sup>[3]</sup>Dept. Families and Family Policies; German Youth Institute of Munich ~ Munich ~ Germany, <sup>[4]</sup>Clinical & Biological Psychology; Institute of Psychology & Education, University of Ulm ~ Ulm ~ Germany, <sup>[5]</sup>Dept. Child and Adolescent Psychiatry/Psychotherapy, University Hospital of Ulm ~ Ulm ~ Germany*

The interdisciplinary consortium "My childhood – your childhood" investigates in a birth cohort the developmental, psychological and biological consequences of maternal childhood maltreatment (CM) on the next generation with the aim to identify mechanisms of stress resilience on different levels. Due to a lack of longitudinal study approaches, this individual risk and resilience interplay during development is hardly explored. Especially for the father, protective parenting characteristics are not well understood. However recent studies show that higher oxytocin (OXT) levels facilitated paternal caregiving. Our aim was to investigate a subgroup of fathers from our cohort to analyze the protective role of the father with respect to attachment representations, OXT levels and social support within the family system. CM was assessed with the Childhood Trauma Questionnaire (CTQ). Paternal attachment representations were examined using the Adult Attachment Projective Picture System (AAP, George & West 2012). OXT levels in plasma were investigated before and after

the AAP interview. Social support was investigated using the Postpartum Social Support Questionnaire (PSSQ). Our preliminary results with a subgroup of n=26 fathers (funded by the KÖHLER-foundation) revealed a significant association between paternal CM and insecure attachment representations, as well as an attachment-sensitive plasma OXT release directly after the attachment task (AAP). Importantly, mothers of partners classified as insecure reported significantly lower social support in the partnership and lower wellbeing, independent of the fathers' degree of CM. These results are in line with other studies supporting the role of the attachment system and oxytocinergic system in parental caregiving. The potential of protective role of the father was shown by the influence of secure versus insecure attachment representations and its impact on the perceived maternal social support system.

## **Symposium S09 - RECOMMENDED HOME VISITOR COMPETENCIES: IDENTIFYING AND IMPLEMENTING EFFECTIVE PRACTICES**

**Peterson C.\***

*Iowa State University ~ Ames, Iowa ~ United States of America*

Home visiting is being used to serve families with young children, especially those facing risks, around the world. Home visiting is being embraced as an opportunity to address challenges faced by children and their families in this third millennium. Grounded by both theoretical and empirical support for the primacy of the parent-child relationship and scientific evidence that responsive and stimulating caregiving promotes optimal child development even in the face of risks, investments in home visiting programs are growing. Simultaneously, expectations are running high, and a variety of home visiting models are being developed to meet the needs of diverse families and communities.

Home visiting programs exist within different fields, and home visitors may be from many different disciplines (e.g., social work, public health, early child education and intervention, general family and community services). The unique characteristics of the position – working with both children and adults, following different service models, and practitioners trained in different disciplines – present unique challenges. First, competencies home visitors need to work effectively must be identified. Educational activities that will prepare home visitors appropriately, as well as ongoing training and support needed to sustain high quality practice need to be designed and implemented broadly. Administrative supports need to be arranged in ways that promote high-fidelity program implementation. Finally, collaborative efforts among home visitors, program administrators, funders, and researchers is needed to ensure continuous quality improvement efforts are in place and overall program effectiveness.

This symposium will articulate professional competencies for home visitors followed by reports from two studies that describe the effects of high-quality implementation of home visiting services. Following this, an ongoing effort to enhance home visiting quality using a community of practice approach will be presented. Participants will be invited to share similarities and differences among efforts to provide high-quality home visiting services across countries.

S09.2

**IDENTIFYING AND USING HOME VISITOR COMPETENCIES TO PREPARE AN EFFECTIVE WORKFORCE**  
**Vallotton C.\*<sup>[1]</sup>, Peterson C.<sup>[2]</sup>, Roggman L.<sup>[3]</sup>, Chazan Cohen R.<sup>[4]</sup>, Hughes--Belding K.<sup>[2]</sup>, Ispa J.<sup>[5]</sup>, Decker K.<sup>[6]</sup>, Cook G.<sup>[7]</sup>**

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*University ~ Bozeman, Montana ~ United States of America, [7]California State University, Stanislaus ~ Turlock, California ~ United States of America*

Home visitors play a unique role in the lives of children and families, often with little specific preparation. Home visitors, often working within community-based programs implementing a specific model, are charged with providing individualized services to families of young children in their homes. Many programs are expected not only to increase children's school readiness, but also address maternal and newborn health, prevent child injuries and maltreatment, reduce crime and domestic violence, increase family economic self-sufficiency, and improve coordination with community resources (Health Resources and Services Administration, 2014). To meet these expectations, we must have highly skilled home visitors; yet recruitment and preparation vary considerably across program models. Due to their unique role, home visitors must develop a specialized set of competencies—specific knowledge, skills, and dispositions. These competencies share some characteristics of those needed by professionals who will educate young children in classrooms, but contain additional elements to reflect expectations that home visitors will partner with family members to enhance the parents' efforts to nurture their children's development, health, and learning. We present a comprehensive framework of competencies for home visitors and identify empirically supported knowledge, skills, and dispositions needed for effectively working with parents who (1) are adult learners from diverse backgrounds, (2) face their own unique challenges, and (3) have strong emotions about their children and their parenting. First, we describe a set of cross-role competencies for the infant/toddler workforce (CUPID, 2017), then describe the specialized competencies needed for home visitors (Roggman et al., 2016). Next, we explore several uses of these competencies in training programs for preparing an effective home visiting workforce. Finally, we consider facilitators and barriers to using a competencies-based framework in preparation of this workforce.

S09.3

### **IMPLEMENTATION AND IMPACT OF A HOME VISITING PROGRAM IN RURAL COMMUNITIES IN THE UNITED STATES**

**Chazan Cohen R.\*<sup>[1]</sup>, Raikes H.<sup>[2]</sup>, Jones Harden B.<sup>[3]</sup>**

*<sup>[1]</sup>University of Massachusetts Boston ~ Boston, Massachusetts ~ United States of America, <sup>[2]</sup>University of Nebraska-Lincoln ~ Lincoln, Nebraska ~ United States of America, <sup>[3]</sup>University of Maryland ~ College Park, Maryland ~ United States of America*

Researchers have called for increased attention to the experiences of the rural poor, including the early childhood services they receive (Raikes, 2016). Although many rural, low-income families receive home visiting services, few studies have examined the impact of these programs on participant families and children from rural contexts. This session will summarize the implementation and impact of a literacy-based home visiting program with rural, low income families with children under three years of age. This 3-year home-based intervention employed community members to deliver a manualized curriculum to parents that was focused on increasing child language and pre-literacy skills.

1. To inform the audience of the needs of rural poor families and children.
2. To describe one home-based intervention that was designed to promote the language and literacy of young children in rural families.
3. To summarize the impacts of this intervention on participant children and families.

The evaluation utilized a quasi-experimental design. We collected program implementation data (home visitor characteristics, alliance with families), child outcomes (language development, behavior problems) and family outcome data (parenting, home environment).

Preliminary regression analyses controlling for site and family demographic variables show impacts on children's vocabulary as assessed by the Peabody Picture Vocabulary Test and on parent support for development as assessed by the HOME observation scale. Additional analyses will explore the role of program implementation in program impacts. In this paper we present preliminary evaluation findings of an innovative home visiting program located in rural communities that focuses on children's literacy and language development. Early findings show that the program has impacts on children's vocabulary and parents' support for children's learning.

S09.4

#### **DATA-DRIVEN IMPLEMENTATION SUPPORTS FOR EARLY HEAD START HOME VISITORS' USE OF A RESEARCH-BASED CURRICULUM**

**Manz P.\***

*Lehigh University ~ Bethlehem, Pennsylvania ~ United States of America*

The Little Talks for Early Head Start (EHS) home-based services curriculum includes culturally-responsive modules to facilitate English- and Spanish-speaking parents' acquisition of varying narrative and book sharing styles (Manz et al., 2016). The Little Talks. Home visitors individualize the sequence and pace of Little Talks according to parents' skills and preferences. The effective use of Little Talks requires home visitors' knowledge of the curriculum (procedural fidelity) and interpersonal skill, including clinical decision-making and collaboration with parents (process fidelity). Implementation supports entail ongoing Little Talks fidelity monitoring, which becomes the basis for performance feedback that is routinely provided by program supervisors.

1) Does Little Talks fidelity improve over time?

2) Are Little Talks fidelity and home visit quality significantly associated across time?

A randomized control trial was conducted, involving 17 EHS home visitors and 109 children. Little Talks home visitors self-reported fidelity on a web-based survey. They video recorded child development interactions with parents for 30 minutes, four times during the 10-month Little Talks implementation, which were coded using the Home Visitor Rating Scale – A+ (HOVRS-A+; Roggman et al., 2012). Preliminary results indicate that home visitors immediately achieved and sustained nearly perfect procedural fidelity. Process fidelity was low at the start, but reached acceptable levels. Initially, positive associations between HOVRS-A+ practice scales and the use of the Little Talks curriculum were noted. However, as process fidelity increased, home visitors decreased parent-focused practices and increased direct child engagement. The effectiveness of the implementation supports for home visitors was demonstrated. The finding that home visitors' increased clinical competence was inversely related to their practice and engagement of parents and possibly associated with an increase in direct child engagement was unexpected. This research suggests the importance of dually focusing implementation supports on research-based curricula and skills for facilitating parent-child interactions.

S09.5

#### **USING A COMMUNITY OF PRACTICE TO IMPROVE HOME VISITING OUTCOMES**

**Cook G.\*<sup>[1]</sup>, Innocenti M.<sup>[2]</sup>, Roggman L.<sup>[2]</sup>**

*<sup>[1]</sup>California State University, Stanislaus ~ Turlock, California ~ United States of America, <sup>[2]</sup>Utah State University ~ Logan, Utah ~ United States of America*

The specific behaviors by which home visiting (HV) practitioners effectively engage with families to increase developmental support in home environments are not well documented. Research from various disciplines identifies specific HV practices that predict stronger parenting and child outcomes (Kelly et al., 2008; Roggman et al., 2017; Woods et al., 2004; Zajicek-Farber, 2010).

Professional development approaches are needed to promote these aspects of home visiting (Dunst & Trivette, 2009). We present a framework for using a measure of HV quality with groups of home visiting practitioners to improve home visiting process. The Home Visit Rating Scales (HOVRS; Roggman et al., 2017) provide a reliable observational measure of HV that predicts key outcomes of parenting and child development. Multi-stage path models show significant indirect effects from HV practices through family engagement to parenting and through parenting to child development. HOVRS assesses HV practices and family engagement. We developed Communities of Practice (CoP) as an approach to professional development, structured around the HOVRS, in collaboration with HV practitioner groups. Reports from participants are positive about HOVRS as a framework for professional development, peer sharing, reflective supervision, and coaching. Although each CoP varies in implementation, the primary feature is HV practitioners reflecting on their actual practices. HVs submitted video clips of their home visits in relation to jointly selected HOVRS items. Facilitators identified videos that demonstrated the practice being used well. At each meeting, the practice was discussed and selected videos were shown. Participants described only what they liked about the video (nothing negative) and shared ideas about implementing the practices. Qualitative and quantitative data (HOVRS scores) demonstrate effectiveness of the CoP approach. A CoP approach can be an effective resource for professional development of home visiting professionals. Information on the HOVRS (items, scoring, research) and its use in a CoP (set-up, facilitation, practices, outcomes) can inform professional development in home visiting.

#### **Symposium S12 - HOW EARLY EXPERIENCES GET UNDER THE SKIN: EPIGENETIC MECHANISMS LINKING ADVERSITY EXPOSURE, MATERNAL CARE AND INFANTS' DEVELOPMENTAL OUTCOMES**

**Provenzi L.\***

*Scientific Institute IRCCS Eugenio Medea ~ Bosisio Parini ~ Italy*

Epigenetics refer to biochemical changes occurring at the chromatin structure of the DNA, without the occurrence of structural modifications of the DNA sequence itself. Epigenetic processes (e.g., DNA methylation and telomere regulation) are highly susceptible to environmental conditions and stimulations and they contribute to the emergent phenotype of a given individual. Consistently, the application of epigenetics to the study of developmental changes in human infants is revealing the potential pathways through which early adversities are embedded into the developing biology and behavior of infants. In the present symposium, three international contributions provide different perspectives on the role that epigenetic processes play in interaction with early environment in shaping the developmental trajectories of healthy and at-risk infants. The diversity of the contributions provides a multi-faceted view of developmental behavioral epigenetics at different ages, in association with different timing of early adversities, looking at diverse epigenetic mechanisms, and assessing the protective role of maternal care. Prof. Tim Oberlander presents evidence from a study on the epigenetic correlates of prenatal serotonin reuptake inhibitor antidepressant exposure and cortisol response in 6-year-old children of depressed mothers. Dr. Elisabeth Conradt reports on the role of maternal sensitivity in association with DNA methylation of the glucocorticoid receptor gene (i.e., NR3C1) in affecting infants' salivary cortisol reactivity to social stress (i.e., Still-Face paradigm). Dr. Livio Provenzi reports on telomere length regulation in very preterm (VPT) infants across the hospitalization in the Neonatal Intensive Care Unit (NICU) both in comparison with a full-term control group and in association with NICU-related stress exposure. Taken together these contributions provide insightful screenshots from a rapid developing landscape of innovative research in the developmental psychobiology and neuroscience fields. This area of investigation holds potentials of being beneficial for both scientific knowledge growth and clinical practice.

## S12.2

### **PRENATAL SEROTONIN REUPTAKE INHIBITOR ANTIDEPRESSANT EXPOSURE, SLC6A4 GENETIC VARIATIONS AND NEONATAL METHYLATION STATUS ALTERS STRESS CHALLENGE CORTISOL RESPONSE IN 6 YR OLD CHILDREN OF DEPRESSED MOTHERS**

**Chau C., Hookenson K., Brain U., Glier M., Grunau R., Devlin A., Weinberg J., Oberlander T.\***

*University of British Columbia ~ Vancouver ~ Canada*

Prenatal exposure to maternal depressed mood and serotonin reuptake inhibitor (pSRI) antidepressants associate with altered hypothalamic-pituitary-adrenal (HPA) programming. As serotonin is key to HPA programming, use of SSRI antidepressants during pregnancy raises questions about whether maternal mood and pSRI exposure alters the HPA stress response in childhood.

We investigated the relationships of pSRI, SLC6A4 genotypes (5HTTLPR/rs25531) and promoter methylation status (10 CpG sites) with maternal depressed mood. Mother-child dyads were followed from 2nd trimester to 6 years. Infants were genotyped (LA/LA = 46; LG/S = 61). Both prenatal and current mother's depressed mood symptoms were obtained. Children salivary cortisol levels in response to the MacArthur Assessment Battery were collected at baseline, 20 min (reactivity) post-test, and 40 min (recovery) post-test. pSRI-exposed children had significantly lower reactivity and recovery cortisol levels. Greater prenatal maternal depressed symptoms were associated with higher cortisol levels. Greater maternal depressed mood at 6 years was associated with greater reactivity cortisol among pSRI children, whereas lower recovery cortisol was observed in non-pSRI children. In non-pSRI children with LA/LA (S) genotype, greater current maternal depressed mood predicted blunted cortisol reactivity, compared with non-pSRI children with the LG/S SLC6A4 genotype. Increased maternal depressed mood at 6 years and higher neonatal SLC6A4 methylation status was associated with blunted cortisol levels at all 3 time points, but only in non-pSRI children. In pSRI children neither SLC6A4 variants nor neonatal methylation status were associated with reactivity cortisol levels. These findings suggest a possible association between altered early 5HT signaling and programming of the HPA axis at school age. Importantly, current maternal mood blunted stress responses in non-pSRI, but not pSRI children, suggesting that prenatal SSRI exposure may play a role in attenuating the impact of current maternal depressed mood on child HPA stress responses.

## S12.3

### **MATERNAL RESPONSIVENESS IS RELATED TO DNA METHYLATION OF NR3C1 AND CORTISOL REACTIVITY IN INFANCY**

**Conradt E.\*<sup>[1]</sup>, Lagasse L.<sup>[2]</sup>, Hawes K.<sup>[2]</sup>, Tronick E.<sup>[3]</sup>, Marsit C.<sup>[4]</sup>, Lester B.<sup>[2]</sup>**

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Caregivers play a vital role in supporting infant bio-behavioral development. Decades of behavioral research with humans suggests that caregivers who are more responsive and sensitive have infants who exhibit less stress reactivity and more social and emotional competence (Conradt & Ablow, 2010). However, the precise mechanisms by which caregiver sensitivity is related to infant stress reactivity is unclear. Exciting new research, based in part by the work of Michael Meaney and colleagues, in the area of epigenetics suggests that DNA methylation of the glucocorticoid receptor gene (NR3c1) may be related to caregiver behavior, and in turn, infant stress reactivity. We examined whether maternal sensitivity assessed in three different contexts was associated with DNA methylation of NR3c1 and in turn infant cortisol reactivity in response to a social stressor, the still-face paradigm. Participants were 111 infants (58 female) recruited from birth at the local

hospital. Maternal responsiveness, a component of maternal sensitivity, was assessed prior to and following the still-face episode of the still-face paradigm, and during a free play. Cortisol reactivity was assessed prior to and 40 minutes following the still-face episode. Higher levels of maternal responsiveness during a free play were associated with less DNA methylation of NR3c1 CpG sites 5-13,  $r(100) = -.23$ ,  $p = .02$  and greater levels of maternal responsiveness prior to and following the still-face episode was related to less DNA methylation of NR3c1 CpG sites 1-4,  $r(93) = -.22$ ,  $p = .03$  and  $r(92) = -.23$ ,  $p = .03$ , respectively. Only higher levels of maternal responsiveness during a free play was associated with less cortisol reactivity,  $r(107) = -.24$ ,  $p = .01$ . We will describe our results in relation to the behavioral epigenetic literature in early childhood and discuss how these results partially replicate Michael Meaney's studies with rodents.

#### S12.4

##### **STRESS EXPOSURE ASSOCIATES WITH TELOMERE LENGTH EROSION IN VERY PRETERM INFANTS**

**Provenzi L.\*<sup>[1]</sup>, Giorda R.<sup>[1]</sup>, Fumagalli M.<sup>[2]</sup>, Pozzoli U.<sup>[1]</sup>, Morandi F.<sup>[3]</sup>, Scotto Di Minico G.<sup>[1]</sup>, Mosca F.<sup>[2]</sup>, Borgatti R.<sup>[1]</sup>, Montirosso R.<sup>[1]</sup>**

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Very preterm (VPT) infants (gestational age < 32 weeks) require long-lasting hospitalization in the Neonatal Intensive Care Unit (NICU), even in absence of severe morbidities. During NICU stay, life-saving interventions occur and include invasive and painful skin-breaking procedures (NICU-related stress), which constitute a major early adverse experience for VPT infants. Telomeres are repeat-sequence at the end of chromosomes, which shorten with age and are highly susceptible to life adversities: the exposure to early adverse experiences is associated with shorter telomere length (TL). Nonetheless, previous research did not assess longitudinally the association between NICU-related stress and TL in VPT infants. We aimed at assessing (1) telomere length at birth in VPT and FT infants; (2) the association between NICU-related stress and TL in VPT infants from birth to discharge. In the present study, leukocyte TL was assessed by means of q-PCR from cord blood at birth in 46 VPT infants and in a group of 31 full-term (FT) infants, as well as from peripheral blood at NICU discharge in VPTs only. NICU-related stress was measured as the number of skin-breaking procedures occurring throughout the NICU stay. A significant difference emerged for TL between VPT infants and FT counterparts at birth. TL decreased from birth to discharge in VPT infants, although the change was not significant in the group as a whole. The amount of NICU-related stress emerged as the primary predictor of TL erosion in VPT infants, even controlling for neonatal and clinical confounders. Furthermore, VPT infants exposed to high NICU-related stress exhibited a marked and significant decrease in TL, whereas VPT exposed to low NICU-related stress exhibited a non-significant increase. The present study confirms previous evidence of longer telomeres in VPT infants at birth compared to FT controls. Moreover, NICU-related stress emerged as a key regulator of TL erosion from birth to discharge in VPT infants. Future research is warranted to further explore TL erosion in VPT infants and the factors associated with individual differences in NICU-related stress susceptibility at the epigenetic level.

#### **Brief Oral Presentations BOP11 - PSICOTHERAPHY & OBSERVATION WITH THE INFANT**

##### BOP11.1

##### **WORKING WITH TRAUMA IN UNDER-FIVES:THE VOICE OF THE INFANT**

**Sanzone L.<sup>[1]</sup>, Cosgrave N.<sup>[2]</sup>, Lamb C.\*<sup>[3]</sup>**

*[1]Social work practitioner ~ London ~ United Kingdom, [2]Consultant Clinical Psychologist ~ London ~ United Kingdom, [3]Consultant Child & Adolescent Psychiatrist | South London & Maudsley NHS Foundation Trust ~ London ~ United Kingdom*

LIFT targets the mental health needs of under 5 year olds in care proceedings, providing assessments and interventions for infants, parents and foster carers under the jurisdiction of the Family Court. The presentation shares our experiences of doing LIFT story book work with the under-fives. We outline the importance of supporting very young children to put words to their experiences, even during times of transition, and illustrate how we do this. The story book work takes place before intervention proper starts, and therefore bridges the gap between assessment ending and treatment beginning. The work provides the child with a coherent narrative of their traumatic experiences. We aim to create a shared language for the child, by co-constructing the book with adults around the infant, including birth parents, foster carers and social workers. We name the child's experiences and invite them to share their feelings about their experiences. The Story Book emphasises the child's current safety, promotes the idea that it is okay to talk about their difficult experiences, and supports resilience building. The format for the books is accessible and child centred. We support the infant's sense of identity by sharing anecdotes and pictures of them that we have gained from our work with birth parents and foster carers. When completed the child can take the books away and share with trusted adults. We will show examples of story books, discuss the process of co-production, and the impact of the work on the infants and their parents and carers.

BOP11.2

#### **SYSTEMATIC REVIEW OF THE EFFECTIVENESS OF DYADIC INTERVENTIONS IN IMPROVING REFLECTIVE FUNCTIONING IN PARENTS OF INFANTS AND TODDLERS**

**Barlow J.\*<sup>[1]</sup>, Sleed M.<sup>[2]</sup>, Midgley N.<sup>[3]</sup>**

*[1]University of Oxford ~ Oxford ~ United Kingdom, [2]Anna-Freud Centre ~ London ~ United Kingdom, [3]~ London ~ United Kingdom*

The impact of mentalisation-based therapy (MBT) on the mentalising abilities of borderline patients, has led to the development of mentalisation based interventions for a range of clinical populations, alongside its measurement as an outcome, including parent-infant/toddler dyads who are experiencing significant problems. The aim of this review was to synthesise data from studies evaluating the effectiveness of dyadic interventions targeting parents of infant and toddlers, in improving parental reflective functioning. A systematic review and meta-analysis was conducted in which key electronic databases were searched up to March 2017. Eligible studies were identified and data extracted. Data was synthesized using meta-analysis and expressed as both effect sizes and odds ratios. Five studies were identified providing a total of 399 participants. The results of three meta-analyses found a moderate but non-significant trend toward improvement in parental reflective functioning (ES: -0.55 (95% CI -1.18, 0.07; n=5 studies) with evidence of significant heterogeneity. There was no evidence of an impact on maternal sensitivity (ES: 0.12; 95% CI: -1.39, 1.62; n=3 studies) or on secure (OR: 1.24; 95% CI: 0.73, 2.12) or disorganized (RR: 1.03; 95% CI: 0.84, 1.27) attachment, with high levels of heterogeneity. There was insufficient data to conduct subgroup analysis (i.e. to compare the effectiveness of MBT with non MBT interventions). The findings of this review suggest that while dyadic interventions may improve parental reflective functioning, this does not necessarily translate into improvements in sensitivity and/or infant attachment security. Further work is needed to address the reasons for this.

BOP11.3

### **WHY INFANT OBSERVATION?**

**Re J.\***

*Monash University ~ Melbourne ~ Australia*

Shining a light on different ways of seeing the infant - in the eyes of the observer, the other group participants, the seminar leader, and the mother- what can we learn? Can we clarify something about the elusive experience of infant observation? Can we find a way to seeing the infant in the mother and the infant in the observer? Will it shed light on what clinicians learn and what is thought to be valued? If so will it elucidate why infant observation? And why do families participate? What if anything do the infants and their families gain? These questions will guide an exploration of infant observation in clinical training.

BOP11.4

### **SITTING WITH SUFFERING: APPLYING PSYCHOANALYTIC INFANT OBSERVATION PRINCIPLES TO CLINICAL WORK WITH INFANT CHILD PROTECTION CLIENTS**

**Milburn N.\***

*Private practice ~ Melbourne ~ Australia*

Infant observation has a tradition dating back to the late 1940's in London. The aims of infant observation as defined by Esther Bick in the 1960's were both broad and deep. They were to hone observation skills and to think carefully about what is seen and not seen, as well as what is experienced by all parties including the observer, and to integrate this information to understand the experience of the baby. Through this process trainees could also learn directly about projection, projective identification, transference and countertransference (Thompson-Salo, 2014). This practice of observation that comes from a stance of curiosity, openness and passivity in action within very active attention on the baby offers much to the clinician in their efforts to understand the subjective experience of the baby. When applied to working with infant clients of child protective services the work can be very challenging but very rewarding. The experience of infant observation in this realm of practice will be explored, including feelings of the observer and when and why the observer is pulled out of the frame. These themes will be explored through two cases, one of a four-month-old who had suffered multiple fractures and the other of a seven-month-old who was extremely avoidant.

BOP11.5

### **DEVELOPING INFANT MENTAL HEALTH SERVICES IN UKRAINE: FROM THE TAVISTOCK MODEL OF INFANT OBSERVATION TO THE ANNA FREUD CENTER TRAINING IN THE PARENT INFANT PSYCHOTHERAPY**

**Baradon T.<sup>[1]</sup>, Pushkarova T.\*<sup>[2]</sup>**

*<sup>[1]</sup>The Anna Freud National Centre for Children and Families (AFNCCF) ~ London ~ United Kingdom,*

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Due to the fruitful cooperation with the WAIMH since 2006, a pilot project with a group of Ukrainian mental health clinicians in Kiev was established by Louise Emanuel and Rebecca Bergese from Tavistock in 2013. This project fruitfully continued in the present with a second group of 11 Observers, succeeded to find infants for the Observation. In a meantime the group of graduates of that project, together with other colleagues, has started a new training project in Parent Infant Psychotherapy (PIP) following the Specialist Professional Development of The Anna Freud National Centre for Children and Families (AFNCCF). The pioneer role of a specialist, whose goal is to engage

parents with infants into the PIP, is always a challenge. Such a situation of a real great need, but which is denied by parents and environment, requires an optimal combination of an open-minded attention, sincere interest in Parents' and Infants' real needs and difficulties and well attuned, tactful therapeutic interventions, based on the deep understanding of the early emotional experiences of infants and the dynamics and difficulties of parenting. The most important step is the building of a trustful relationship and discovering a fertile field for the development of each particular case. It extends their capacity to contain, to think and to facilitate subtle processes of psychic growth and increment of attachment and parents-infant love. Alongside their clinical work participants study the literature relevant for infantile development, attachment, parent-infant relations and psychoanalytic psychotherapy. This project has a specific importance for the development of a modern system of early prevention of the Infant Mental Health services, especially now when Ukraine is on the first place in the rate of mental illnesses in Europe. It is supposed that a positive impact of this course can be one of the models and resources for thinking about the needs of families, which face a high risk for infant mental health disturbances.

BOP11.6

### **INFANT RESILIENCE: SHARED PLEASURE INTERACTIONS**

**Lachman A.\*<sup>[1]</sup>, Niehaus D.<sup>[1]</sup>, Puura K.<sup>[2]</sup>**

*<sup>[1]</sup>Stellenbosch University ~ Cape Town ~ South Africa, <sup>[2]</sup>Tampere University Finland ~ Tampere ~ Finland*

Infants instinctively strive for social interaction. The extent to which early child-caregiver attachment mediates developmental trajectories is of particular relevance in infants born to mothers with mental health problems, as they are at risk of later psychopathology and poor functioning in a range of developmental domains. The high level of positive arousal that infants construct with their parents, reached only during shared moments, accelerates the maturation of the infant's relational skills and provides essential environmental inputs for the development of self-regulation and social connectedness. Shared pleasure (SP) moments in parent-infant interaction is defined as " the parent and the child sharing positive affect in synchrony. This study aims to search for the presence of SP moments between mothers and their infants in an at risk and vulnerable population - with and without mental illness. Being able to recognize and screen potentially for early resilience is crucial to contributing towards awareness and promotion of maternal and infant mental health in an attempt to decrease exposure of the infant to early adversity. Mothers that attend a Maternal Mental health clinic in Cape Town South Africa, as part of a longitudinal maternal and infant mental health study, will be assessed for SP moments in their interactions with their babies, and the potential relationship this has with infant social and developmental outcomes for eg infant withdrawal (measured by the ADBB). Preliminary pilot data results will be presented from initial ratings of SP moments and their correlations with infant withdrawal. South African women possess a unique manner of expressing and communicating within different linguistic groups which will influence their non-verbal communication as measured by the SP paradigms and will contribute to a wider application of this technique. Assessing parent-child interaction this early offers an opportunity to identify at risk children for maladaptive development as early as possible

BOP11.7

### **ETHICAL ASPECTS OF PSYCHIATRIC DIAGNOSIS IN INFANCY**

**Lim I.\***

*University of Western Australia ~ Perth ~ Australia*

Infancy is a period of rapid social and emotional development that occurs in the context of a caregiving relationship. Diagnosis of mental health disorders in infancy challenges developmental and relational perspectives on infancy by adopting a model of psychopathology better suited to adult psychiatry. The publication of diagnostic classification manuals such as DC:0-5™ serves to legitimate psychiatric diagnosis in infancy by offering an account of infant psychopathology. However, there are serious ethical implications to expanding the boundaries of psychopathology and diagnosing infants with mental health disorders, which require consideration by academicians and clinicians alike. This paper aims to provide an ethical analysis of psychiatric diagnosis in infancy. This paper will consider the potential harms to individual infants wrought by psychiatric diagnosis, and explore the consequences of developing notions of infant psychopathology at a sociocultural level. At an individual level, psychiatric diagnosis can harm infants by a) paradoxically locating relational difficulties in the infant, b) problematising, magnifying and generalising transient challenging behaviours, and c) leaving infants with labels that remain with them for life. At a broader level, psychiatric diagnosis in infancy a) narrows the range of 'normal' behaviours and experiences, b) contributes to a pathologising discourse around common developmental and relational difficulties, c) brings caregiving behaviour and early relationships under the jurisdiction of medical authority. Clinicians and academicians should attend to the ethical aspects of diagnosing infants and very young children and proceed with caution.

BOP11.8

**PERSPECTIVES ON NATURE AND NURTURE IN AN INFANT CASE: ASSESSMENT, PLANNING TREATMENT AND EVALUATION BEFORE AND AFTER INFANT PARENT RELATIONAL PSYCHOTHERAPY USING THE DIAGNOSTIC PROCESS DC0-3R COMPARING WITH THE DC:0-5.**

**Malmquist Saracino A.\***

*Child and Adolescent Psychiatry, Infant and Toddler Team ~ Stockholm ~ Sweden*

The aim of the presentation is to use a multiproblematic case history to:

- describe a psychotherapeutic groupbased, integrated relationship treatment for infants and their parents, used at an Infant/Toddler Team within the Child and Adolescent Psychiatry (BUP) in Stockholm, Sweden.
- investigate the difference between using the DC:0-3R and DC:0-5 when diagnosing the same infant family case before and after relationship treatment

Different ports of entry are used to help babies with severe disturbances within their attachment context emphasizing affectregulation, attachment and mentalization in a transgenerational perspective. The Relationship Treatment Model used at the clinic comprises group sessions for the infant and parent dyad, individual infant-parent sessions, family sessions with the triad, monthly evaluation sessions with the family and collaboration meetings with Adult Psychiatry and/or Social Authorities as needed. Video based interaction methods are used both with the dyad and the triad. In all sessions except in the individual there are two therapists and the co-therapist relationship as a psychotherapeutic instrument is utilized. Intake, treatment process, ending phase and outcome will be described. The assessment procedure is based on the Diagnostic Classification System DC:0-3R as stipulated in guidelines developed by BUP Stockholm. As BUP has decided to implement the revised DC0-5 it is important to investigate, compare and reflect on differences and impact on the treatment process as a whole comparing how the case was previously diagnosed with DC:0-3R and now with DC0-5. The presentation is illustrated with images and video vignettes.

## **Symposium S20 - IMPLEMENTATION OF ATTACHMENT AND BIOBEHAVIORAL CATCH-UP: THE “ABC’S” OF RELATIONAL CHANGE IN COMPLICATED CONTEXTS**

**Hoye J.\***

*University of Delaware ~ Newark ~ United States of America*

Attachment and Biobehavioral Catch-up (ABC) is a 10 session manualized intervention aimed towards enhancing parenting behaviors that promote secure and organized attachments. Specifically, parents who receive ABC are encouraged to follow their child’s lead with delight, nurture their child, and avoid frightening behaviors. ABC is designed for high risk families, including birth parents and children involved in child welfare, foster parents, and adoptive parents of children who were reared in institutional care. Among high-risk children, ABC is associated with increased rates of secure and organized attachments, improved executive functioning, and regulation of the hypothalamic-pituitary-adrenal axis when compared to a control intervention. Further, research found that parents who received ABC displayed more sensitive parenting than parents who received a control intervention. Moreover, these differences were sustained to 3 years after receiving ABC, a relatively brief intervention. Changes in parenting behavior are also found when ABC is disseminated within community sites. ABC is currently disseminated in 15 states and 5 countries. ABC is primarily implemented with families receiving services through involvement in the child welfare system. The goal of this symposium is to provide three unique clinical cases from the child welfare system to highlight unique case characteristics that impacted the delivery of ABC and varied outcomes of service provision. Such factors include cultural considerations, family constellations, and reasons for referral.

S20.2

### **ATTACHMENT AND BIOBEHAVIORAL CATCH-UP WITH A TEEN MOTHER**

**Bailey L.\***

*Tulane University ~ New Orleans ~ United States of America*

ABC was implemented in clinic to improve parent-child interactions between a sixteen year-old foster child and her 6 month-old son. After running away from foster care, with her baby, this mother was separated from him, and placed into a group home. Assessment revealed that the baby had difficulty engaging with the mother, avoided making direct eye contact with her, was distressed throughout the interactional procedure (e.g., excessive drooling and spitting-up), and was not soothed by re-engagement with her, following a brief separation. During weekly visitation the mother was highly intrusive with the baby, smothering him with hugs and kisses, despite his potent cues of discomfort. The mother demonstrated a willingness to learn to more effectively recognize and respond to her son's cues for nurturance, support, and connection, and to work toward engaging in more synchronous interactions with him. The concept of noticing her baby’s cues and recognizing his need for “space” resonated with her, as she recalled her own childhood experiences of adult caregivers failing to sensitively respond to her cues for disengagement. Over the course of intervention, the mother began to take great joy and delight in her interactions with her baby, which translated into warmer and more positive interactions between the two of them. Though ABC provided a foundation for improved interactions between this young mother and her baby, she continued to struggle with consistently recognizing the baby’s instrumental needs and “big picture” issues that would impact her ability to safely reunify with him.

S20.3

### **ATTACHMENT AND BIOBEHAVIORAL CATCH-UP WITH GRANDPARENTS**

**Middleton M.\***

*Tulane University ~ New Orleans ~ United States of America*

ABC was implemented in home to improve caregiver-child interactions between a 28-month-old boy and his maternal grandparents. The child entered foster care as a result of issues related to the biological mother's diagnosis of Schizophrenia and refusal of treatment, resulting in unsafe situations involving the children. As such, child and his older brother were placed in foster care with their maternal grandparents. Assessment with child and grandparents revealed that the grandparents had several strengths, including their commitment to the child, but they struggled with understanding how to meet his unique needs in a sensitive manner. The grandparents completed the sessions together in the home, each working target behaviors that they uniquely struggled with, including providing nurturance to the child (grandmother) and refraining from the use of frightening behaviors with the child (grandfather). The grandparents made notable progress on recognizing how their parenting styles impacted the child and they genuinely worked to modify their respective behaviors in order appropriately to meet his needs and allow him to develop a sense of psychological safety. Though the grandparents had difficulty with grasping more abstract parenting concepts, they responded to "in-the-moment" comments, which altered concrete parenting behaviors (e.g., following the lead). Grandparents gained a perspective essential for parenting this maltreated child and were granted full custody of the child following the completion of the intervention.

S20.4

#### **ATTACHMENT AND BIOBEHAVIORAL CATCH UP WITH BIRTH PARENTS**

**Hoye J.<sup>[1]</sup>, Bailey L.\*<sup>[2]</sup>, Middleton M.<sup>[2]</sup>**

<sup>[1]</sup>*University of Delaware ~ Newark ~ United States of America*, <sup>[2]</sup>*Tulane University ~ New Orleans ~ United States of America*

ABC was delivered to a mother and her 20 month old daughter in the home. The family entered child welfare due to domestic violence perpetrated by the mother against the father, which the child witnessed. After the mother completed anger management classes, the family began ABC. Prior to beginning the intervention, the mother was engaged with the child and desired interaction. However, she was often intrusive and overwhelming to the child. The mother reported that her own early childhood was marked by maternal incarceration and a lack of nurturance from her father, leading the mother to be unsure of how to nurture and play with her own child. Her intrusive behavior often resulted in her child disengaging from the interaction and seeking nurturance and play elsewhere. Through ABC, the mother grew to follow her child's lead and read cues for appropriate nurturance. Over the course of treatment, the child appeared more regulated and sought out her mother for interaction, both in times of distress and for joy. Intervention sessions were completed primarily with the mother and infant. However, the father joined sessions when possible. The couple reported using the ABC targets to encourage each other outside of session.

#### **Video Presentation V06 - THE HUG: UNDERSTANDING AND CARING FOR YOUR NEWBORN**

**Tedder J.\***

*HUG Your Baby ~ Durham ~ United States of America*

Many families today have important concerns about a baby's eating, sleeping and crying. This 20-minute, award-winning, parent education video is evidence-based. It uses innovative, family-friendly language and inclusive, multicultural video to help expectant and new parents understand and care for their newborn. Three newborn "Zones" are described: the "Resting Zone" (sleeping states), the "Ready Zone" (ready to eat or play), and the "Rebooting Zone" (fussing/crying). The video also describes how a baby sends out an "SOS" (Sign of Over-Stimulation). "SOSs" include body

changes in color, movement or breathing, and three behavioral “SOSs”: “Spacing Out,” “Switching Off,” and “Shutting Down.” Parents discover the difference between Active/Light and Still/Deep Sleep in order to help them (and their baby) get a better night’s sleep. Seeing babies respond to a variety of calming techniques is helpful once parents learn about newborns’ normal crying patterns. Observing a baby look at her father or turn to her mother’s voice demonstrates how newborns are ready and able to engage with the world. And because today’s families appreciate the value of breastfeeding, parents are eager to notice a baby’s early feeding cues. Translated into five languages, this video has been well received in twenty countries. It concludes by reminding parents that “your baby will be your greatest teacher.” Enhancing parents’ ability to read their babies’ body language empowers them to provide the competent, confident, loving care that newborns need.

### **Symposium S28 - RESPONDING TO THE CHILD'S SIGNALS OF DISTRESS: MOTHERS' NEURAL PROCESSING OF CHILDREN'S EMOTIONAL EXPRESSIONS AND ITS RELATION TO INDIVIDUAL PARENTING CHARACTERISTICS AND INTERVENTION EFFORTS**

**Kungl M.\*, Spangler G.**

*Institute of Psychology, Friedrich-Alexander University ~ Erlangen-Nuremberg ~ Germany*

Maternal sensitivity is a key construct in parenting quality and plays an important role in children’s social-emotional development. It comprises the recognition and prompt response to even subtle cues indicating the child’s emotional state. During the transition to parenthood the maternal brain gets re-organized and tuned to be especially sensitive to such cues adapting to new requirements. This symposium integrates recent neurophysiological findings on mothers’ processing of children’s emotional facial expressions at different stages of motherhood and with regard to intervention efforts. Paper 1 will present longitudinal data covering the early transition to motherhood. Here, Rutherford et al. show that during this developmental shift the maternal brain undergoes significant changes regarding the processing of infant emotions. Furthermore, they reveal associations with mothers’ anxiety at these time points. In paper 2, Kungl et al. investigate individual differences in early perceptual as well as inhibitory control processes in response to children’s facial expressions. Including early risk factors they analyze how postpartum and current dysphoric mood as well as current anxiety affect these neural markers using a GoNoGo task. Focusing on mothers of school aged children the paper also provides an expanded view on the effects of parenting characteristics. Finally, in paper 3, Kolijn et al. emphasize the practical relevance of the research included here. They present new data of a study that investigates how a video-feedback parenting intervention (VIPPSD) affect the neural processing of children’s emotional faces. Thereby, they provide new insights in mediating mechanisms underlying effects of parenting interventions that are not accessible when solely focusing on behavioral measures. Finally, Gottfried Spangler will discuss how these findings relate to current knowledge on the development of the mother-child dyad taking an attachment perspective.

S28.2

### **NEURAL RESPONSES TO INFANT AND ADULT FACES DURING PREGNANCY AND THE POSTPARTUM PERIOD**

**Rutherford H.\*, Crowley M.J., Linda C M.**

*Yale Child Study Center ~ New Haven, CT ~ United States of America*

Emerging research indicates pregnancy and the postpartum period shape the maternal brain to support adaptive caregiving. This neural re-organization may increase the salience of infant cues. In studies investigating the neural processing of infant faces in pregnant and postpartum women, research has focused on the late positive potential (LPP), an attention-mediated event-related

potential (ERP) response that is enhanced when mothers view distressed versus neutral infant faces. This infant face LPP is also associated with maternal anxiety. In the third trimester of pregnancy and at 3-months postpartum we examined (i) the LPP elicited by infant and adult faces; and (ii) maternal anxiety. In this study 38 mothers (M= 43.83 yrs, SD=4.93) of school-aged children viewed emotional faces of children (Radbound Faces Database; Langner et al., 2010), embedded in a Go-NoGo task. Neutral expressions were Go-Trials (button press) and angry, fearful, happy and sad facial expressions represented the NoGo (see Hare et al., 2005). EEG data was recorded from 64 channels. Anxiety symptomatology was assessed using the STAI (Spielberger, 1985). First, distressed faces elicited a larger LPP than neutral faces ( $p=.001$ ). Second, the LPP did not change from pregnancy to postpartum,  $F<1$ . Third, prenatal anxiety was more strongly associated with the prenatal LPP ( $r=.47$ ,  $p=.01$ ), than the postpartum LPP ( $r=.34$ ,  $p=.06$ ), response to face stimuli. In contrast, postpartum anxiety was more strongly associated with the postpartum LPP ( $r=.57$ ,  $p<.01$ ), than the prenatal LPP ( $r=.22$ ,  $p=.28$ ), response to face stimuli. The LPP elicited by infant (and adult) faces was comparable from the third trimester of pregnancy to 3-months postpartum. These findings suggest that maternal brain responses at the level of the attention-driven LPP for infant stimuli remains stable from the third trimester to 3-months postpartum, but does vary as a function of anxiety at each of these time-points. Future work should consider other time-points during pregnancy and the postpartum period to measure anxiety and the neural responses elicited by infant stimuli, and whether such measures have implications for caregiving.

S28.3

#### **EFFECTS OF PERIPARTAL DEPRESSIVE MOOD AND CURRENT AFFECTIVE SYMPTOMS ON MATERNAL PROCESSING OF CHILDREN'S EMOTIONAL EXPRESSIONS**

**Kungl M.\*<sup>[1]</sup>, Heinisch C.<sup>[1]</sup>, Fasching P.<sup>[2]</sup>, Beckmann Matthias W.<sup>[2]</sup>, Lenz B.<sup>[2]</sup>, Kornhuber J.<sup>[2]</sup>, Spangler G.<sup>[1]</sup>**

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A mother's ability to perceive even subtle cues that indicate her child's emotional state and her prompt responses are key components of maternal sensitivity. This ability, however, may be compromised by individual characteristics. Indeed, a number of studies have found affective symptoms to alter maternal brain responses to infant emotional faces. The current study investigates mothers' neural markers of recognition and inhibition in response to children's emotional expressions. It further asks how these processes are affected by early peripartum as well as current depression and anxiety symptoms. **Materials and Methods:** 38 mothers of school-aged children were presented with children's emotional faces embedded in a Go-NoGo task. Neutral expressions were Go-Trials (button press) and angry, fearful, happy and sad facial expressions represented the NoGo (see Hare et al., 2005). Simultaneously, EEG data was recorded from 64 channels. Depressive symptoms and anxiety were assessed using validated self-report forms. Also, longitudinal data on peripartum depressive symptoms were retrieved. Effects in the four emotional NoGo-conditions varied depending on the component. Regarding the EPN, which is related to enhanced emotional processing, we found a main effect of peripartum depression while current depressive symptoms interacted with the type of emotion. The N2, associated with inhibitory response processes, was increased for children's fearful expressions. Again, current depressive symptomatology interacted with the type of emotion. Mothers' current anxiety level solely affected the N170's response to fearful children's faces. First, our results on an increased mental effort to inhibit responses to fearful children's faces fit well with the assumption of evolutionary anchored mechanisms in the maternal brain serving a protective function. Second, we found early peripartum depression to be predictive of altered maternal processing of children's emotional expression.

However, only current depressive symptoms and anxiety clearly interacted with the type of emotion.

S28.4

#### **EFFECTS OF THE VIDEO-FEEDBACK INTERVENTION TO PROMOTE POSITIVE PARENTING ON N170 AMPLITUDES IN RESPONSE TO CHILDREN'S FACIAL EMOTIONS**

**Kolijn L.\*, Huffmeijer R., Van Den Bulk B., Van Ijzendoorn M., Bakermans--Kranenburg M.**

*Leiden University ~ Leiden ~ The Netherlands*

The Video-feedback Intervention to Promote Positive parenting and Sensitive Discipline (VIPP-SD) has proven to be effective in enhancing parenting sensitivity and discipline, but the mediating processes explaining its effectiveness are currently unknown. An important aspect of parenting is the recognition and accurate interpretation of children's emotions, for example facial expressions (Bernard, Simons & Doziers, 2015). The current study investigates mothers' N170 responses to children's facial expressions as potential neurophysiological marker of maternal sensitivity. In a randomized controlled trial we examined VIPP-SD effects on N170 amplitudes in response to children's happy and angry facial expressions. The sample includes a total of 65 mothers who came to Leiden University's Child and Family lab for two identical experimental sessions separated by approximately four months during which a random 50% of the mothers received 5 sessions of the VIPP-SD. Mothers' electroencephalographic (EEG) activity in response to 144 photographs (i.e. 48 happy, 48 angry and 48 neutral faces) was acquired during both pre- and post-intervention sessions. The N170 time window (i.e. 132 – 162 ms) and electrode sites (i.e. 58, 64, 65, 90, 95 and 96) were defined a priori based on a previous study (Huffmeijer et al., 2017). Currently, all participants completed the pretest, and posttest data is available for 52 mothers. The remaining posttests will be completed within the next few weeks. Participants contributed M=133 artifact-free trials in the pretest and M=132 in the posttest. For the pretest, mean amplitude of the left N170 were -.11 (SD=2.6), -.25 (SD=2.8) and .04 (SD=2.69) for Happy, Angry and Neutral respectively. For the right N170, these numbers were -.27 (SD=3.27), -.37 (SD=3.26) and .12 (SD =3.15). Insight in these neurocognitive processes may reveal some of the mediating mechanisms underlying the effects on parenting behavior of successful parenting intervention programs.

#### **Symposium S29 - WHERE DOES THE YOUNG CHILD FIT IN TREATMENT FOR SUBSTANCE USE DISORDERS (SUDS)? EXAMINING APPROACHES TO THE INTEGRATION OF INFANT MENTAL HEALTH AND TREATMENT FOR SUDS**

**Bosk E.\*<sup>[1]</sup>, Pajulo M.<sup>[2]</sup>**

*<sup>[1]</sup>Rutgers University, School of Social Work ~ New Brunswick ~ United States of America, <sup>[2]</sup>University of Turku ~ Turku ~ Finland*

With more young families affected by parents' substance misuse, programs are challenged to provide accessible, effective dyadic treatment to caregivers and their young children. Even though an estimated 70% of women who enter treatment for substance use disorders (SUDs) are parents (Brady & Ashley, 2005), traditional programs typically view these clients as individuals rather than as caregivers located in a family system. Within treatment for SUDs opportunities to include issues related to parenting, the client's family and/or child are seen as adjunctive or, more commonly, do not occur at all. At the same time, decades of research in Infant Mental Health (IMH) identifies the cumulative negative impacts of caregiver SUDs on young children's emotional, cognitive and physical development. This research highlights the need for sustained intervention within family systems to interrupt the relational and developmental consequences of problematic parenting behaviors that often occur both as a result of, and alongside, caregiver substance misuse. The goal

of this symposium is to examine different perspectives and debates related to best practices for the integration of treatment for SUDs and IMH. The first presentation examines paradigmatic differences in SUD treatment models and IMH interventions, focusing on fundamental challenges to integration that must be overcome in implementation. The second presentation examines staff experiences implementing an IMH intervention for parents and young children within a substance use treatment program. The final presentation presents an innovative model for concurrently treating both caregiver SUDs and the parent/child dyad, reviewing outcome data from 1400 families. After the presentations, an international expert on the integration of infant mental health within treatment for SUDs will serve as a discussant. This symposium brings together scholars with diverse perspectives from different countries to explore best practices related to intervening with caregivers' who have SUDs and their young children.

S29.2

**STAFF PERSPECTIVES ON ENHANCING TREATMENT PROGRAMS FOR SUBSTANCE USE DISORDERS WITH AN INFANT MENTAL HEALTH INTERVENTION**

**Paris R.\*, Mittal G.**

*Boston University, School of Social Work ~ Boston ~ United States of America*

Young children of parents with substance use disorders (SUDs) are at increased risk of developmental challenges, child maltreatment and strained attachment relationships. Yet, SUD treatment programs have only begun to include infant mental health (IMH) interventions to address these challenges (Pajulo, et al, 2006; Hanson, et al., 2015). Furthermore, no studies have evaluated the process of enhancing substance use treatment with IMH programs by assessing staff reactions to the new interventions. This study aimed to explore the perspectives of staff from SUD treatment programs regarding the addition of an IMH intervention for mothers and young children. Seventy one semi-structured interviews were conducted with varied staff from 8 residential and 3 methadone treatment programs where an IMH intervention, BRIGHT, was implemented with mothers and young children. Questions addressed perceived experiences of BRIGHT with regard to implementation and impact. Interviews were transcribed verbatim and analyzed by 4 coders, in consultation with the study PI, using qualitative data management software. Overall, findings suggested that offering an IMH intervention within SUD treatment was feasible although residential programs described greater investment given their commitment to serving women with young children. Facilitators included relationship building with staff and buy-in at the organizational and interpersonal levels. Most program staff described the IMH clinicians as knowledgeable about young children, trauma, and attachment and many appreciated that a parenting focus could be important in the recovery process. A few staff acknowledged that an IMH approach was different from how they previously thought about parenting and SUD treatment. The main perceived barrier to implementation was limited organizational capacity. Study findings highlight the viability of merging practices and philosophies in order to bring an IMH intervention into residential and methadone SUD treatment programs. They can be utilized to shape developing programs for maximum efficacy and sustainability.

S29.3

**FAMILY-BASED RECOVERY: AN INNOVATIVE MODEL FOR INTEGRATING SUBSTANCE USE DISORDER TREATMENT WITH INFANT MENTAL HEALTH**

**Hanson K.\***

*Yale School of Medicine, Yale Child Study Center ~ New Haven ~ United States of America*

Substance Use Disorder (SUD) treatment programs generally offer limited opportunities to focus on parenting, and traditional parenting programs rarely address the special needs of parents with SUDs. Programs that offer the opportunity for mothers to receive treatment while residing with their children often place caps on age and family size, leaving women with difficult and limited treatment choices. Family-Based Recovery (FBR) is an innovative treatment program designed to address these programmatic limitations. A three-member team provides in-home individual psychotherapy, SUD treatment, dyadic attachment-focused therapy, group therapy and case management services. This study aims to evaluate the effectiveness of the FBR model, to understand whether it is a promising practice for integrating SUD treatment with Infant Mental Health Treatment. In order to evaluate program effectiveness, at intake, 90-day intervals, and discharge, the Edinburgh Depression Scale, the Parenting Stress Index Short Form, Postpartum Bonding Questionnaire, were administered to clients. Additionally, observed urine toxicology screens and breathalyzer tests were conducted at each session. Pre-post paired scores and the Cohen's d statistic for single samples were analyzed. Toxicology screen data was aggregated into weeks since program entry and calculated based upon the percentage of clients that tested positive on urine screens at given weeks of FBR participation, as well as a positive breathalyzer test for alcohol use. FBR teams have treated 1,408 families since 2007. Analysis of pre-post paired scores of parents suggest reductions in depression, parental stress, and enhanced parental bonding with their children. Toxicology results indicate an aggregate reduction in positive screens from the first week of the program (51%) to week 20 (14%). At discharge, 81% of children were living with their parent. FBR represents a promising practice for the effective integration of treatment of SUD and IMH.

S29.4

**ONE OF THESE THINGS IS NOT LIKE THE OTHER: HOW SUBSTANCE ABUSE TREATMENT AND INFANT MENTAL HEALTH TREATMENTS ARE OFTEN AT ODDS AND WHAT PROGRAMS ARE DOING TO INTEGRATE THEM EMILY BOSK, RUTGERS UNIVERSITY**

**Bosk E.\***

*Rutgers University, School of Social Work ~ New Brunswick ~ United States of America*

Intervening with caregivers who have a Substance Use Disorder (SUD) and their children poses unique challenges. Substance use treatment emerges from an addiction and individualized approach, while Infant Mental Health (IMH) emerges from a relational perspective. Paradigmatic differences between these approaches means that simply adding IMH to treatment for SUD is likely to be ineffective. Despite the recognized importance of addressing parenting and the impact of caregiver SUD on young children, little is known about how best to integrate substance use treatment to include an Infant Mental Health (IMH perspective). This conceptual study aims to better understand how integration of infant mental health interventions is occurring in practice within treatment programs for substance use disorders. Specifically, this research identifies common points of tension and common elements across distinct approaches to integrated intervention. This qualitative study reviewed the models for 4 integrated substance abuse and infant mental health treatment programs. Thematic data analysis was conducted, drawing on principles of grounded theory and situational analysis, using QSR NVivo software. Within the field of IMH, there is no consensus on the best practices for the integration of treatment for SUD with IMH. Specifically, disagreement centers around when and how to include the child(ren) in treatment. One program provides sequential treatment so that a parent must be in recovery prior to the start of dyadic work. Two others emphasize the importance of beginning dyadic and family work immediately to address the intersection of parenting, the caregivers SUD, and the child's experience. Another program co-locates mothers in treatment with their children but provides limited adjunctive IMH work. All programs sought to build emotion identification and regulation and reflective capacities in

caregivers. The translation and implementation of Infant Mental Health principles into treatment for SUD remains varied. The field must move towards better defined practice paradigms for effective integrated intervention.

## Poster Workshop PW02 - INFANT MENTAL HEALTH SERVICES AND POLICY

PW02.1

### **A BETTER START: EMBEDDING INFANT MENTAL HEALTH IN LOCAL COMMUNITIES**

**Gibbs S.\*<sup>[1]</sup>, Haynes A.<sup>[2]</sup>**

*<sup>[1]</sup>Big Lottery Fund ~ London ~ United Kingdom, <sup>[2]</sup> National Children's Bureau ~ London ~ United Kingdom*

A Better Start is a £215 million National Lottery funded programme set up by the Big Lottery Fund in England. It aims to improve three key early childhood development outcomes: i) social and emotional development; ii) diet and nutrition; and iii) communication and language. Between 2015 and 2025, A Better Start is supporting five partnerships working in some of the most deprived communities in England. The programme offers an unprecedented opportunity to transform outcomes for very young children (aged 0 to 4) by putting parents and communities at the heart of designing services and support. The five partnerships bring together local families, charity and voluntary sector organisations, health services and early years professional. Together, they are developing a range of services, systems and approaches which are tailored to the local area, draw on research based models and involve parents in their design. The ambition is that the evidence and learning which emerges from A Better Start will help to influence and shape the commissioning and design of early years services nationally. Aim: To share examples and early learning from the design and implementation of community-based services, systems and approaches in parental and infant mental health from across the A Better Start areas. Description: This Symposium will describe approaches which aim to improve support in communities at the levels of: whole systems redesign; enhanced universal midwifery and health visiting services; establishment of a community-based parent-infant relationship service; and an explanatory communications campaign to share understanding of early social, emotional and language development with parents and the community themselves. Conclusion: A Better Start is an important strategic investment into the design of early years services, the learning from which will be of importance to a wide range of researchers, practitioners and policy makers.

PW02.2

### **MUMS, DADS AND BABIES IN MIND: RETHINKING THE SYSTEM**

**Law C.\*<sup>[1]</sup>, Hogg S.<sup>[2]</sup>, Rosan C.<sup>[2]</sup>, Gregoire A.<sup>[2]</sup>**

*<sup>[1]</sup>Blackpool Centre for Early Child Development ~ Blackpool ~ United Kingdom, <sup>[2]</sup>Mental Health Foundation ~ London ~ United Kingdom*

Around half of perinatal mental health problems remain untreated or undetected. This can have a devastating impact on mums, dads and our very youngest children. In Blackpool, England, the National Lottery funded 'A Better Start' partnership has been working with the Maternal Mental Health Alliance's 'Mums & Babies in Mind' team to transform the local system of support, introducing evidence based interventions and practices and working to embed enhanced local pathways. Blackpool Centre for Early Child Development has worked with local community members, practitioners and international experts to developed a portfolio of evidence and science-based interventions which aim to promote attuned parent-child interactions, whilst also addressing the impacts of high levels of parental trauma, mental ill-health, substance misuse, domestic abuse

and social isolation. This work has been enhanced by the use of a service and system mapping tool developed by the Mums & Babies in Mind team from the Maternal Mental Health Alliance. As well as providing an overview of the portfolio of interventions, we describe the wider systems change required to ensure organisations work together in an integrated way ensuring families get the right help at the right time. We will share the impact of the partnership with the MMHA and explore how the system is being redesigned in response to identified gaps. We will share our work in relation to parental and infant mental health and our approach to increasing self-efficacy in the community. We are embedding interventions and pathways in a system that is trauma-informed and equipped to support our families in a non-stigmatising way. Increasing service integration and provision of a tailored portfolio of relationship-based interventions, provides a hugely exciting opportunity for change. By looking through a trauma-informed lens, we can truly begin to address the range of issues that present themselves as a result of early trauma and adversity and ultimately break the intergenerational transmission of mental ill-health.

PW02.3

### **ENHANCING THE CONTRIBUTION OF UNIVERSAL SERVICES IN IDENTIFYING AND SUPPORTING PARENTAL AND INFANT MENTAL HEALTH**

**Howes J.\***

*Better Start Bradford ~ Bradford ~ United Kingdom*

Funded by the National Lottery, Better Start Bradford has been working in partnership with maternity and health visiting services to develop improved support for parental mental health and parent-infant relationships. This presentation will describe two significant innovations in local universal services aiming to improve: i) support for parental mental health antenatally through a 'personalised midwifery' service; and ii) identification of problems in parent-infant relationships through the introduction of a universal measure of parental sensitivity. The design and implementation of a pilot of personalised midwifery in Better Start Bradford responds to the community's request for a model of service delivery that allows them to build empowering relationships with their midwife. It uses a model of enhanced visiting to offer the benefits of continuity of relationships. It is anticipated that this will lead to a more positive experience of pregnancy and birth resulting in improved maternal mental health and lower incidence of post-natal depression. Highlighted by NICE as a gap in current guidance, there are currently no recommended tools to assess attachment or parental sensitivity in children under one. The Maternal Postnatal Attachment Scale developed by John Condon and Carolyn Corkindale has been used widely in research to consider maternal sensitivity and is being piloted as an enhancement in the health visiting service in Better Start Bradford. This will be the first time it has been used as a part of routine primary care. Universal identification of mother-infant dyads where children are at risk of poor attachment will allow services to offer more appropriate and timely support. These innovations in universal services offer the potential to improve early identification and support for families who may otherwise suffer in silence. Findings will be of significance to other communities interested in enhancing primary prevention strategies in the perinatal period.

PW02.4

### **PAIRS –A MULTI-TIERED CLINICAL SERVICE TO SUPPORT PARENT-INFANT RELATIONSHIPS**

**Higgins S.\***

*Lambeth Early Action Partnership (LEAP) ~ London ~ United Kingdom*

Funded by the National Lottery, PAIRS (Parent and Infant Relationship Service) is a new community based, Tier 2/3 clinical service offering therapeutic input to support infant mental health and parent-

infant relationships in the early years. PAIRS is one of 20 new services developed by LEAP ([www.leaplambeth.org.uk](http://www.leaplambeth.org.uk)), one of 5 national sites to receive a share of £215 million in funding for 10 years as part of the A Better Start programme. PAIRS is the lead service within the LEAP programme to support social and emotional development and one of the few but increasing number of clinical services in the UK to provide therapeutic input for parents and infants within the NHS. The team is composed of child and adolescent psychotherapists and clinical psychologists, operating within an “escalator model” of support to prevent future psychological difficulties and promote resilience within the early years population. Based on a treatment model of parent infant psychotherapy, interventions include: individual parent-infant therapeutic work; a group intervention based on a model of “Watch, Wait and Wonder”; awareness training for the local workforce; supervision and consultation. Parents identified in pregnancy and/or up to the child’s 4th birthday are eligible for the service. Challenges to delivery include: cross agency collaboration; early years professionals’ developing understanding of infant mental health; engaging “hard to reach” families; linking perinatal, adult and child mental health services as well as service development during austerity. Team interventions inform an assessment and evaluation framework to match the clinical population of expectant parents and children up to 48 months of age. A logic model to evaluate the clinical offer of the team informs understanding on how best to determine effectiveness of therapeutic interventions for infants and young children in a busy clinical setting. The PAIRS service provides important implementation learning for researchers, practitioners and managers interested in establishing similar community-based services in the future

PW02.5

### **REFRAMING EARLY SOCIAL AND EMOTIONAL AND LANGUAGE DEVELOPMENT: A CROSS-AREA EXPLANATORY CAMPAIGN**

**Haynes A.<sup>[1]</sup>, Gibbs S.\*<sup>[2]</sup>**

*<sup>[1]</sup>National Children's Bureau ~ London ~ United Kingdom, <sup>[2]</sup>Big Lottery Fund ~ London ~ United Kingdom*

Five A Better Start local partnerships are developing an ambitious public health communications campaign aimed at parents or primary caregivers of children in pregnancy and the early years. The campaign is being delivered in five economically deprived communities in England. The campaign aims to achieve behaviour change by deepening caregivers’ understanding of early social, emotional and language development (ESEL) and by illustrating ways to put the concepts into practice. This innovative campaign is informed by an analysis of expert consensus on ESEL and builds on empirically tested metaphors or ‘frames’ developed by the FrameWorks Institute and National Scientific Council on the Developing Child. The campaign’s ‘explanatory’ approach to communications, emphasising the ‘why’ as well as the ‘what’ of effective caregiving, has been found to have robust effects on a range of outcomes. A creative communications agency is working in collaboration with the A Better Start partnerships and FrameWorks Institute to design and deliver a campaign based on core messages and locally tailored to fit the contexts and populations of each area. The impact of the campaign will be robustly and independently evaluated using a multimethod approach, including measures of relevance, exposure, outtakes and a range of outcomes including attitudes, knowledge, caregiving behaviours and child development outcomes. This campaign presents a unique opportunity to contribute to the evidence base on the use of public health campaigns to improve infant mental health, and the learning will have significance for international audiences across a range of disciplines.

PW02.6

**PROMOTING ENGAGEMENT AND DEVELOPING MEANINGFUL WORKING RELATIONSHIPS WITH VULNERABLE FIRST TIME PARENTS USING RELATIONSHIP BASED PRACTICE**

**Phillips M.\*, Dinwoody A.**

*NSPCC ~ Glasgow ~ United Kingdom*

This clinical presentation addresses barriers to engagement in high risk families based on a case discussion.

We work for NSPCC Scotland in The Minding the Baby (MTB) programme in Glasgow. MTB is an intensive community based home visiting programme for vulnerable first time pregnant women and their families, developed by Arietta Slade and Lois Sadler from Yale University. The main aim of MTB is to develop maternal reflective functioning, reducing the risk of childhood neglect. The case discussion concerns parents, both adolescents, who have each experienced multiple adverse childhood events. In the perinatal period, serious child protection, or, safeguarding concerns were identified relating to maternal mental health issues and difficulties in the maternal-infant relationship. Intervention was necessary to ensure the safety of mother and child. This risked the parents disengaging from the programme. However, we continued to work with the family, involving other agencies and the extended family. The outcome is that maternal health, parenting skills and the maternal infant relationship have all improved with an attuned, responsive & warm relationship evident between mum and baby. The infant is meeting all developmental milestones and thriving. We will outline the Minding the Baby programme, present our assessment of the safeguarding concerns and the interventions taken using the therapeutic process and strategies of the programme. We will discuss the inter-disciplinary and interagency approach, and the strategies to keep the family engaged and to promote the development of a meaningful working alliance. We will discuss the outcome for the parents and the child.

**Brief Oral Presentations BOP12 - EXPLORING THE NEWBORN BEHAVIOUR OBSERVATION (NBO)**

BOP12.1

**NURTURING NATURE AT ITS ORIGIN: USING THE NEWBORN BEHAVIORAL OBSERVATIONS (NBO) SYSTEM TO BUILD COMMUNITY AROUND LISTENING TO NEWBORNS AND PARENTS**

**Gold C.\*<sup>[1]</sup>, Elmendorf D.<sup>[1]</sup>, Jewson K.<sup>[1]</sup>, Harrison A.<sup>[2]</sup>, Kronborg H.<sup>[3]</sup>, Kristensen I.<sup>[3]</sup>, Vinter M.<sup>[4]</sup>**

*<sup>[1]</sup>Austen Riggs Center ~ Stockbridge ~ United States of America, <sup>[2]</sup>Harvard Medical School ~ Boston ~ United States of America, <sup>[3]</sup>Aarhus University ~ Aarhus ~ Denmark, <sup>[4]</sup>Thisted Municipality ~ Thisted ~ Denmark*

Introduction: This symposium will present examples from work in the United States, Denmark, India, China, El Salvador, Peru and Grenada using the Newborn Behavioral Observations (NBO) system as a preventive intervention that introduces an infant mental health frame of dynamic interaction between nature and nurture to an entire community. The NBO aims to build healthy parent-infant relationships from birth. It offers the opportunity to listen for the unique “nature” of the infant by providing a frame for observing behavior and appreciating the uniqueness of this emerging individual, while at the same time addressing the “nurture” environment, with its primary aim of promoting a sense of self-confidence and self-efficacy in caregivers. It aims to set the dynamic interaction between infant and caregiver on a healthy path from the start. Materials and Methods: Our work has two levels of intervention. By offering the NBO training to practitioners who interface with newborns and families we have opportunity to shift the focus of those who care for infants and families. At the same time we are making the NBO intervention itself available to an entire population. Results: Each group will present both quantitative and qualitative data from research

within their community. We will describe our process of engagement with community leaders and the community as a whole. We will focus on both the impact of our intervention on the practitioners using the NBO as well as the families experiencing the NBO. Conclusions: By developing a model that offers intervention to an entire population we normalize the challenges of the transition to parenthood and avoid the possible stigma of identifying individual families as being “at-risk.”

#### BOP12.2

### **WHAT ARE THE EFFECTS OF SUPPORTING EARLY PARENTING BY INCREASING PARENTS’ UNDERSTANDING OF THE INFANT? STUDY PROTOCOL INCLUDING PROCESS EVALUATION OF A CLUSTER-RANDOMISED COMMUNITY-BASED TRIAL OF THE NEWBORN BEHAVIORAL OBSERVATION (NBO)**

**Kristensen I.<sup>[1]</sup>, Kronborg H.\*<sup>[1]</sup>, Vinter M.<sup>[2]</sup>**

*<sup>[1]</sup>Aarhus University ~ Aarhus ~ Denmark, <sup>[2]</sup>Thisted Municipality ~ Thisted ~ Denmark*

Support to strengthen the early parent-infant relationship is recommended globally to ensure future health and development of the infant. Little is known about the universal approaches of health visitors to support this early relationship. Four participating municipalities with 108 employed health visitors and 2800 families are cluster-randomised into intervention or comparison groups. The 55 health visitors in the intervention group will receive NBO training with certification before project start, and will deliver the NBO during the project period; 53 health visitors in the comparison group will deliver standard care. Data on participating health visitors and parents will be collected in both groups. Process evaluation data collected among health visitors consist of a self-reported questionnaire on knowledge, intention, self-efficacy and observation skills in assessing four video-recorded mother-infant interactions at three time points. Effect evaluation data collected from mothers and fathers consist of a self-reported questionnaire on parental confidence, stress and mood, infant socio-emotional and cognitive development, breastfeeding duration, and parent-infant relationship at four time points, and video recordings of mother-infant interactions in a selected group of mothers at one time point. Data for effect and process evaluation will be analysed using intention-to-treat, descriptive and linear multiple regression analysis, respectively. Results based on the training, supervision and implementation of the NBO programme in a Danish community setting will be presented in scientific journals. The study will describe a process and effect evaluation of a universal home visiting programme that has not yet been evaluated in a community setting in Denmark.

#### BOP12.3

### **NURTURING NATURE AT ITS ORIGIN: USING THE NBO TO SUPPORT CAREGIVING RELATIONSHIPS IN LOW TO MEDIUM INCOME COUNTRIES (LMIC)**

**Harrison A.\***

*Harvard Medical Center ~ Boston ~ United States of America*

The presenter will describe an infant mental health training for caregivers of infants and parents that uses the NBO as a clinical demonstration. Videotapes from India, China, El Salvador, Peru, and Grenada are presented to illustrate the effectiveness of the NBO as a relationship-building tool in different cultures. Protect, Nurture, and Enjoy (PNE), an intensive mini-course in infant mental health consisting of lecture, videotape illustrations, demonstration of the NBO, and an accompanying study guide, has been taught in four LMICs. A study has begun to test the performance of PNE-trained Indian nurses in their interaction with mothers, compared with a control group that has not received PNE training. Assessments of effectiveness of the PNE are derived from questionnaires given to the mothers and nurses in both groups. A version of the Home

Visitor Index (Nugent, 2002), slightly modified to make it suitable for nursing students instead of home visitors, will be given to the mothers, and the Index of Practitioner Knowledge and Satisfaction (Nugent, 2003) will be given to both groups of nurses. Similar studies are being planned in Peru and Grenada. Videotapes examples of the NBO from El Salvador, China, Peru, India, and Grenada will be shown to demonstrate the effectiveness of this tool in engaging parents. Preliminary results of the quantitative study in India will be presented, and the role of the NBO in the PNE training will be discussed. The NBO is an effective tool to engage parent and newborn in a meaningful relationship. The transformative influence of such a tool is great during the newborn period. Videotape illustrations and quantitative results demonstrate these features of the NBO.

#### BOP12.4

### **CREATING A COMMUNITY HOLDING ENVIRONMENT FOR PARENTS AND INFANTS USING THE NEWBORN BEHAVIORAL OBSERVATIONS (NBO) SYSTEM**

**Gold C.\*, Elmendorf D., Jewson K.**

*The Austen Riggs Center ~ Stockbridge ~ United States of America*

The Discovering Your Baby Project uses the NBO to bring together an entire rural community around supporting parent-infant relationships. We introduced the NBO with a three-pronged approach: community-wide NBO training, integration of the NBO into routine care on the maternity unit of our local hospital, and research to examine the impact of our work. In April 2017 we brought together a range of practitioners who care for infants and parents, including maternity nurses, pediatricians, home visitors, Early Intervention specialists, lactation consultants, nurse and family practitioners for two days of NBO training. We have begun a pilot study of families delivering at that hospital using a range of measures including prenatal parental-fetal attachment, anticipated co-parenting, parenting stress, parent-infant bonding and maternal depression. We plan to initiate a longitudinal study. All babies born at our local hospital are now receiving the NBO as part of routine care. Initial training evaluations show significant educational and community-building impact. By May 2018, we expect to have 70-80 families enrolled and will have quantitative and qualitative descriptions of providers' sense of efficacy in their work with newborns and parents as well as on their referral practice. Preliminary findings in respect to the relationship between parent's experience of the NBO and levels of parenting stress, the co-parenting relationship, parent-infant bonding, and postpartum depression will be available. Our community represents a broad demographic with generations of local working families, wealthy families relocated from the city and a growing immigrant population. Families from the full range of socioeconomic backgrounds may have struggled with generations of mental illness, substance abuse, or other adverse childhood experiences. The small size of our community allows us to offer a population-based intervention, avoiding potential stigma of identification as "at-risk." We hope to bring our model to other local communities both urban and rural.

#### BOP12.5

### **TRAINEES' NARRATIVES IN THE REFLECTIVE PRACTICE PROCESS OF INDIVIDUAL LEVEL TOUCHPOINT TRAINING: A QUALITATIVE ANALYSIS.**

**Banella F.E.\*<sup>[1]</sup>, Migliaccio L.<sup>[1]</sup>, Rapisardi G.<sup>[2]</sup>**

*<sup>[1]</sup>Italian Brazelton Touchpoints Site - Natinsieme Association ~ Rome ~ Italy, <sup>[2]</sup>Italian Brazelton Touchpoints Site ~ Rome ~ Italy*

The Brazelton Touchpoints (TP) is a theoretical and practical approach that focuses on the baby/child and the family, and that aims to enhance parental skills built upon the parent-child relationship and to create an alliance between parents and professionals operating within this

systems. The Brazelton TP Sites develop and apply knowledge of early childhood development to practice and policy, throughout training programs for Infant-Parent Health providers. TP is listed in the SAMHSA National Registry of Evidence-based Programs as a “Promising intervention”. In 2016, the first Italian Touchpoints Site, started to offer a 3-day individual training course, followed by a 6 months Reflective Practice (RP) process. The RP provides tools and strategies for providers in order to help them integrate TP approach in their daily practice. In this work we present a qualitative analysis of the written narratives of the trainees in applying TP approach. The goal of this presentation is:

1. to explore trainees subjective experience of improvement, changes and challenges in their practice over the 6 months of TP training process;
2. to determine the relevance of Reflective Practice process as an important tool for Infant Parent Mental Health providers training.

One hundred twenty five trainees interviews were collected at the beginning and at the end of the RP Process. The interviews were analyzed by three independent coders, focusing on providers’ goals, improvements and challenges in the application of TP approach in their work with families. Key themes and specific aspects of their clinical strengths and challenges will be discussed. Reflective Practice supports providers’ integration of new skills and strategies into their clinical practices.

BOP12.6

#### **BRAZELTON TOUCHPOINTS IN PORTUGAL – ENHANCING A CASCADE OF CARE**

**Brito A.\***

*Fundação Brazelton Gomes-Pedro ~ Lisboa ~ Portugal*

Among the many factors that support the essential quality of educational contexts, evidence underlines that the critical component is based on the relationship between child and caregiver, and the adult's ability to be responsive to the child. In addition, the importance of primary caregivers to have at least one other adult/caregiver who encourages, expresses admiration and affection for them, and engages in joint activity with the child, is also central. This cascade of care must therefore be seen from a systemic and ecological perspective, which is translated into a complex dynamic of mutually supportive networks. In this framework, the Brazelton Touchpoints Model for training, offers a way of understanding development embedded in knowing that it takes place within relationships, offering skills and strategies to help supporting these relationships (parent-child, parent-provider, provider-child). By encouraging a respectful, sensitive learning environment, where professionals from diverse fields – health, education, social services - can flourish and find opportunities for professional and personal growth, it enhances this cascade of care. In this presentation, we particularly look at Brazelton Gomes-Pedro Foundations work in the last seven years, analyzing how trainers as facilitators seek to embody the principles they teach, relating to training participants in the same way they want them to relate to families. Trainers principles, assumptions, and competencies, are similar as those needed by practitioners to successfully work in partnership with families. The approach to training moved from traditional lecture-based methods towards active, relational learning methods where reflective practice as a fundamental role.

BOP12.7

#### **CLINICIANS’ EXPERIENCES OF CONDUCTING THE NEWBORN BEHAVIOUR OBSERVATION (NBO) IN A STATE HOSPITAL IN SOUTH AFRICA.**

**Canin N., Maharaj S.\*, Gaylard J.**

*Rahima Moosa Hospital ~ Johannesburg ~ South Africa*

The NBO is an interactive relationship-building instrument that facilitates the nascent relationship between parents and infant by sensitising parents to their baby's capacities and individuality. This presentation details the NBO practitioners' use of this developmental tool in a Caesar ward in the Rahima Moosa State Hospital in South Africa. Rahima Moosa is the only hospital in South Africa dedicated exclusively to mothers and children. The structural and economic impact of apartheid remains and the community is impoverished. Conducting the NBO at a Caesarian Section Ward at Rahima Moosa in the days immediately following infants' birth has been a unique experience for the clinicians involved. Mothers in this context often struggle with the experience of having a caesar and report that it disrupts their experience of bonding with their babies. In addition there is a sense of shame in having had a Caesar and this has been found to impact the mother- infant dyad. The Newborn Behavioural Observation is being used in the ward to enhance maternal sensitivity and support developmental outcomes. It is also believed that offering the NBO at Rahima Moosa provides a containing function for mothers and infants. The NBO has allowed for non-threatening interactions with mothers who often find it difficult to share their feelings and concerns about their baby. This presentation will make use of case examples to present the clinical work currently being done.

BOP12.8

#### **THE IMPROVED RATE OF EXCLUSIVE BREASTFEEDING ASSOCIATED WITH ENHANCED SOCIAL INTERACTIVE BEHAVIOR IN NEWBORN INFANTS FOLLOWING MATERNAL PERINATAL ANXIOUS SYMPTOMS**

**Zhang H.<sup>[1]</sup>, Zhu Z.<sup>[2]</sup>, Zhang Q.<sup>[3]</sup>, Shao S.<sup>[1]</sup>, Li J.<sup>[1]</sup>, Yao D.<sup>[1]</sup>, Fali F.<sup>[1]</sup>, Dang S.<sup>[1]</sup>, Zhu Z.<sup>[4]</sup>, Li H.\*<sup>[1]</sup>**

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Maternal anxiety was involved in reduced breastfeeding and newborn behavior disorder.

To determine whether the improved rate of exclusive breastfeeding was associated with enhanced social interactive behavior in newborn infants following maternal perinatal anxious symptoms after Neonatal Behavioral Observation (NBO) intervention. The 14-item Hamilton Anxiety Scale (HAMA) was used to assess mental health of the hospitalized pregnant women waiting for delivery. A total of 105 subjects were diagnosed with anxiety divided into two groups: Neonatal Behavioral Observation (NBO) intervention group (n=65) and control group(n=40). Neonatal Behavioral Assessment Scale (NBAS) was administered to assess the social interactive behavior in newborns. The beginning time of milk secretion, frequency of breastfeeding and breastfeeding rate were recorded. (1) the HAMA scores in mothers of the NBO intervention group were lower than those of the control group within 15 days postpartum ( $p < 0.05$ ). (2) The score of social interactive behavior in newborns of anxiety group were lower than that in normal group ( $p < 0.01$ ) ; The score of social interactive behavior in newborns of the NBO intervention group were higher than that in control group ( $p < 0.01$ ) ;(3) The beginning time of milk secretion in the NBO intervention group were earlier than those of the control group ( $p < 0.05$ ); The frequency $\geq 10$  of breastfeeding within 24h in the first 3 day postpartum in the NBO intervention group was more than those of the control group ( $p < 0.05$ ); (4) Within 3, 42 days postpartum, the rate of exclusive breastfeeding (58.5%、61.5%、63%) in the NBO intervention group were higher than those of the control group (37.5%、35%、40%) , respectively ( $p < 0.05$ ); NBO intervention could ameliorate maternal anxious symptoms,

and further to improve exclusive breastfeeding rate associated with enhanced social interactive behavior in newborns.

BOP12.9

**THE NEWBORN BEHAVIOURAL OBSERVATION (NBO) AS A SUPPORTIVE INTERVENTION IN THE KANGAROO MOTHER CARE WARD AT A SOUTH AFRICAN MOTHER AND CHILD HOSPITAL**

**Canin N.\*, Maharaj S., Gaylard J.**

*Rahima Moosa Hospital ~ Johannesburg ~ South Africa*

The Newborn Behavioural Observation (NBO) is a developmental tool which has been shown to support developmental outcomes in early infancy, keeping open channels of relating and enhancing maternal sensitivity (Hane et al, 2015; Hawthorne, 2015; McManus, 2015; McManus & Nugent, 2012). This presentation will document the pioneering implementation of NBOs in the Kangaroo Care Ward at a governmental hospital in South Africa. The literature suggests that the experience of prematurity impacts parents as well as infants, creating trauma and disruption for both (Davis; Richards & Robertson; 2014; Feldman et al, 2003; Stern, Talmi & Harmon, 2003). The importance of intervening in the parent-infant relationship has been highlighted in the literature (Browne & Talmi, 2005; Cohen, 2003; Gibbs, 2015; Hane et al, 2015). In the Kangaroo Mother Care (KMC) Ward at Rahima Moosa Mother and Child Hospital in South Africa, mothers of premature infants struggle to hold their babies in mind as they report feeling overwhelmed and concerned about their infant's survival. The challenge has been to help these mothers recognise their infants' humanity and need for connection. Following on from several years of psychological intervention in the KMC, the NBO is now being introduced as a repeat intervention aimed at fostering appropriate, developmentally supportive interactions. Case study material will be included in the presentation to explore the impact of NBO in this setting on the mother, the infant as well as mother-infant interaction.

**Brief Oral Presentations BOP03 - POSTPARTUM DEPRESSION MOTHERS & FATHERS**

BOP03.1

**ASSESSMENT OF POSTPARTUM DEPRESSION IN A GROUP OF CHILEAN PARENTS**

**Perez Cortes F.S.\*, Anthea C., Morales A., Diego R., Quinlan A., Javiera N., Javiera N.**

*Universidad Alberto Hurtado ~ Santiago ~ Chile*

Several studies have shown that not only mothers, but also fathers can suffer from postpartum depression, nevertheless the assessment of paternal postpartum depression (PPD) is not part of the standard evaluations despite its relevance. This phenomenon has not been researched in Chile. The aim of present study is to explore the presence of depressive symptoms in fathers and mothers during the postpartum period and describe their interaction. Users of the Metropolitan Health Service - West Unit (SSMOC) in Santiago the Chile were assessed two months after childbirth with a sociodemographic questionnaire, the Beck Depression Inventory (BDI-I), and the Edinburgh Postnatal Depression Scale (EPDS). Even though mothers score significantly higher in both scales, 18.5% of men surpass the cutoff score in the EPDS and 10.5% in the BDI. These results stress the need to continue researching this phenomenon and incorporate father assessment in pre and postnatal checkups. Early diagnosis and timely intervention not only of maternal, but also paternal PPD, regardless of the type of relationship that exists between the parental couple, is key to promoting the exercise of responsible parenting and well-being in the whole family system.

BOP03.2

### **MARITAL STATUS AND ITS RELATION TO RELATIONSHIP SATISFACTION, DEPRESSION AND INFANT HEALTH AMONG A SAMPLE OF FINNISH FIRST-TIME PARENTS**

**Kalland M.\*, Laszlo V., Martina S., Simo R.**

*University of Helsinki ~ Helsinki ~ Finland*

In Europe, the increase in cohabiting within childrearing unions have been one of the most striking changes during the past decades. In Finland fifty-seven per cent of first children were born outside marriage in Finland in 2015. The threshold of 50 per cent was exceeded in 1997. In general, studies indicate that marriage is better for both relationship stability and child outcomes. Given the acceptance of cohabiting as a base for parenting, earlier observed outcomes may not reflect contemporary circumstances in Finland. Therefore, the question is if earlier notions on differences in well-being between married versus cohabiting families has disappeared in cultures that accepts cohabitation as a base for parenting. The current study is part of a larger study on first-time parents in Finland. The aim of the current study is to provide empirical data on the impact of marital status on relationship satisfaction, depression, infant health and support during pregnancy. We analyzed differences in parental characteristics, depression, relationship satisfaction, health behavior and infant health outcomes of cohabiting and married first-time parents in Finland. Survey data were collected from 903 parents expecting their first child in the years 2011–2015 from 80 communities all over the country. Cohabiting parents were at a higher risk of depression during the pregnancy than married parents. They were also less satisfied with their relationships. Cohabiting fathers smoked more during the pregnancy than mothers or married fathers. The families reported receiving mostly similar support, except for a smaller share of cohabiting than married fathers reported being supported by maternity clinics, as confirmed by qualitative analyses. We found no statistically significant differences in child health outcomes. Our results suggest that differences between married and cohabiting parents persist even in countries where cohabitation is more common than marriage for first-time parents. In addition, cohabiting fathers need more support for parenting.

BOP03.3

### **IMPACT OF GROUP SUPPORT ON MENTAL HEALTH, MARITAL RELATIONSHIP AND PARENTING AMONG A SAMPLE OF FINNISH FIRST-TIME PARENTS**

**Kalland M.\*<sup>[1]</sup>, Simo R.<sup>[1]</sup>, Marjukka P.<sup>[2]</sup>, Saara S.<sup>[1]</sup>, Martina S.<sup>[1]</sup>, Laszlo V.<sup>[1]</sup>**

*<sup>[1]</sup>University of Helsinki ~ Helsinki ~ Finland, <sup>[2]</sup>University of Turku ~ Turku ~ Finland*

A promising approach in the field of parental support is the impact of parental reflective functioning (RF) on the parent-child relationship and on the health and development of the child. This study propose to investigate the impact of group support in general, and mentalization based group support in particular, among normative first-time parents on a) parenting and parental health and well-being and b) the effects of these factors on the development and health of the child. A sample of 654 Finnish First-time parents (483 mothers and 171 fathers) were studied from pregnancy until the child was two years of age. Of the parents, 43 took part in a mentalization based Families First (FF) group intervention. In five measurement waves we collected data on depression, stress, parental reflective functioning, relationship satisfaction, sense of coherence and support. For each variable of interest, we applied a repeated measures ANOVA model to compare parents that took part in the FF-group intervention) and/or other structured group activities; or unstructured open-group Family cafés with a group of parents who reported not having attended any group activities. We found no significant differences in depression between parents related to using/not using group support. We found significant positive effects for structured group support on marital satisfaction

(mothers), social isolation (mothers), role restriction (mothers). Structured group support had a negative impact on fathers' marital satisfaction but not for fathers taking part in the FF-intervention. We found a positive impact of Family Café participation on Child involvement with parent(EA-SR). Finally we observed a significant positive impact of structured group support on PRFQ of fathers. The study confirms the beneficial impact of group support for first-time parents. Due to lack of power we were not able to find significant effects of mentalization based group support on maternal reflective functioning, however, PRFQ was higher for both parents attending the FF-groups at 12 and 24 months follow-up in comparison with other parents.

BOP03.4

**A TROUBLED SPACE: AN EXPLORATION OF THE ROLE AND IMPACT OF WINNICOTT'S THEORY OF POTENTIAL SPACE IN THE MOTHER-INFANT DYAD EXPERIENCING POST NATAL DEPRESSION**

**Mclaughlin J.\***

*ICAPP ~ Dublin ~ Ireland*

This presentation aims to contribute to the knowledge and discussion on the development of the internal world of the infant by focusing on what is between the mother and infant initially to what becomes within the baby/child with time in a depressed mother-infant dyad. The aim is to understand how potential space, present and silently active from birth is significantly affected when the infant state of mind meets a post-natal state of mind that is depressed. It is argued, a potential space where need, omnipotence, and illusion now meet unmet need, disillusionment and reality. With time, the potential for growth, creativity and play to form within the space are diminished and instead the space becomes filled with disillusionment, persecution, ambivalence and defensive bi-directional projective identification. It is postulated in a 'potential space' that is lacking in meaning and play for the infant and an exacerbation of the depression for the mother and baby, the emergence of the 'false self' for the baby is likely and without intervention, the costs to personality character and future mental health are indicated. The content of the presentation includes a brief overview of Winnicott's Theory of Potential Space followed by a detailed exploration of how this space is impacted in a depressed mother-infant dyad. Implications for development of the true self and personality development are explored including a neuro-psychoanalytic perspective.

BOP03.5

**NATURE VERSUS NURTURE THROUGH A MICROANALYTIC LENS: THEORETICAL AND CLINICAL IMPLICATIONS FOR ATTACHMENT AND SOCIAL AND EMOTIONAL DEVELOPMENT**

**Friedman D.D.\***

*Columbia University ~ New York ~ United States of America*

This oral presentation will describe how infants respond in face-to-face interaction with their mothers and will explore the microanalytic results in terms of nature versus nurture. It will include theoretical and clinical implications for attachment and social and emotional development. This study examined 6-week maternal self-report depressive symptoms measured by the Center for Epidemiological Studies-Depression Scale (CES-D) and 4-month infant vocal affect qualities. Infant vocal affect qualities were examined in 122 4-month old infants during face-to-face play in relation to 6-week maternal depressive symptoms. Mothers were categorized depressed (26.2%) based on a 16+ cutoff on the CES-D. Videotaped interactions were coded on a 1-s time basis for infant vocal affect qualities. Infants of depressed mothers were more vocally activated in both positive and negative qualities and more vocally variable. Male infants maintained cry/angry, fuss/whimper and neutral/positive as well as high positive more than females who maintained silence more often. There was no significant interaction between maternal depression and infant gender. However,

each variable yielded significant results independently. Infants became vocally activated in response to maternal depression. Males were more vocally activated and more dysregulated than females. Infants of depressed mothers were more vocally activated in both positive and negative qualities. Infants of depressed mothers were more vocally variable, specifically in and out of fuss/whimper, as well as more likely to change, rather than maintain vocal states. Heightened negative and positive patterns are interpreted as high arousal. This response to maternal depression supports the Dan Stern's theory of the infant functioning as an anti-depressant. Heightened arousal in male infants raises the question of biology versus parent-infant interaction. The question of "nature versus nurture" is relevant for both variables. These findings have important theoretical and clinical implications with regard to attachment and infant social and emotional development. The presentation will discuss these implications and how they are incorporated clinically into an evidence-based dyadic video intervention.

BOP03.6

### **DEPRESSIVE SYMPTOMS AND PARENTAL STRESS IN MOTHERS AND FATHERS 25 MONTHS AFTER CHILD BIRTH**

**Johansson M.\***

*Linneus University ~ Vaxjo ~ Sweden*

Most studies of postpartum depression in parents have been conducted from 2-3 months after delivery up to the child's first year and only include either mothers or fathers. Research on parents with depressive symptoms and parental stress in a population-based sample after the first year of childbirth including both fathers and mothers is scarce. However, a few studies including younger children have demonstrated the importance of good mental health in both parents for supporting the parent-child relationship. Was to determine the prevalence of depressive symptoms, feelings of incompetence and spouse relationship problems and their mutual relations. Data from a Swedish parent-infant population-based cohort 25 months after childbirth was used. A questionnaire containing Edinburgh Postnatal Depression Scale (EPDS) and a modified Swedish Parental Stress Questionnaire (SPSQ) regarding depression and parental stress were answered by 646 fathers and 700 mothers. Parents with depressive symptoms experienced more feelings of incompetence and spouse relationship problems than parents without depressive symptoms. The prevalence of depressive symptoms (EPDS  $\geq$  12) was more than 11% for mothers and nearly 5% for fathers, 25 months after childbirth. More than 8% of the mothers stated that they had previously received treatment for anxiety/ worrying or depression/low mood, and 34% of these scored high on the EPDS in the study, which suggests that they were experiencing some distress. Among the fathers, 25% reported that they had previously received treatment and scored high on EPDS. The result indicated that feelings of incompetence and spouse relationship problems could be important constructs for understanding parental stress and depressive symptoms in the parents of young children. It is important that Child Health Care is attentive to both mothers' and fathers' depressive symptoms and parental stress after the first year.

### **Workshop WS05 - MENTAL HEALTH SERVICES FOR IMMIGRANT AND REFUGEE PARENTS OF INFANTS: SYSTEMIC CONSIDERATIONS**

**Bohr Y.\*<sup>[1]</sup>, Khourouchvili M.<sup>[1]</sup>, Lee Y.<sup>[1]</sup>, Cole E.<sup>[2]</sup>, Armour L.<sup>[3]</sup>, Misbah K.B.<sup>[1]</sup>**

*<sup>[1]</sup>York University ~ Toronto ~ Canada, <sup>[2]</sup>Private Practice ~ Toronto ~ Canada, <sup>[3]</sup>Aisling Discoveries Child and Family Centre ~ Scarborough ~ Canada*

North America is defined by immigration. In 2017, Canada for example welcomed a record 300,000+ immigrants, and close to 56,000 refugees, many of whom have left war-torn countries and suffered

diverse forms of trauma. Even the most typical migration is stressful for families, often resulting in the so called “immigrant paradox” whereby healthy immigrants’ mental health deteriorates over time (DeMaio & Kemp, 2010). Indeed, the trials faced by many recently arrived migrants and refugees may involve considerable mental health challenges, which can have significant effects for caregivers. This situation is concerning when one considers that parental mental health affects parenting quality, which in turn has an important impact on infant development (Bornstein, 2015; Mesman, 2012). Communities in all regions that welcome immigrants would thus be best served if culturally sensitive mental health services were available for families soon after their arrival, and if efforts were made to make such resources widely accessible. In this workshop, we will present a framework for understanding adaptation challenges for migrating parents of infants, and how this framework can be used to design excellent primary, secondary and tertiary community mental health services for families after settlement. A case study depicting an exemplary, culturally sensitive, community-based infant mental health initiative will be presented. Participants will enjoy interactive exercises, consider unique cases seen at an infant mental health service in Scarborough, Ontario, Canada and discuss structured approaches to policy implications. This session will be led by Yvonne Bohr, Mariami Khourchvili and Yookyung Lee from York University, Toronto.

### **Workshop WS06 - WHO IS THINKING ABOUT THE BABIES? IMPACT OF IMMIGRATION POLICIES ON FAMILIES/PARENT-CHILD WELL-BEING IN THE UNITES STATES**

**Norona C.R.\*<sup>[1]</sup>, Frankel K.A.<sup>[2]</sup>, Velasco--Hodgson M.C.<sup>[3]</sup>, Arbel A.<sup>[4]</sup>**

<sup>[1]</sup>*Boston Medical Center/Child Witness to Violence Project ~ Boston ~ United States of America,*

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<sup>[3]</sup>*Pontificia Universidad Catolica de Chile ~ Santiago ~ Chile,* <sup>[4]</sup>*South West Human Services /Birth to Five Helpline/Fussy Baby ~ Phoenix ~ United States of America*

This session will explore the impact of being undocumented or living in an immigration mixed-status family in the United States on young children’s and their parents’ well-being. Implications of immigration enforcement policies will be analyzed from a diversity-informed perspective highlighting the effect of detentions and deportations on children’s rights, access to services, attachment system, and to children’s overall development. Trauma-focused and socio-culturally-attuned interventions appropriate with this population will be discussed as well as the prevention of secondary traumatic stress in providers. A growing body of literature illuminates the impact of immigration policies and enhanced enforcement on children and families. One of the most deleterious conditions is the lack of legal immigration status. Undocumented families are more prone to experiencing traumatic incidents, have less social and financial recourse, and are more victimized by exploitation. Fear of immigration authorities may discourage families from seeking help thus, increasing isolation and vulnerability. Enforcement activities (raids, detentions, deportations) can create extreme fear; re-traumatize individuals and communities, affecting not only the unauthorized family members but especially their young children. Through case discussion and using a diversity-informed framework, the presenters will explore the potential consequences that immigration enforcement activities have for children’s rights and for the mental health of millions of young children in the US. Drawing from their clinical experience the presenters will suggest clinical interventions with this population and ways to prevent provider secondary traumatic stress. Reflections on provider’s and institutional values and their impact on the work with these families will also be explored.

### **Workshop WS11 - HOME VISITING SERVICE: SUPPORTING PARENTHOOD IN THE EARLY PHASE**

**Cherici S.\*, Majello L., Bettini P., Guariento M., Olivelli C., Ciuffi L., Leonetti R.**

*USL Toscana Centro – Ambito Firenze ~ Firenze ~ Italy*

This work takes place within the area of studies relative to the contribution of home interventions to help disadvantaged children. The most famous model of Home Visiting at an international level is Olds that started in 1977 in New York, at N.H.V.P. This program was mainly connected to the ecological theory of Bronfenbrenner (1979) who called attention to the background of the child and the interaction between them. The Home Visiting programs, starting from different theoretic prerequisites, offer a vast range of “services” to promote parenting skills and resources dealing with caregiving. This work intends to describe a service of intervention based on the Home Visiting model realized in Florence by USL Service for Mental Health in Infants and Adolescents, aimed at reducing environmental, individual and relational risk factors involved in determining infant distress. Specifically, we try to illustrate the details of this intervention keeping in mind the methodological aspects: subjects of the project, evaluative and intervention instruments, the length of intervention, the professionalism of the home operators and the work of supervising. Moreover, the work intends to show the value of this model through the analysis of two situations of adolescent parents which required the activation of several different resources. In one case it was necessary to mainly promote a synergy between social health services in the territory in order to intervene in a well integrated manner, in the other we concentrated more on supporting the parent-child relationship in order to help them acquire knowledge of their emotional world.

#### **Workshop WS12 - KENNEDY KRIEGER INSTITUTE NETWORK FOR EARLY CHILDHOOD TELEHEALTH (KKI-NECT): A MULTIDISCIPLINARY MODEL OF INTEGRATED CARE FOR BEHAVIORAL, EMOTIONAL AND DEVELOPMENTAL DISORDERS IN CHILDREN FROM BIRTH TO FIVE**

**Harrison J.\*<sup>[1]</sup>, Leppert M.<sup>[1]</sup>, Grace N.<sup>[2]</sup>**

*<sup>[1]</sup>Kennedy Krieger Institute/Johns Hopkins School of Medicine ~ Baltimore ~ United States of America, <sup>[2]</sup>Kennedy Krieger Institute ~ Baltimore ~ United States of America*

The aim of the presentation is to introduce a unique model of integrated care, KKI-NECT. It is a case-based learning collaborative to address behavioral, emotional and developmental concerns in children ages birth to 5. It replicates the Project ECHO(Extension for Community Healthcare Outcomes) model of a “hub” (KKI developmental pediatricians, child psychiatrist, behavioral psychologist, neurologist, social workers) which hosts weekly “clinics”(teleconferences) with “spokes”( 10-12 pediatric primary care providers or School Based Health Center care providers) in underserved areas across the state of Maryland. The goal of the model is to create local experts.

There are currently 139 ECHO models across the world for a variety of disorders including HIV, substance abuse, autism, Hepatitis C, but we are to date the ONLY ECHO for behavioral, emotional and developmental concerns in very young children. The 45 minute workshop would describe the ECHO model, which consists of one hour weekly tele-clinics with a cohort of pediatric providers in rural areas. During the hour the providers present a de-identified case for discussion by all, and summary and recommendations by the hub experts. A fifteen minute didactic on topics related to the cases follows. We will discuss the lessons learned from our first year of experience. The need and rationale for this unique model, and the process of training and finding funding will be presented. We will describe our challenges and successes, as well as our evaluation and outcome measures of the program. Time permitting we will bring a clinical case example for discussion.

#### **Workshop WS17 - THE ADOPTED WOMAN AS MOTHER**

**Conrick J.\*<sup>[1]</sup>, Paul C.<sup>[2]</sup>**

*<sup>[1]</sup>Monash University ~ Melbourne ~ Australia, <sup>[2]</sup>Royal Children's Hospital ~ Melbourne ~ Australia*

The meaning that adopted women make of their experiences mothering their own children, is an area that has received little detailed attention in the research literature to date. This workshop will

begin with a presentation of a case situation by A/Professor Campbell Paul, followed by an outline of a recently submitted Ph.D. dissertation in the area of adoption. This exploratory, qualitative study, aimed to hear from 21 adopted Australian women, about their own lived experience as mothers. Semi-structured interviews were conducted with 16 participants. The transcripts from these interviews were thematically analysed using a constant comparative method, and the emerging categories and themes were evaluated by a focus group of 5 additional adopted women who had not participated in the interview process; and two independent inter-raters. While each participant account was unique (impacted by individual life histories, partnerships and social networks), shared threads of meaning ran through the combined narratives and mothering was experienced through the lens of their adoption experiences. The consideration of their own childhoods; their perception of loss and restoration and the renegotiation of identity, contributed to perceptions of themselves as mother. What also emerged was the impact of the research process as a therapeutic intervention for the participants. The life stage of mothering, for this group of adopted women, not only brings the usual challenges of being a parent, but does so with an overlay of adoption issues that can be unexpected and distressing. This life stage also provides an opportunity to rework and gain further understanding and mastery.

### **Workshop WS18 - "WHY DIDN'T I DIE TOO?" - PSYCHOANALYSIS WITH A 3 YEAR OLD BEREAVED CHILD**

**Russo T.\*, Thomson Salo F.**

*AAIMHI ~ Melbourne ~ Australia*

Mourning in the very young child is not always recognised. This presentation aims to share with participants the experience of a young boy who at the age of 2½ years suffered the loss of his mother and an older brother within the space of a month. It aims to demonstrate the value, for this young child, of a psychoanalytic experience in aiding him to mourn, to explore deeper emotional fears and defences, allowing transformation and thus to recover developmental trajectories. Discussion will provide an opportunity to consider mourning in the very young child as well as specific aspects of child psychoanalysis such as the setting, engagement with parent/caregiver, play and creativity, and the use of countertransference and interpretation. A brief history that led to this child's presentation will be given. A series of vignettes throughout the treatment will be described. (45 minutes and then discussion to follow). The child was initially seen weekly for some twelve months, but persisting difficulties prompted the recommendation of psychoanalysis which was taken up. He was then seen four times a week for nearly two years, and a gradual reduction in session frequency followed. Two aspects that will be focused on are his drawings (power point presentation) and his physicality.

### **Brief Oral Presentations BOP06 - HELPING PREMATURE BABIES AND FAMILIES**

BOP06.1

#### **MOTHER-PRETERM INFANT INTERACTION: BOTH MOTOR DEVELOPMENT AND QUALITY OF SPONTANEOUS MOVEMENTS OF THE PRETERM INFANT MAKE A DIFFERENCE**

**Lev Enacab O.\*<sup>[1]</sup>, Sher--Censor E.<sup>[2]</sup>, Zareya--Jacobi O.<sup>[2]</sup>, Daube--Fishman G.<sup>[2]</sup>, Beni--Shrem S.<sup>[4]</sup>, Einspieler C.<sup>[3]</sup>**

<sup>[1]</sup>Maccabi Health Care Service and University of Haifa, ~ Haifa ~ Israel, <sup>[2]</sup>University of Haifa ~ Haifa ~ Israel, <sup>[3]</sup>Medical University of Graz ~ Graz ~ Austria, <sup>[4]</sup>Maccabi Health Care Services ~ Haifa ~ Israel

Preterm infant-mother dyads are at risk for showing poor interaction quality, which might hamper infants' developmental outcomes. Thus, identifying factors underlying mother-infant interaction is

important. Only a few studies examined the associations between preterm infants' motor development (MD) or quality of spontaneous movements (QSM) and mother-infant interaction, with inconsistent results. We extended prior research by (1) assessing MD and QSM within the same study and examining their distinct links with mother-infant interaction; and (2) evaluating maternal behavior separately for the modalities of touch, holding, eye contact and vocalization. We hypothesized that better MD and QSM would each be associated with higher maternal sensitivity and preterm infants' more positive engagement. Participants were fifty-nine healthy preterm infants (gestation age = 26-34 weeks; birth weight < 2.5kg; corrected age = 12-22 weeks) and their mothers. MD was evaluated using the Alberta Infant Motor Scale (Darrach & Piper, 1994). QSM, namely, presence and temporal organization of fidgety movements (FMs) and quality of the overall movement character were assessed using the General Movement Assessment according to Prechtl (Prechtl, 1990). Maternal sensitivity in the modalities of touch, holding, eye contact, and vocalization, and infant's positive engagement were rated using five 6-point scales. Better MD, continual (vs. intermittent) FMs and a more optimal movement character were distinctly associated with mothers' more sensitive holding. Continual FMs and a more optimal movement character were associated with mothers' more sensitive touch and eye contact and infants' positive engagement. Results suggest that assessing preterm infants' motor performance is important not only for diagnosing developmental deficits but also for understanding the quality of mother-infant interactions. The study calls for including QSM assessment in screening protocols for preterm infants and developing psychoeducational programs that will educate parents about preterm infants' MD and QSM to decrease misinterpretation of infants' behavior and increase parental sensitivity.

BOP06.2

## **BEHAVIORAL INTERVENTION WITH MATERNAL PARTICIPATORY GUIDANCE IMPROVES PRETERM INFANT OUTCOMES**

**White--Traut R.\***

*Children's Hospital of Wisconsin ~ Milwaukee ~ United States of America*

Premature infants experience developmental challenges. This RCT of 198 infants born at 29-34 weeks gestation and their mothers examined the impact of the H-HOPE (Hospital to Home: Optimizing the Preterm Infant's Environment) intervention compared with an Attention Control group on infant behavior, nutritive sucking and growth during hospitalization, mother-infant interaction (Barnard's Nursing Child Assessment Feeding Scale (NCAST) and Censullo's Dyadic Mutuality Code (DMC)), and illness visits. H-HOPE included: (1) twice-daily infant behavioral Intervention prior to feeding and (2) maternal participatory guidance. There were no differences between the groups at baseline. By day 7, the H-HOPE group exhibited a higher mean frequency of orally directed behaviors (8.9 vs. 5.3 (controls) prior to feeding,  $p < 0.05$ ) and had a higher proportion of alertness during (0.26 vs. 0.11,  $p < 0.05$ ) and after intervention (0.28 vs. 0.06,  $p < 0.01$ ). H-HOPE group experienced improved sucking by day 7 (# of sucks -  $\beta = 13.69$ ,  $p < 0.01$ ; # of sucks per sucking burst -  $\beta = 1.16$ ,  $p < 0.01$ ; the sucking maturity index  $\beta = 0.12$ ,  $p < 0.05$ ) and sucking pressure increased over time ( $\beta = 45.66$ ,  $p < 0.01$ ). H-HOPE infants gained weight ( $p = 0.04$ ) and grew in length ( $p = 0.015$ ) more rapidly. At 6-weeks corrected age, H-HOPE group trended toward higher NCAST scores, higher maternal Social-Emotional Growth Fostering Subscale scores, higher scores for the overall infant subscale and the Infant Clarity of Cues Subscale ( $p < 0.05$ ), and were more likely to have high responsiveness during play (67.6% versus 58.1% of controls). H-HOPE group were half as likely to have illness visits (OR = 0.46, 95% CI = 0.22, 0.95). Intervening with both mother and preterm infant is a promising strategy to support infant behavior, oral feeding, growth, improve

mother-infant interaction, and reduce infant illnesses.

BOP06.3

### **SPECIFICITIES OF KANGAROO MOTHER CARE IN BRAZIL: MOTHERS' EXPERIENCES DURING HOSPITALIZATION WITH THEIR PREMATURE BABIES**

**Ramos Da Silva L.\*<sup>[1]</sup>, Caetano Da Silva Leão L.<sup>[2]</sup>, Sobreira Lopes R.D.C.<sup>[1]</sup>**

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Kangaroo Mother Care (KMC) was adapted in Brazil as a health policy that aims to involve the family in caring for the low-weight newborn and improve parent-infant relationship. In this country, some mothers of preterm infants are hospitalized with their babies in spaces called Kangaroo Units, where they become responsible for caring for their babies, with little help/assistance from hospital staff and few medical procedures. The aim of this study was to investigate maternal experiences regarding hospitalization with their preterm babies in Kangaroo Units. Nine mothers answered a structured interview in a moment near hospital discharge. Interviews were analysed through inductive thematic analysis. Three themes emerged regarding the Kangaroo Unit: 1) Decision for maternal hospitalization with the baby, 2) Mother-infant relationship and 3) Support. Findings pointed out that the decision for maternal hospitalization with the baby was mainly made by hospital staff, who gave mothers brief and superficial information about this process. Mother-infant relationship in the Kangaroo Unit was permeated by mothers' ambivalent feelings regarding staying with their babies in this confined space, because whilst they were able to care for them with more autonomy, they also reported feelings of isolation and abandonment. Regarding support, mothers reported that they were not receiving as many visits from babies' fathers as they wished, and hospital staff also appeared as a source of little support during hospitalization. This study highlights the importance of giving voice to mothers in what concerns their experiences in the Kangaroo Unit, as well as the need to rethink this Brazilian practice in a way that can be less intrusive for these mothers. It is suggested that the presence of psychologists could facilitate mothers' experiences in these confined spaces and also be useful for the staff to be able to better assist these mothers and their babies through hospitalization.

BOP06.4

### **A COHORT STUDY ABOUT BREASTFEEDING OF PREMATURE BABIES**

**Centenaro Levandowski D.\*, Rodrigues Castelli C.T., Tamanini De Almeida S.**

*UFCSA ~ Porto Alegre ~ Brazil*

Premature babies usually have difficulties with breastfeeding due to the immaturity of their physiological systems. However, breastfeeding is essential to them, helping to reduce the risks of infections. It is very important to understand the factors that contribute to maintain or interrupt breastfeeding, in order to better intervene to promote premature babies' health. A prospective cohort study, comprising 50 preterm infants (mean of gestational age, of 235.6 days  $\pm$  18.6) admitted to the neonatal ICU, with hospital discharge to December 2015 until November 2016, and their mothers (mean age = 31 years, 34% with complete secondary education). Four evaluations of breastfeeding and aspects of the mother-infant dyad related to the maintenance of breastfeeding or weaning were performed: during hospital discharge, and at one, three and six months after. The mean duration of breastfeeding was 128.15  $\pm$  14.7 days. An improvement of the pattern of breastfeeding after the first month of hospital discharge was verified. However, the prevalence of exclusive breastfeeding in the sixth month was only 2%. There were significant associations between weaning and lower gestational age and birth weight ( $p < 0.05$ ). On the other side, the presence of

support for the mother reduced the chance of breastfeeding cessation. The findings point to a significant reduction in the duration of breastfeeding of premature infants after hospital discharge, highlighting the relevance of follow-up support after hospital discharge, especially after the first month. They also indicate the need for special management for preterm infants that present a higher risk of early interruption of breastfeeding due to personal or contextual characteristics.

BOP06.5

### **NEONATES' MOTOR INVOLVEMENT WITH SILENT AND TALKING FACES**

**Guellai B.\*<sup>[1]</sup>, Streri A.<sup>[2]</sup>**

<sup>[1]</sup>*Université Paris Nanterre ~ Paris ~ France*, <sup>[2]</sup>*Université Paris Descartes ~ Paris ~ France*

Previous studies evidenced that different interactive contexts modulate newborns' visual attention. In the present study, we investigated newborns' motor feedback as an additional cue to neonates' expression of interest. We expected newborns' occurrences of mouth movements to differ according to the different conditions: (a) whether or not the face in front of them was talking; and (b) if the person had been already seen or was a new one. Using videos of interactive faces and a familiarization-test procedure, three different groups of newborns were assigned to three different conditions (i.e., one condition with a talking face during familiarization and silently moving faces at test, Silently moving/Silently condition, or Talking/static condition). Following studies on neonatal imitation, mouth movements were analyzed as indicators of social interest. Results revealed that a talking face elicited more motor feedback from the newborns than a silent one, and that there was no difference in front of the familiar face or the novel one. Finally, frequencies of mouth movements were greater, and latencies of appearance of the first mouth movement were shorter, in front of a static versus a dynamic face. These results are congruent with the idea of the existence of 'a sense' for interaction at birth, therefore new approaches in newborns' studies are discussed.

### **Symposium S15 - EARLY PARENT-INFANT INTERACTION AND STRESS IN SEVERE MENTAL DISORDERS**

**Harder S.\***

*Department of Psychology, University of Copenhagen ~ Copenhagen ~ Denmark*

Objectives: Severe maternal illness with psychotic features such as schizophrenia-spectrum, bipolar disorder, and recurrent depression, has been associated with less optimal caregiving behavior and poorer child outcomes. Most studies have focused on the impact of maternal depression on caregiving and mother-infant interaction and more knowledge is needed on the potential differential impact on caregiving of schizophrenia-spectrum and bipolar disorders. Most studies have been conducted during active phases of the illness, and little is known about quality of caregiving during phases of remission and which illness related factors that are most important for quality of caregiving. One potential important factor might be level of stress. In addition, the role of the partners as a potential source of support in relation to caregiving for this population is not well described.

Method: The symposium presents data from two longitudinal studies of caregiving and mother-infant interaction at 3 months among mothers with bi-polar disorder (the Bi-sam study) and at 4 and 16 weeks among mothers with schizophrenia-spectrum, bipolar and depressive disorder (the WARM study).

Results: Anke will present findings and correlates of reduced quality of caregiving and less optimal mother-infant interaction at 3 months from the BiSAM study. Røhder will present findings of at-risk maternal caregiving representations during pregnancy in mothers from the WARM study. Nyström-Hansen will present findings of associations between maternal stress during pregnancy, maternal

behavior, and infant stress at 4 months in the same sample. Finally Trier will present characteristics of partners to these mothers and discuss to what degree the partners can be seen as a resource for the mentally ill mothers and their infants.

Discussion: Together these findings indicate important areas for preventive interventions focussed on supporting these families during the transition to parenthood, to secure quality of life for these families and optimal developmental outcomes for the infants.

S15.2

### **MOTHERS WITH BIPOLAR DISORDER AND THEIR INFANTS - INTERACTION PATTERNS AT 3 MONTHS. (BI-SAM STUDY)**

**Dag Vegard S.<sup>[2]</sup>, Kari S.<sup>[3]</sup>, Vibeke M.<sup>[4]</sup>**

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Women with bipolar disorder (BD) have a high risk of postpartum mood episodes. The mood episodes include depressive, (hypo)manic and mixed states, and psychosis. There is a scarcity of studies on how postpartum mood episodes may affect mother-infant interaction. We are conducting a longitudinal mixed methods study on family life in the context of maternal BD. As a part of this study we investigate the quality and development of mother-infant interaction during the first year postpartum, and factors affecting this development. Twenty six families with mothers with a BD I or BD II diagnosis, were included in pregnancy or early postpartum. Parent-Child Early Relational Assessment Scale (PCERA) has been used to assess mother-infant interaction at infant age 3 and 12 months. At the same time points, each mother's current affective state was assessed with Inventory of Depressive Symptomatology and Young Mania Rating Scale, and information on occurrences of postpartum mood episodes were collected retrospectively. PCERA interaction data from 30 healthy mother-infant dyads is used for comparisons. We are currently conducting the first statistical analyses on interaction data at infant age 3 months. The analyses show significant differences (medium to large effect sizes) between the BD (more concerns) and comparison group on parental and dyadic variables. We will explore possible covariances (impact of maternal mood deviation on interaction quality). We will also investigate if the differences cluster in specific PCERA sub-scales. Results will be presented at the conference. Implications for early support for families with infant mothers with BD will be discussed.

S15.3

### **MOTHER-INFANT INTERACTIONS AMONG MOTHERS WITH SEVERE MENTAL DISORDERS AT 4 AND 16 WEEKS**

**Røhder K.\*, Mikkelsen N., Harder S.**

*Department of Psychology, University of Copenhagen ~ Copenhagen ~ Denmark*

Severe maternal illness (SMI), such as schizophrenia-spectrum, bipolar disorder, and recurrent depression, has been associated with less optimal caregiving behavior and poorer child outcomes. However, as SMI is episodic by nature, children of mothers with a lifetime history of severe psychopathology are likely to experience parenting both during their parent's active and remission phases of their illness. Most clinical research on mother-infant interactions have been conducted during episodes of active psychopathology. Less is known about how a lifetime history of SMI affects parental behavior during remission phases. The aim of the current study is to explore the associations between current severity of psychopathology and quality of mother-infant

interactions at 4 and 16 weeks of infant age in a sample of mothers with a lifetime history of SMI. The present study is a sub-study of the WARM study. Based on maternal interviews, lifetime DSM-V diagnosis and severity of antenatal psychopathology were assessed during pregnancy. Measures of current severity of symptoms were repeated at 4 and 16 weeks. Maternal postnatal behavior were assessed with the Coding Interactive Behavior (CIB), using the newborn manual at 4 weeks and the version for infants aged 2 to 36 months at 16 weeks. In previous studies, we have found that mothers with a history of depression show more non-optimal intrusive behavior at 16 weeks compared to both non-clinical mothers and mothers with a history of psychosis or bipolar disorder. In the present study, we will present results on stability and changes in perinatal interaction patterns and associations to current symptom severity. The impact of psychopathology on patterns of perinatal interactions will be discussed. Both lifetime diagnostic classification and current symptom severity will be included in analysis and thus contribute to our understanding of interactional risk patterns among mothers with SMI.

#### S15.4

##### **DETERMINANTS OF HAIR CORTISOL AT 4 MONTHS OF AGE IN INFANTS OF MOTHERS WITH SEVERE MENTAL ILLNESS**

**Nyström--Hansen M.<sup>[1]</sup>, Andersen Skovsager M.<sup>[2]</sup>, Harder S.\*<sup>[1]</sup>**

*<sup>[1]</sup>Department of Psychology, University of Copenhagen ~ Copenhagen ~ Denmark, <sup>[2]</sup>Odense University Hospital and University of Southern Denmark ~ Odense ~ Denmark*

Infants who experience early life stress are at risk for abnormal HPA activity, which in turn may have developmental consequences increasing the risk of physical and mental health problems. Little research has examined determinants of early stress in infancy reflected in hair cortisol.

The study explored associations in hair cortisol concentration (HCC) between infants and their mothers with severe mental illness. Forty four mothers and their 4-months-old infants participated in the study, hereof 30 mothers with severe mental disorder, and 14 controls. Hair samples were collected for the mother at the 3rd trimester and 4 months post-partum in both mother and infant. Maternal behavior was coded using the AMBIANCE coding system on mother-infant still face video interactions 4 months post-partum. Liquid chromatography tandem mass spectrometry was used for HCC. Maternal HCC in pregnancy significantly predicted maternal HCC 4 months post-partum as well as level of disrupted maternal behavior. The higher HCC during pregnancy, the more disrupted behavior. Maternal HCC at 4 months post-partum was strongly positively associated with infant HCC 4 months post-partum. Maternal behavior was also significantly associated with infant HCC 4 months post-partum, however in the opposite direction. Though not significant, results showed a trend towards higher HCC in mothers and infants from the clinical group compared to controls at 4 months. Our results indicate an indirect path from maternal stress in pregnancy to infant stress at 4 months through maternal stress and behavior at 4 months. Hair cortisol sampling from the mother is suggested as a strong biological method for predicting infant stress.

#### S15.5

##### **PARTNERS TO MOTHERS WITH SEVERE MENTAL DISORDER. RESOURCES AND PARENTAL ROLE**

**Christopher Høier T.<sup>[1]</sup>, Aggernæs B.<sup>[2]</sup>, Harder S.<sup>[1]</sup>, Macbeth A.\*<sup>[3]</sup>**

*<sup>[1]</sup>Department of Psychology, University of Copenhagen ~ Copenhagen ~ Denmark, <sup>[2]</sup>Department of Child and Adolescent Psychiatry, Roskilde, Region Zealand and University of Copenhagen ~ Copenhagen ~ Denmark, <sup>[3]</sup>University of Edinburgh ~ Edinburgh ~ United Kingdom*

Fathers are found to have both a direct influence on a child's development through his own interaction with the child, and an indirect influence through his relationship to the mother.

Depending on his own resources and the quality of the relationship to the mother, the father may have either a positive or a negative influence on the development of his children. The role of the father is of special importance in families, where the mother has a severe mental disorder (SMI). In the present study, we explore the resources of the partners of mothers with a history of SMI. The aim of the study is to explore the caregiving resources of partners to mothers with a history of SMI. The participants are partners of the mothers with a history of SMI included in the WARM sample. Former or current psychiatric symptoms, severity of illness, work and educational level are reported, and in addition, practical and emotional support towards the partner is assessed. Finally, caregiving representations are measured. Symptoms severity is associated with level of helplessness in caregiving representations both during pregnancy and at 4 months of infant age. Fathers experience higher helplessness at the time of maternal pregnancy compared to when the infant is 4 months old. The results indicate that partners of mentally ill mothers may experience helplessness toward the caregiving role related to their own level of symptomatology. This indicates a need to address preventive screening and intervention not only related to the mother with mental illness and the infant at developmental risk, but also to the partner, which might experience helplessness toward being a caregiver and related to his own mental difficulties.

### **Brief Oral Presentations BOP09 - PREGNANCY EXPERIENCE AND THE BABY**

BOP09.1

#### **EXPERIENCES OF WOMEN AT RISK FOR PRETERM BIRTH ON INTERACTIVE ULTRASOUND EXAMINATION**

**Ahqvist--Bjorkroth S.\*, Niela--Vilen H., Pulliainen H., Ekholm E.**

*Universtiy of Turku ~ Turku ~ Finland*

Pregnant women who are at risk for preterm birth are often stressed and anxious and depressed because of worries and fears related to the health of the unborn baby, their own health and about the uncertain future. Only a few studies have assessed on the types of psychological support that would relieve these stress symptoms among women with high-risk pregnancies. The aim of this study was to describe 1) how women at risk of preterm birth experienced an interactive ultrasound examination, during which the mother, sonographer and psychologist observe the baby together, and 2) their need for psychological support during the antenatal period. Women with singleton pregnancy in 26-32 gestational weeks who are hospitalized and at risk for preterm birth are included in the study. The ultrasound examination is done with 4D-ultrasound and includes the joint observation of the baby based on the mother's wishes. After the examination, the experiences of the women are explored with a semi-structured interview. The data are analyzed using inductive thematic analysis. Data collection is ongoing. The estimated sample size is 15 pregnant women. Preliminary results showed that the women experienced the interactive ultrasound examination positive. The women appreciated that the baby was considered as an individual person, not just an object to be measured. The women reported that seeing baby and watching her/his activities relieved their concerns. The women enjoyed that the staff was genuinely present during the examination and were interested in the woman's own thoughts and feelings. The need for additional psychological support varied depending on individual situation. It seems that interactive ultrasound examination made the unborn child more real for the women and assured the women about their babies' well-being in the uterus, despite the risk for the preterm birth.

BOP09.2

**CONNECTING WHILE EXPECTING: PRENATAL ULTRASOUND AS A COMPONENT OF PARENTAL-FETAL BONDING**

**Walsh T.\***

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A prenatal ultrasound is both a medical and relational experience. Conducted for diagnostic purposes, routine screens may also contribute to the developing maternal-fetal and paternal-fetal bonds. The ultrasound is an understudied component of the bonding process. Through structured observation of routine prenatal ultrasounds, I aimed to explore how the participation of mothers, fathers, and the sonographers who conduct ultrasounds may contribute to mothers' and fathers' prenatal expectations of their future child and the relationship they will share with their child. Routine prenatal ultrasounds of 26 women recruited through prenatal care were observed in a structured fashion, using an adaptation of the "Observation of Routine Screen Form" (Boukydis et al., 2006). The adapted form was used to record information including the number and nature of questions asked and comments made by the sonographer, the mother, and the father (when present) regarding the fetus' behavior or appearance. A thematic analysis was conducted, drawing on principles of grounded theory. During the ultrasound, mothers and fathers frequently looked for resemblance to themselves in fetal appearance and behavior, and openly discussed their hopes, fears, and expectations for their child. Sonographers varied widely in their approach, sometimes supporting bonding by joining with parents in seeking connections and imagining the future child, other times focusing exclusively on the clinical aspect of the ultrasound. Parents perceive the ultrasound as an important moment for meeting and connecting with their baby, as well as medical testing. Through their language and demeanor, sonographers may amplify or suppress the relational aspect of the experience. Given the importance of the parental-fetal bond for subsequent bonding and parental behavior before and after birth, sonographers and other prenatal care providers should receive training in supporting early relationship development.

BOP09.3

**VALIDATION AND USE OF PASS TEST (PERINATAL ANXIETY SCREENING SCALE) BY S.SOMERVILLE, 2014 FOR THE PSA RATING (PREGNANCY SPECIFIC ANXIETY)**

**Toppi V.\*, Giordano V.**

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Recent studies show that pregnancy is a high risk period for the onset of affective disorders and it has been demonstrated that women with an anxiety symptomatology during the gestational period have a three times higher risk to develop a depressive disorder. Extensive literature show that anxious disorders, during the pregnancy, if not recognized and treated, can have very serious consequences, both for the mother and for the baby. Therefore an accurate screening for perinatal anxiety can reduce the risks related to a disorder to be able to condition the present and future mother and child personality. Our aim was to choose a test able to identify the perinatal anxiety and to add this to a test battery already validated in Italian to explore its validity. The other tests used are the EPDS (Edinburgh Postnatal Depression Scale) of Cox et al., specific for depressive symptomatology, and the HAM-A (Hamilton Anxiety Rating Scale) of Hamilton A., which analyzes anxiety and its modifications after treatments. This battery was given during pregnancy (5° gestational month) and the second day after the baby birth. From the first specimen observations the variables which have a statistical significance are to be parous, in the antenatal screening, while in the post partum the highest scores were found to be borne by women with a low level of education and moms who had a baby with a low birth weight. These first evidences put us in the

condition to orient ourselves to an assessment and, if necessary, taking charge of the woman already during the gestational age to ensure a proper accompaniment until birth, discriminating more complete aspects regarding the personality structure and the presence of any clinical vulnerability for managing the event on multiple levels.

BOP09.4

#### **MOTHER'S RELATIONSHIP TO THE CHILD AT PRENATAL AND POSTNATAL PERIODS AND THE INFANT'S MENTAL DEVELOPMENT**

**Savenysheva S.\*, Chizhova V., Furman A., Savina E.**

*Saint-Petersburg State University ~ Saint-Petersburg ~ Russian Federation*

Many scientists have shown that the emotional state of pregnant woman influence on child development. But there is a lack of information on the woman's relationship to the pregnancy and fetus on subsequent infant development. Measures in the prenatal period: Pregnant woman attitude test, Projective technique "Figures", Questionnaire "Parental attitude research instrument". Measures in the postnatal period: Questionnaire of child-parent emotional interaction; Projective method "Drawing the family"; Observation of the mother-child interaction (HOME); technique for diagnosing the infant's mental development. Analysis of the influence of the women's relationship to the pregnancy and fetus showed that the infant mental development is affected by the ignoring type of attitude towards pregnancy and fetus. We also found that the type of attitude to pregnancy and child and emotional contact to the fetus on the indicators of infant mental development. Study of the associations of mother's interaction and relation to the infant with infant development showed that the closest links are with the acceptance of the child, emotional contact with him, and such indicators of interaction as parental attention, emotional and verbal sensitivity. Also we found that the relationship to the infant is more closely related to the infant's mental development than the relationship to the fetus. The infant's mental development is related to the mother's relationship to him/her during pregnancy, but the mother's emotional relationship and the features of her interaction with the infant have a stronger impact on the infant development. Research was supported by grant RHSF № 16-06-00392

BOP09.5

#### **THE EFFECTS OF EARLY LIFE STRESSORS ON PSYCHOPATHOLOGY: THE CASE OF A PRETERM BIRTH**

**Dimitrova N.\*<sup>[1]</sup>, Urban S.<sup>[1]</sup>, Turpin H.<sup>[1]</sup>, Ansermet F.<sup>[2]</sup>, Borghini A.<sup>[1]</sup>, Morisod--Harari M.<sup>[1]</sup>, Muller--Nix C.<sup>[1]</sup>**

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Few studies have examined the deleterious impact of maternal post-traumatic stress disorder (PTSD) symptoms related to a preterm-delivery on child and maternal psychological functioning; and no study have investigated this question using a longitudinal design. Studying preterm-related PTSD symptoms is important given that 1/10 children is born preterm (<37 weeks of gestational age) and that the proportion tends to increase (Hornman et al., 2016). In this study, we asked how variability in maternal preterm-related PTSD symptoms influences variability in child and maternal psychopathological long-term outcomes. To examine this question, 56 preterm-born children and their mothers participated in a 9-year-long study. According to scores on the Perinatal PTSD Questionnaire (PPQ) administered to mothers at 12 months of corrected child age, participants were divided into lower (n=32) vs. upper maternal PTSD symptoms quartiles (n=24). Child psychopathological outcome was measured at age 9 years with Child Behavior Checklist (CBCL) along with Conners Rating Scale for assessment of attention-deficit/hyperactivity disorder. Maternal symptoms were assessed with the Beck Depression Inventory (BDI) and with the State-

Trait Anxiety Inventory (STAI). Results indicate that children of mothers with more PTSD symptoms (i.e., upper PPQ quartile) scored tendentially higher on the CBCL total score,  $t(54)=-1.88$ ,  $p=.06$ , and significantly higher on the learning problems subscale of the Conners,  $t(52)=-2.19$ ,  $p=.032$ , compared to children of mothers with fewer PTSD symptoms. Additionally, mothers with high PTSD scores at 12 months scored significantly higher on the BDI,  $t(52)=-2.99$ ,  $p=.004$ , and the STAI (both for state and trait anxiety,  $ps<.05$ ) than mothers with low PTSD scores. The present findings indicate that perinatal maternal PTSD symptoms related to a preterm-delivery negatively impact long-term psychopathology both in children and their mothers. In an effort to unravel the predictors of different phenotypes, our next step aims to investigate how preterm-related PTSD influences physiological regulation of stress measured via cortisol.

BOP09.6

### **MOTOR DISABILITY, RARE DISEASES AND MOTHERHOOD: A LONGITUDINAL STUDY**

**Viaux--Savelon S.\*<sup>[1]</sup>, Candilis--Huisman D.<sup>[2]</sup>, Becerra L.<sup>[2]</sup>, Dommergues M.<sup>[1]</sup>**

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About 10% of women in age of procreating are living with a handicap that hinders their everyday life. These women have the same legitimacy of having a child than any women, but they have to face the negative reactions of their relatives or from healthcare professionals. The specific data concerning parenthood of women suffering from rare diseases with motor impairment are rare. The goal of our study was to describe access to parenthood in women suffering from rare motor diseases and to compare them to women with a frequent motor impairment. We conducted an observational longitudinal study of mother suffering of motor rare or not rare disability and their child recruited in 2 clinical centers. One hundred fifteen pregnant women with motor disability were eligibles, 29 were included within 16 with rare motor disability. We followed them during 3 times: inclusion, child's 3 and 12 months. Socio demographic and obstetrical data, history of accession to parenthood, precarity level (EPICES), autonomy (Barthel), anxiety status (STAI), depression status (EPDS), social support (Cutrona) were collected. Child developmental level was assessed at 3 and 12 months with the Brunet Lezine test and parent child interaction using CIB and interaction level by PIRGAS. Somatic complications often affected these mothers during pregnancy, delivery or post partum (breath complications, aggravation of motor disability...). Our population was characterized by low precarity level (EPICES  $m=20$ ), medium anxiety (STAI  $m=43$ ), medium depression (EPDS  $m=8$ ) comparable in the both group with relative autonomy (Barthel  $m=78$ ). They describe a good level of social support (Cutrona  $m=79$ ). The baby development is good and the interaction slightly trouble. Women with motor disability, rare or not, can access to parenthood with good abilities to help their child to develop. They need ergonomic adaptation and intensive and specific health care during perinatal period.

### **Workshop WS23 - FROM THE YOUNG CHILD CLINICAL DISORDER (DC: 0-5TM , AXIS I) TO THE ENVIRONMENTAL CAREGIVING (DC: 0-5TM , AXIS II, PART B) IN THE CONTEXT OF FAMILY THERAPY MULTIGENERATIONAL APPROACH**

**Andolfi M.<sup>[1]</sup>, Mascellani A.\*<sup>[1]</sup>, Mazzoni S.<sup>[2]</sup>, Parigi S.<sup>[1]</sup>**

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The DC: 0-5TM influences the clinicians to connect the disorder in the child to the specific disorder of a relationship and to the problems in the caregiving environment (AXIS II, Part B). Family

Psychotherapy (Andolfi, 2010) shares with Developmental Psychopathology (Davies, Cicchetti, 2004) many assumptions and the possibility of a coherent evaluation and psychotherapy process. The aim of the workshop is to propose an example case study of a 4-year-old girl with an aggressive - hostile relationship with her parents. Her behaviour is linked to an obsessive-compulsive clinical disorder. The case study shows a diagnostic process that considers different levels of observation: child's characteristics, characteristics of parenting and co-parenting and multi-generation family environment. A multifactorial evaluation process shows the balance between risk and protective factors considering the child, the parenting and co-parenting and the family stories. After having completed these proceedings, a therapeutic process is presented. By working in three distinct phases, it is possible to interact with parents by supporting them in the strategies of managing the symptomatology of their child and then gradually discover multigenerational family stories that result coherent, both in terms of meaning and function, with the disorder presented through the request for therapeutic aid. The case demonstrates the possibility of partial remission of clinical disorder through a first phase of structural work focused on Caregiving Role Allocation (Minuchin, 1974; DC:0-5TM, 2016). A complete remission of the disorder has been found after the multigenerational clinical work, involving parents and grandmother. DC:0-5TM helps clinicians to attend the diagnostic task keeping in mind the interaction between risk and protective factors in a broad context of family relationships (Cummings, Davies, Campbell, 2000). Multigenerational family therapy can be considered coherent with this diagnostic method.

#### **Workshop WS24 - LISTEN AND LEAD: INCORPORATING THE YOUNG CHILD'S PERSPECTIVE TO PROMOTE PARENTAL ENGAGEMENT AND REFLECTION IN FAMILY THERAPY**

**Dealy J.\*, Robinson J., Parent D.**

*University of Connecticut ~ Storrs ~ United States of America*

The workshop aims to inform participants about a clinical framework that enables practitioners to assess and integrate young children's inner experiences into clinical interventions with parents and families. Workshop participants will learn about how feedback sessions can be used to promote parental engagement and reflection about how to better support their young child. This workshop will present on a clinical intervention, Listen and Lead, that provides a framework for integrating the young child's voice into treatment with parents and families. Listen and Lead is a two part intervention that includes assessment sessions and a feedback session for parents. Listen and Lead uses narrative tasks (McArthur Story Stem Battery; Bretherton & Oppenheim, 2003) that enable practitioners to gain insight on young children's inner worlds. The semi-structured feedback session is designed to promote parental reflection, problem solving, engagement, and emotional attunement with their child. In the workshop, we will provide an overview of the features of children's story-telling that are relevant for clinical settings. Presenters will illustrate how children's narrative responses can inform treatment planning. We will guide practitioners on how to deliver narrative findings to parents through a collaborative and strengths-based approach. Presenters will discuss strategies to address potential intervention barriers (e.g., parental resistance). The workshop will conclude with a clinical case presentation that illustrates Listen and Lead potential benefits and clinical utility.

#### **Workshop WS28 - INTEGRATING PARENTING MANAGEMENT TRAINING, OREGON (PMTO) INTO AN IMH TREATMENT APPROACH TO EMPOWER AND STRENGTHEN YOUNG CHILDREN (AGES 3 TO 5) AND THEIR FAMILIES**

**Farley J.\*<sup>[1]</sup>, Threadgould M.<sup>[2]</sup>, Hathaway S.<sup>[3]</sup>**

<sup>[1]</sup>Eastern Michigan University ~ Ypsilanti, Michigan ~ United States of America, <sup>[2]</sup>Clinton, Eaton and Ingham County CMH Authority ~ Lansing, Michigan ~ United States of America, <sup>[3]</sup>Starfish Family Services ~ Inkster, Michigan ~ United States of America

Parent Management Training Oregon Model (PMTO) is an evidenced-based parenting intervention (Forehand et al., 2014) that celebrates the expertise of parents and lends clinical guidance and coaching to promote positive parenting practices and optimal social and emotional development. Rooted in social interaction learning model, clinicians tailor active teaching and coaching skills to help families learn emotional regulation, parent-child communication and core parenting skills (encouragement, limit setting, positive involvement, monitoring and problem solving). PMTO efficacy with young children has been demonstrated across a diverse range of contexts, cultures and formats (Forgatch & Kjobli, 2016). Results indicate reductions in problematic behaviors, improved emotional and social skills (Akin et al., 2017/2016) and emotional regulation of parents (Brockman et al., 2016; Gewirtz et al., 2011). Integrating PMTO within an IMH setting increases the scope of parenting interventions with high-risk families. Similar to IMH interventions, PMTO services are strength-based and the clinician-parent relationship models and supports the parents becoming change agents for their family. Additionally, reflective practice is embedded in PMTO and implemented with parents and clinicians to promote self-awareness and overall model fidelity. This workshop will examine the PMTO model, its structure and efficacy across cultures and contexts, and how to integrate PMTO while maintaining fidelity to the IMH treatment approach. It will also facilitate the experiential learning of a core PMTO clinical strategy aimed to empower parents and explore the use of reflective practice to improve model fidelity and clinical ability to meet the ever-changing needs of the families we serve.

#### **Workshop WS29 - REFLECTIVE TECHNICAL ASSISTANCE: RELATIONSHIP – BASED PRIMARY CARE PRACTICE TRANSFORMATION IN EARLY CHILDHOOD SYSTEMS**

**Talmi A. \*, Buchholz M., Burnett B.**

*University of Colorado and Children's Hospital Colorado ~ Denver ~ United States of America*

This session will describe a reflective, relationship-based approach to providing technical assistance and support to communities and primary care clinics interested in implementing integrated early childhood behavioral health strategies (ECBH) in primary care. Practice transformation strategies will be described including opportunities and barriers to successful expansion of early childhood integrated behavioral health. Pediatric primary care is an optimal setting to engage with very young children and their families. Primary care is intended to be preventative in nature, with ample opportunity to promote health from a family-centered, culturally responsive, and community-connected framework. Infant/early childhood behavioral health providers integrated into this setting are uniquely positioned to enhance primary care by supporting relationships and providing developmental guidance in order to maximize young children's health and well-being. Implementing integrated early childhood behavioral health (ECBH) strategies in primary care settings is fraught with challenges and barriers including operational, workforce, and sustainability issues. Despite these challenges, there has been significant momentum and investment from private and public interests to support ECBH strategies. Examples of such investments and how to leverage them will be provided during this session. This session will describe the reflective, relationship-based strategies used to provide technical assistance, facilitate practice transformation, and support primary care practices, communities, and partner agencies in successfully implementing integrated ECBH strategies. Opportunities and challenges will be discussed using case studies. Participants will be encouraged to develop action plans to implement these strategies in their own communities.

**MONDAY MAY 28, 2018**

**09:00-10:15 Plenary Lecture**

**Effects of prenatal stress on child brain development -implications for later health**

*Hasse Karlsson (Finland)*

Accumulating evidence shows that exposure to early life stress (ELS) sets in motion trajectories by influencing the psychobiological programming of the developing brain with negative health consequences persisting to adulthood. Prenatal stress (PS), such as maternal anxiety and depression during the pregnancy, reportedly also affects fetal central nervous system via different biological pathways. Exposure to PS is related to altered development of important regulatory functions of child stress reactions, emotional states, and attention as well as elevated risk for some pediatric conditions, such as asthma and obesity. There is also evidence that the brain effects of PS persist into adulthood and increases the offspring risk for depression. However, some of the effects of PS may increase resilience. Thus, the nature and timing of the stress exposure as well as individual vulnerability and resilience factors needs more research. A totally new concept is transgenerational epigenetic inheritance through the male germline which is one mechanism linking paternal early stress experiences with next generation outcomes. In the talk, I will also cover current knowledge on the effects of paternal ELS on next generation infant brain development. We have collected a large pregnancy cohort ([www.finnbrain.fi](http://www.finnbrain.fi)) focusing on the effects of early stress exposure and performed repeated assessments (eg. multimodal brain imaging (MRI, NIRS, EEG), collection of biological samples (eg. blood, faeces, hair, saliva, breast milk), neuropsychological assessments, child-parent interaction, questionnaires) during pregnancy, infancy, and early childhood. The first cohort children turn 6 years in summer 2018 and follow-up of the cohort has been planned to continue for several decades. I will present some main findings of this project in the talk.

**10:45-12:15 General Sessions**

**Symposium S33 - PARENT INFANT PSYCHOTHERAPY UNDER SEVERE CONDITIONS**

**Ludwig--Koerner C.\*, Tuters E.**

*International Psychoanalytic University Berlin ~ Berlin ~ Germany*

Parent-infant psychotherapy is specifically indicated in the instance of parent-infant relationships involving severely disturbed, traumatized parents and/or with very ill and/or premature infants. In the contribution "The need for early psychotherapeutic intervention to address disturbed affect appraisal in dyads impacted by maternal violent traumatization" Daniel Schechter and Sandra Rusconi Serpa (Geneva) present findings from a longitudinal study of children of mothers with and without IPV-PTSD that were first evaluated at ages 1-3.5 years and then again at ages 5-9 years. A manualized psychotherapy for parents with children ages 6 months-4 years, using joint attention to affect appraisal and regulation during stressful interactions via videofeedback exposure with a reflective therapist, namely, the Clinician Assisted Videofeedback Exposure Approach Therapy (CAVEAT), will be presented as one such promising preventive intervention. Janna Mattheß and Christiane Ludwig-Körner (Berlin) give an overview of a randomized research project of "Parent-Infant-Psychotherapy with high-risk mothers in shared living arrangements and facilities". They focus on the difficult research conditions since those mothers show no apparent motivation for treatment. In case reports, reference is made to the various needs of study participants, as well as

the emotional stress on the psychotherapists, social workers and researchers involved. It will be shown how psychotherapy can help to improve the dyad's development. Preliminary results will be presented. Working with sick babies in intensive care requires that the therapist is finely attuned to the baby's subtle communications. Campbell Paul and Frances Salo (Sydney) report about "Infant-Parent Psychotherapy with Very Sick and Premature Babies: Building the Psychotherapeutic Relationship with the Baby." They will present some of the methods useful for psychotherapists so as to engage very sick infants and their parents and will present some research evaluating how psychoanalytic thinking and the NBO can facilitate therapy with a very sick newborn, as illustrated with clinical vignettes.

S33.2

**THE NEED FOR EARLY PSYCHOTHERAPEUTIC INTERVENTION TO ADDRESS DISTURBED AFFECT APPRAISAL IN DYADS IMPACTED BY MATERNAL VIOLENT TRAUMATIZATION**

**Schechter D., Rusconi Serpa S.\***

*Research Unit, Child & Adolescent Psychiatry Service, Hôpitaux Universitaires de Genève (University of Geneva Hospitals) ~ Geneva ~ Switzerland*

Maternal interpersonal violence-related posttraumatic stress disorder (IPV-PTSD) is associated with disturbances of maternal emotion regulation that adversely affect the mother-infant relationship. We present findings from a longitudinal study of children of mothers with and without IPV-PTSD assessed at ages 1-3.5 and 5-9 years.

- 1) Maternal IPV-PTSD, caregiving behavior and child hypervigilance at ages 1-3.5 years are associated with child psychopathology, and perturbed emotion appraisal
- 2) Maternal attributions of the child's capacities to comprehend emotions on the Test of Emotional Comprehension (TEC) is associated with maternal and child performance on an Emotional Face-Matching Task (EFMT).

Thirty-four dyads initially assessed via the CARE-Index were reassessed at school-age (mean age 7.7). Nineteen IPV-PTSD mothers and 15 non-PTSD mothers and their children performed an EFMT and a TEC. Children were psychiatrically assessed (K-SADS). The majority of school-age children of IPV-PTSD mothers (73%) had a diagnosis of separation anxiety disorder, predicted both by maternal symptom severity and early childhood hypervigilance, regardless of whether mother and/or child had been in some form of treatment ( $p < .01$ ). IPV-PTSD mothers and children vs controls demonstrated confusion of fear and anger, correlated to lower child capacity to comprehend a) the role of beliefs and desires on emotions ( $p < .05$ ), and b) the distinction between self-other emotions ( $p < .05$ ). IPV-PTSD mothers attributed to their children 3) more appraisal errors ( $p < .01$ ). Having an IPV-PTSD mother poses a risk to development of emotion regulation by school-age. Specific parent-infant interventions that target emotion appraisal in these high-risk families are needed earlier rather than later. A manualized psychotherapy for parents with children ages 6 months-4 years, using joint attention to impact appraisal and regulation during stressful interactions via videofeedback exposure with a reflective therapist, namely, the Clinician Assisted Videofeedback Exposure Approach Therapy (CAVEAT), will be presented.

S33.3

**PARENT-INFANT-PSYCHOTHERAPY WITH HIGH-RISK MOTHERS IN SHARED LIVING ARRANGEMENTS AND FACILITIES**

**Ludwig--Koerner C., Mattheß J.\***

*International Psychoanalytic University Berlin ~ Berlin ~ Germany*

Psychotherapy of mother/father-child-dyads is an important intervention to prevent maltreatment and negative influence on children's psychological development. This clinical study is exploring the impact on the parent to infant relationship of psychoanalytic Parent-Infant-Psychotherapy (PIP) and focuses explicitly on mothers in shared living arrangements in Germany. There is no empirical evidence about the effectiveness of the social support in German living facilities. As such the focus of this study is to see if there is a need for PIP as an additional offer besides the social/pedagogical support. The aim of PIP is to improve the dyadic relationship, the infant's attachment and the mother's sensitivity by targeting the view of her child, unconscious feelings and representations. This randomized controlled trial investigated the outcome of PIP for parents with mental health problems and their infants (< 7 months) living in shared living arrangements. A total of n= 20 dyads in each group will be included and randomly allocated to PIP or treatment as usual. Outcomes were assessed at baseline, 3-month and 6-month follow-up as well as at 12-month catamnesis. The primary outcome is the maternal sensitivity measured by videotaped dyadic play-interactions. Secondary outcomes are maternal psychopathology, maternal reflective functioning, maternal stress, infant development and infant attachment. The study is at stage of recruiting the sample and assessing baseline and 3-month follow-up. As the study is still ongoing, preliminary results will be available soon. There is a high drop-out rate, as this high-risk population participating in the study, have no therapeutic motivation or intention of being treated. Up to the present, there is a lack of good-quality randomized research investigating the outcomes of PIP and of shared living arrangements in Germany. Given the impact of maternal psychopathology on the development of the child, it is important to support these high-risk mothers and their children.

S33.4

#### **INFANT-PARENT PSYCHOTHERAPY WITH VERY SICK AND PREMATURE BABIES: BUILDING THE PSYCHOTHERAPEUTIC RELATIONSHIP WITH THE BABY**

**Paul C.\*<sup>[2]</sup>, Frances T.<sup>[1]</sup>**

*<sup>[1]</sup>Royal Women's Hospital Melbourne, University of Melbourne ~ Melbourne ~ Australia, <sup>[2]</sup>Associate Prof Campbell Paul, ConsulRoyal Children's Hospital Melbourne and the Royal Women's Hospital, University Melbourne ~ Melbourne ~ Australia*

Working with sick babies in intensive care requires that the therapist is finely attuned to the baby's subtle communications. The baby is a sentient person, and communicates with us in her own right (Trevarthen; Winnicott). Infant parent psychotherapists working with very sick and premature babies must engage with the baby using the baby's own language. The baby's predicament reaches us through the language of her body: through gaze, vocalisation, hand and body movement, and especially through exquisitely timed contingent body responses. (Shae) The very sick baby will struggle with some of these methods of communication, but therapist should remain attuned to the baby. In doing so the therapist can share baby's state with the anxious and distressed parents, to facilitate and otherwise fragile emerging relationship between parent and baby. The Newborn Behavioural Observation (NBO) provides one relationship method which enables the therapist to understand and to reach the infant. Psychoanalytic infant-parent psychotherapy endeavours to understand the underlying hidden conflicts and their defences for parents experiencing trauma and impingements upon earlier key attachment relationships. This paper will present some of the methods for infant-parent psychotherapists to engage very sick babies and their parents and will present some research evaluating how the psychoanalytic thinking and the NBO can facilitate therapy with a very sick newborn. This approach will be illustrated with clinical vignettes. The baby is the primary subject of our intervention within the paediatric or neonatal context.

## **Symposium S36 - WHAT ABOUT THE FATHERS? PATERNAL MENTAL HEALTH WHEN HAVING YOUNG CHILDREN**

**Atzaba--Poria N.\***

*Ben-Gurion University of the Negev ~ Beer-Sheva ~ Israel*

Fathers and mothers may experience anxiety and depressive symptoms following the birth of a child and throughout the first years after birth. Paternal emotional distress may have harmful implications for fathers, mothers, children, and overall family functioning. However, research on paternal mental health is still limited and much remains to be studied. In this symposium, studies from the U.S., Israel, and Australia will be presented and will address three main questions: (1) How do fathers react and adjust to normative family transitions (the arrival of a second born) as well as to unexpected transitions (a preterm birth)? (2) Can paternal depression affect children's development? (3) How can we support fathers and help them reduce their depressive symptoms? These questions are important both for researchers and clinicians. The first study examines paternal (and maternal) anxiety and depressive symptoms following the birth of a preterm infant and demonstrates that fathers are at risk for long-lasting depressive symptoms. The second study takes a family-system theory approach in which different groups of parents based on maternal and paternal depressive symptoms following the birth of a second born will be identified, and the contribution of these symptoms to child behavioral problems will be presented. The importance of family-level patterns of depression for mothers and fathers will be discussed. The third study stresses the need to support new fathers via suitable intervention programs and presents the SMS4dads, which is designed to provide expectant and new fathers support to reduce paternal depression, anxiety, and stress. A randomized controlled trial of this text-based intervention will be presented. Finally, the fourth study gives special attention to links between paternal and maternal depressive symptoms and parent-child synchrony, as well as to child vocabulary and social skills. The symposium will highlight clinical implications and will discuss major points for policy makers.

S36.2

### **ARE FATHERS AT HIGHER RISK FOR ANXIETY AND DEPRESSIVE SYMPTOMS**

**Atzaba--Poria N.\*<sup>[1]</sup>, Gueron--Sela N.<sup>[1]</sup>, Meiri G.<sup>[2]</sup>, Kyla M.<sup>[2]</sup>**

*<sup>[1]</sup>Ben-Gurion university of the Negev ~ Beer-Sheva ~ Israel, <sup>[2]</sup>Soroka Medical Center and Ben-Gurion University of the Negev ~ Israel ~ Israel*

Research suggests that a substantial number of fathers experience anxious and depressive symptoms, particularly during the child-rearing years. A preterm infant may put fathers at higher risk for emotional distress. The birth of a preterm infant was viewed as an emotionally traumatizing crisis for parents, raising feelings of anxiety and depression, which were related to parents' feelings of loss of control and inhibited trust in their child, their own future, and their role as competent parents. However, most research has focused on mothers and not much is known about the paternal experience overtime. To examine paternal (and maternal) anxiety and depressive symptoms following the birth of a preterm infant and to examine continuity and change in these symptoms overtime. Sample included 110 mothers and fathers of full-term infants (gestational age  $\geq 37$  weeks) and 110 mothers and fathers of preterm infants (gestational age 28-33 weeks). Families participated in a longitudinal study of preterm infants (at birth and 6 months' post partum). Parents completed questionnaires reporting their anxiety and depressive symptoms at each time point. Results: Fathers and mothers of preterm infants experienced higher levels of anxiety,  $t(99)=-3.85$ ,  $p<.001$ ;  $t(128)=-6.53$ ,  $p<.001$ , and depressive symptoms,  $t(100)=-3.66$ ,  $p<.001$ ;  $t(128)=-5.92$ ,  $p<.001$ , respectively, than parents of full-term infants. When infants were 6 months old, parents of preterm infants did not report higher levels of anxiety symptoms in comparison to parents with full-

term infants. Maternal reports of depressive symptoms were no different between mothers of preterm and full-term infants; however, fathers of preterm infants reported having significantly more depressive symptoms than fathers of full-term infants,  $t(120)=-2.39$ ,  $p<.05$ . These findings highlight the fact that a preterm birth puts fathers at risk for experiencing negative emotions; the results stress the need to study the long-term emotional distress (particularly depression) of these fathers.

S36.3

### **MATERNAL AND PATERNAL TRAJECTORIES OF DEPRESSION PREDICT FAMILY RISKS AND CHILDREN'S EMOTIONAL AND BEHAVIORAL PROBLEMS AFTER THE BIRTH OF A SIBLING**

**Volling B.\*<sup>[1]</sup>, Yu T.<sup>[2]</sup>, Gonzalez R.<sup>[1]</sup>, Stevenson M.<sup>[1]</sup>, Thomason E.<sup>[1]</sup>**

<sup>[1]</sup>University of Michigan ~ Michigan ~ United States of America, <sup>[2]</sup>University of Georgia ~ United States of America ~ United States of America

Maternal and paternal depression have adverse consequences for child development, particularly in the postpartum period. Studies often examine the effects of maternal and paternal depression separately rather than taking a family systems perspective. We examined the developmental transition after the birth of a second child and whether children's externalizing and internalizing behavior problems were related to maternal and paternal depression in families with none, one, or two depressed parents. We also examined family risk factors that covaried with the family-level depression trajectories. There were three specific aims: (1) to identify different groups of parents based on maternal and paternal depressive symptoms; (2) do family-level trajectories of maternal and paternal depression predict children's behavior problems; and (3) do family risks covary with depression trajectories. Our sample included  $n=225$  families participating in a longitudinal investigation of following the birth of a second child (prenatal, 1, 4, 8 and 12 months postpartum). Parents completed the Beck Depression Inventory, reports of marital relationship quality, parenting stress and child behavior problems at each timepoint. Growth Mixture Modeling (GMM) identified four classes of mothers and fathers: (1) mother and father low in depressive symptoms ( $n = 94$ , 41%); (2) mother high-father low ( $n = 58$ , 25%); (3) father high-mother low ( $n = 57$ , 24.7%); and (4) both mother and father high in depressive symptoms ( $n = 22$ , 9.5%). Multi-group latent growth models revealed that changes in children's behavior problems, marital quality and parenting stress covaried with the trajectory depression groups, with two-parent depressed families having higher child behavior problems, marital difficulties and parenting stress than families with one or no depressed parents. Findings support a focus on family-level patterns of depression for mothers and fathers, and the risky family dynamics that contribute to children's maladjustment after the birth of a sibling.

S36.4

### **SMS4DADS – A TEXT-BASED PROGRAM ADDRESSING THE MENTAL HEALTH OF NEW FATHERS: A RANDOMISED CONTROLLED TRIAL**

**Fletcher R.\*<sup>[1]</sup>, May C.<sup>[1]</sup>, Attiaa J.<sup>[2]</sup>, Garfield C.<sup>[3]</sup>**

<sup>[1]</sup>University of Newcastle ~ Newcastle ~ Australia, <sup>[2]</sup>University of Newcastle and Hunter Medical Research Institute ~ ~ Australia, <sup>[3]</sup>Northwestern University Feinberg ~ Chicago ~ United States of America

Almost 10% of fathers experience Paternal Perinatal Depression which can be detrimental to child development and family functioning. However, addressing new fathers' mental health needs requires overcoming their isolation from health services and their reluctance to seek help. Providing expectant and new fathers with support, information, and links to relevant online services via their

mobile phones during the transition to fatherhood may be an ideal use of a texting intervention. Participants were recruited through social and mainstream media and through healthcare providers if their partner was at least 16 weeks pregnant or had an infant <3 months old. A total of 722 fathers were randomized to SMS4dads, a series of evidence-based, relationship-focused SMS messages for fathers, or control SMS4health containing general health messages. Primary outcome measures include anxiety, depression, and stress scores (DASS 21). Data collection occurred at enrolment (baseline), and is underway at 24-weeks after recruitment. Linear mixed models capable of handling multiple measures as well as missing data will be used to analyse each outcome. Recruitment occurred from October 2016 to September 2017. Follow-up data collection will be completed March 2018 with results analysed in April 2018. This study will be the first perinatal trial to assess the efficacy of direct text support for men during their transition to fatherhood. This presentation will describe the SMS4dads intervention and report on the results of the analysis with regards to depression, anxiety and stress.

S36.5

### **FATHER AND MOTHER DEPRESSION AND TODDLERS' SOCIAL SKILLS: THE MEDIATING ROLE OF DYADIC SYNCHRONY**

**Hennigar A.\*, Cabrera N.**

*University of Maryland ~ Maryland ~ United States of America*

Parental depression is adversely linked to children's wellbeing because it reduces parental sensitivity (Field, 2010). However, this literature remains limited. First, it mostly focuses on maternal depression (Costa et al., 2017). Second, it has not examined how parental depression affects the goodness of fit among parent-child dyads, which is a better indicator of the parent-child relationship because it includes children's response to parents' behaviors (Shanahan & Sobolewski, 2003). Research with middle-class families has shown that mother-child synchrony (i.e. mutual engagement), a measure of goodness of fit, is related to children's language and self-regulation skills (Lindsey et al., 2009). This raises the question of whether depression also disrupts dyadic interactions among low-income mothers, but also fathers. In this study, we address this gap. Guided by the bioecological model, we ask: (1) Are parental depressive symptoms associated with children's vocabulary and social skills? (2) Are parental depressive symptoms associated with mother- and father-child synchrony? (3) Is dyadic synchrony related to children's vocabulary and social skills? and (4) Does dyadic synchrony and parental involvement mediate these associations? Method: Our sample includes n=52 low-income co-resident families participating in a literacy intervention. Parents and children were videotaped during a play interaction, which will be coded for dyadic synchrony. Children completed the PLS-4 language assessment and parents completed surveys on various topics including depressive symptoms, stress, and parenting practices. Results: Data from another sample, representative of Early Head Start children, demonstrated negative associations between depression, dyadic synchrony ( $r=.164, p<.01$ ), toddlers' language ( $r=.137, p<.01$ ) and social skills ( $r=.137, p<.01$ ). Positive associations were found between dyadic synchrony and language ( $r=.33, p<.01$ ) and social skills ( $r=.17, p<.01$ ). We seek to further understand these relationships using a similar sample. This research extends the literature on dyadic synchrony by showing variability among low-income families and its potential contribution to children's social development.

## **Symposium S30 - MATERNAL STRESS AND CHILD DEVELOPMENT: IDENTIFYING BIOLOGICAL, SOCIAL, AND PSYCHOLOGICAL MECHANISMS OF RISK AND RESILIENCE**

**Racine N.\***

*University of Calgary ~ Calgary ~ Canada*

It is well established that maternal stress, both in the prenatal and postpartum period, is a risk factor for poor child development. Recently, there has been shifting interest in identifying factors that mitigate the transmission of these risks. The current symposium will explore prenatal and postnatal maternal stress as determinants of early child development outcomes with an emphasis on resilience factors that may play a role in buffering these detrimental effects. Researchers from three different countries, all of whom use innovative methodologies, will explore the latest science on the biological, social, and psychological mechanisms that may alter the developmental trajectories of children at risk of exposure to maternal stress. The first paper addresses the biological mechanisms by which maternal adversity in childhood conveys risk on infant brain development in the perinatal period. This paper will set up the symposium by establishing a rationale and evidence for intervening to reduce maternal stress both prior to and during pregnancy. The next three papers explore factors in the social, biological, and psychological realms that may support resilience against the negative effects of pre- and postnatal maternal stress. In a prospective cohort of nearly 2000 pregnant women, the second paper explores patterns of maternal social support and stress as predictors of child development in infancy, demonstrating that women with low levels of stress and high levels of social support in pregnancy have infants with the most optimal development. Next, in a longitudinal cohort from pregnancy to 6 years of age, pharmacological intervention in pregnancy is identified as a buffer against the negative cognitive sequelae associated with maternal depression. This paper makes a strong case for intervention for depression in the pre- and postpartum periods. The last paper explores maternal mindfulness in pregnancy as a protective factor for the transmission of maternal anxiety in pregnancy on subsequent vulnerability to anxiety. Taken together, these four papers will provide a comprehensive presentation of the “nature” and “nurture” influences of maternal stress in the pre- and postpartum periods as well as innovative avenues for intervention. Implications for future research and clinical practice will be discussed.

S30.2

### **INTRAUTERINE MECHANISMS UNDERLYING THE INTERGENERATIONAL TRANSMISSION OF MATERNAL CHILDHOOD MALTREATMENT**

**Buss C.\*<sup>[1]</sup>, Moog N.<sup>[1]</sup>, Entringer S.<sup>[1]</sup>, Rasmussen J.<sup>[2]</sup>, Graham A.<sup>[3]</sup>, Styner M.<sup>[4]</sup>, Gilmore J.<sup>[4]</sup>, Fair D.<sup>[3]</sup>, Heim C.<sup>[1]</sup>, Wadhwa P.<sup>[2]</sup>**

<sup>[1]</sup>*Institute of Medical Psychology, Charité Universitätsmedizin Berlin, Germany ~ Berlin ~ Germany,*

<sup>[2]</sup>*University of California, Irvine ~ Irvine ~ United States of America,*

<sup>[3]</sup>*Oregon Health & Science University, Portland, Oregon. ~ Portland ~ United States of America,* <sup>[4]</sup>*University of North Carolina, Chapel Hill ~ Chapel Hill ~ United States of America*

Exposure to childhood maltreatment (CM) has long-term health consequences and growing evidence suggests some of the effects may be transmitted across generations. Children of mothers exposed to maltreatment during their own childhood have an increased risk of developing neuropsychiatric and neurodevelopmental disease. We sought to provide evidence that the transmission of such maternal preconceptional stressful experiences may occur during the sensitive period of fetal development and that maternal CM-associated alterations in maternal-placental-fetal stress biology may play a role in this transmission. Data from a prospective longitudinal study of ~100 mother-fetus/child dyads will be presented. Mothers were recruited in the first trimester of pregnancy and studied serially in the 2nd and 3rd trimester of pregnancy and their offspring were

followed up with magnetic resonance imaging shortly after birth. Maternal CM experiences were assessed with the Childhood Trauma Questionnaire. We found reduced brain volumes in offspring of mothers exposed to maltreatment during their own childhood shortly after birth, i.e. a developmental time point when postnatal influences cannot yet have exerted an influence. Furthermore, evidence for alterations in maternal-placental-fetal stress biology in association with maternal CM and evidence for such biological alterations having the potential to alter fetal brain development point to intrauterine pathways of transmitting maternal CM experience to her offspring. The results have implications for planning interventions aimed at breaking the vicious cycle of intergenerational transmission of CM and suggest that these should start as early as during intrauterine life.

### **S30.3**

#### **MATERNAL STRESS AND SOCIAL SUPPORT PROFILES IN PREGNANCY: ASSOCIATIONS WITH EARLY CHILD DEVELOPMENT OUTCOMES**

**Racine N.\*<sup>[1]</sup>, Madigan S.<sup>[1]</sup>, Plamondon A.<sup>[2]</sup>, Cooke J.<sup>[1]</sup>, McDonald S.<sup>[1]</sup>, Tough S.<sup>[1]</sup>**

*<sup>[1]</sup>University of Calgary ~ Calgary ~ Canada, <sup>[2]</sup>Universite Laval ~ Quebec ~ Canada*

Maternal stress in pregnancy and the postpartum are associated with poorer developmental outcomes in infants and young children. Social support in pregnancy has the potential to buffer these effects, however limited research has investigated the influence of social support in pregnancy in combination with prenatal stress on child development outcomes. Maternal profiles of social support and prenatal stress in pregnancy were identified. Maternal adverse childhood experiences were examined as antecedents of these profiles and child development outcomes were investigated as sequelae. Participants were 1,994 women (mean age = 30.87 yrs) and their infant who were recruited in pregnancy as part of a prospective longitudinal cohort from 2008 to 2011. Pregnant women completed self-report questionnaires in pregnancy related to perceived stress and social support across four subscales (tangible support, affective support, interaction support, and emotional support). Mothers completed child development questionnaires when their infants were 12-months of age. Profiles of maternal prenatal stress and social support were identified during pregnancy controlling for household income, maternal education, and maternal age. These profiles were subsequently used to predict child development outcomes at 12 months of age. A latent profile analysis yielded three distinct pregnancy stress-support profiles: low stress and high social support (69.3%), moderate stress and high social support (25.8%), and high stress and low social support (4.9%). Maternal exposure to physical/emotional abuse in childhood predicted increased risk of belonging in the high stress-low support group. Mothers in the high stress-low support group were however less likely to have experience family dysfunction than women in the moderate stress-high support group. Children in the low-stress-high support group had the highest developmental scores at 12-months of age. The present findings suggest that maternal adversity in childhood influences the level of stress and types of supports mothers are able to access while they are pregnant. Furthermore, mothers who experience higher stress and lower support have infants who are particularly at risk for poor developmental outcomes.

### **S30.4**

#### **HABITUATION AT 6 MONTHS IN INFANTS EXPOSED TO MATERNAL DEPRESSION AND SRI ANTIDEPRESSANTS IS ASSOCIATED WITH EXECUTIVE FUNCTIONS AT 6 YEARS**

**Weikum W.<sup>[1]</sup>, Brain U.<sup>[1]</sup>, Werker J.<sup>[2]</sup>, Hensch T.<sup>[3]</sup>, Mayes L.<sup>[4]</sup>, Grunau R.<sup>[1]</sup>, Diamond A.<sup>[2]</sup>, Oberlander T.\*<sup>[1]</sup>**

<sup>[1]</sup>BC Children's Hospital Research Institute, University of British Columbia ~ Vancouver ~ Canada, <sup>[2]</sup>University of British Columbia ~ Vancouver ~ Canada, <sup>[3]</sup>Harvard University ~ Cambridge ~ United States of America, <sup>[4]</sup>Yale University ~ New Haven ~ United States of America

Serotonin reuptake inhibitor (SRI) antidepressants are frequently used to treat maternal depression during pregnancy with the expectation of improved maternal mood and infant/child cognitive development. We investigated whether exposure to pre- and postnatal maternal depression with or without SRIs influences information processing (habituation/novelty response) in 6-month-old infants and whether this is associated with self-control, working memory and cognitive flexibility (executive functions, EFs) at 6 years. Habituation/novelty response to visual and auditory stimuli was examined in 6-month-olds of mothers who were prenatally treated with SRIs and non-SRI treated with varying levels of depression. Maternal mood was assessed (Hamilton Depression Scale) during the 3rd trimester, at 6 mo and at 6 years. When the children were 6 years (M=5.9 SD=0.6) (SRI-exposed N=34; non-SRI-exposed N=55) their EFs were assessed using the Hearts & Flowers task (H&F). Shorter habituation lengths on both visual and auditory tasks at 6 months were associated with greater maternal depressed mood, but only in infants whose mothers were not prenatally treated with an SRI. Moreover, quicker habituation at 6 months was associated with a steeper decline in performance (% correct) with increasing difficulty across the three blocks of the H&F task. Poorest EF performance in the most difficult block was associated with greater maternal depressed mood at 6 months, but again only if the mother had not been treated with an SRI during pregnancy. Maternal postnatal depressed mood was associated with shorter habituation rates at 6-months, and both were associated with poorer EF performance at 6 years. This association was not found in children with prenatal SRI exposure, suggesting that prenatal SRI treatment may 'buffer' infants from the effects of maternal depression at 6 months and this has a sustained effect on cognition at 6 years.

S30.5

### **PRENATAL ANTIDEPRESSANT EXPOSURE AND CHILD DEVELOPMENT AT KINDERGARTEN AGE: A POPULATION-BASED STUDY**

**Park M.\*, Hanley Gillian E., Guhn M., Oberlander T.**

*University of British Columbia ~ Vancouver ~ Canada*

Importance: Prenatal antidepressant exposure has been associated with adverse child development. However, studies to-date have shown mixed results that could reflect incomplete control of confounding. Objective: To determine associations between prenatal antidepressant exposure and child development. Design, Setting, Participants: Population-based retrospective cohort study using administrative data on mothers and children from British Columbia, Canada (n = 94,712). Exposure: Prenatal antidepressant exposure was defined as 2+ dispensations during pregnancy, or 1+ dispensations from the 2nd trimester of pregnancy until delivery. Main Outcomes and Measures: Child development was assessed using the teacher-reported Early Development Instrument at kindergarten. Vulnerability in physical health (readiness for school, independence, motor skills), emotional maturity (anxious, aggressive, and hyperactive behaviors), social competence (overall, respect, learning, readiness to explore), cognitive development (basic literacy, advanced literacy, numeracy, interest in literacy/numeracy), and communication skills were investigated. Children prenatally exposed to antidepressants were matched to unexposed children using high-dimensional propensity scores (HDPS), a data-driven method that captures known and unobserved sources of confounding. Children whose mothers had had an antidepressant dispensation in the 90–365 days prior to conception and continued treatment during pregnancy were compared against those whose mothers discontinued antidepressants during pregnancy. A

sensitivity analysis was conducted restricting exposure as having had to include dispensations in the 2nd/3rd trimester. 3.87% (n = 3,611) of children in the overall study cohort were prenatally exposed to antidepressants. In the HDPS-matched cohort, prenatal antidepressant exposure was associated with increased vulnerability in physical independence (OR, 1.14; 95% CI, 1.00 – 1.30), social exploration (OR, 1.64; 95% CI, 1.23 – 2.20), and anxious behaviours (OR, 1.30; 95% CI, 1.01 – 1.66). Children of antidepressant continuers vs. discontinuers had higher anxious behaviours (OR, 1.32; 95% CI, 1.01 – 1.72). Sensitivity analyses also revealed increased vulnerability in physical independence in children of mothers who continued versus discontinued treatment (OR, 1.19; 95% CI, 1.03 – 1.38). Prenatal antidepressant exposure was associated with increased odds of vulnerability in anxious behaviours and physical independence at kindergarten age. These findings likely reflect a combination of effects from drug exposure, underlying maternal illness severity, and genetic propensity.

### **Symposium S39 - A GREAT LEAP FORWARD: INTEGRATING MINDFULNESS INTO IMH SUPERVISION, TRAINING AND CLINICAL PRACTICE WITH FAMILIES EXPERIENCING TRAUMA AND ADVERSITY**

**Shahmoon--Shanok R.\*<sup>[1]</sup>, Clark R.<sup>[2]</sup>, Gilkerson L.<sup>[3]</sup>, Heffron M.C.<sup>[4]</sup>, Tuchman L.<sup>[2]</sup>**

*<sup>[1]</sup>New School for Social Research, Center for Attachment Research ~ New York ~ United States of America, <sup>[2]</sup>University of Wisconsin - Madison ~ Madison WI ~ United States of America, <sup>[3]</sup>Erikson Institute ~ Chicago IL ~ United States of America, <sup>[4]</sup>Children's Hospital of Oakland ~ Oakland CA ~ United States of America*

Mindfulness has been demonstrated to be an effective therapeutic practice for numerous mental health, medical, and addiction conditions in adults and children (Kabat-Zinn and Davidson, 2012). As senior clinicians, supervisors and trainers in infant mental health and reflective supervision, each presenter has been integrating mindfulness practice into our programmatic, clinical, training and/or supervisory work. Using illustrative clinical and supervisory vignettes to show surprising leaps forward in practice with trainees/supervisees who are working with clients living in poverty who have experienced much adversity including past and present trauma, our theoretical, practical, and empirical talks address the query: What are the therapeutic/facilitative actions of mindfulness which create the enhanced effectiveness we see in our IMH work? Our responses draw on research on the relationship between therapist mindfulness and patient outcomes (Padilla, 2010), reflective functioning, mindsight, transitional phenomena, the holding environment and other attachment and psychoanalytic concepts. The awareness, acceptance, nurturance and inquiry of mindfulness, plus its creation of space and the power of practicing and reflecting together in developing insight, relational constancy, self- and mutual-regulation and compassion in trainees, supervisees and clients will be shared, explicated and explored further with session participants in discussion and an exercise.

S39.2

#### **MINDFULNESS PRACTICE AS A TOOL TO SUPPORT COHESIVENESS IN A DIVERSE GROUP**

**Heffron M.C.\***

*Children's Hospital of Oakland ~ Oakland, California ~ United States of America*

Using mindfulness practices to begin 2-hour monthly reflective practice sessions added a calming element for a group of managers and supervisors from diverse class and racial backgrounds serving families experiencing adversity and social inequities. Since introduction of these beginning exercises, and facilitator-initiated mindful pauses, the capacity of the group to work together

effectively has increased. Participants report greater self awareness and increased ability to deploy mindfulness techniques in moments of dysregulation.

S39.3

### **MINDFULNESS: HOLDING FRAME TO BUILD RELATIONAL CONSTANCY**

**Gilkerson L.<sup>[1]</sup>, Heffron M.C.\*<sup>[2]</sup>**

*<sup>[1]</sup>Erikson Institute ~ Chicago IL ~ United States of America, <sup>[2]</sup>Children's Hospital of Oakland ~ Oakland, California ~ United States of America*

Mindfulness involves being fully present to experience without becoming it. This ability to attune to self and other while maintaining a reflective stance is at the heart of infant mental health. For over a decade, Erikson's Fussy Baby Network has used a conceptual framework and practical tool, the FAN (Facilitating Attuned Interactions) which offers a grounding framework to create the kind of safe, holding environment which is needed for trauma-informed work. FAN theory of change is that of attunement defined as an individual's sense of feeling connected and understood. Attunement is a kind of resonance, a form of "being with" that does not attempt to change the other. This ability to be present offers an experience of relational constancy which many persons with trauma histories have not had. To provide a consistent holding frame when hearing painful stories takes conscious development of self-awareness. Mindful Self- Regulation (MSR), an essential component of the FAN, is used before client contact to allow the provider to use a regulating ritual to prepare to be present; MSR during the contact provides a way to monitor and regulate urges, feelings, and judgments in the moment in order to see more clearly, understand more fully and respond. Examples of four common Mindful Self-Regulation strategies will be presented; participants will be engaged in a brief activity to identify MSR strategies, and research findings from home visitors, supervisors, and physicians on the benefits of MSR in their practice with families experiencing stress and trauma will be presented.

S39.4

### **USING MINDFULNESS TO PROTECT SUPERVISEES IMPROVES CLINICAL PRACTICE WITH TRAUMATIZED DYADS IN POVERTY**

**Shahmoon--Shanok R.\***

*New School for Social Research, Center for Attachment Research ~ New York ~ United States of America*

Meditation was introduced within weekly, in-person group supervision for mental health providers with large caseloads who worked entirely with young children and parents in trauma-touched families within urban poverty. Not only did the providers integrate mindful pauses in their daily routines but the narrative also reveals how improvements in the pace, depth and effectiveness of treatment in everyone's cases quickly followed. Mindfulness promotes and primes compassion, a capacity needed by parents to nurture their children. Several vignettes highlighting Ideas about the action of mindfulness within child parent psychotherapy will be described. These stem from psychoanalytic sources, including transitional phenomena, mutual regulation and reflective function and also draw on Siegel's concept of "interpersonal neurobiology".

S39.5

### **INTEGRATION OF MINDFULNESS IN A UNIVERSITY-BASED IMH CERTIFICATE PROGRAM: LONGITUDINAL DATA ON THE RELATIONSHIP OF SUPPORTED AND INDIVIDUAL CONTEMPLATIVE PRACTICE AND REFLECTIVE CAPACITIES**

**Clark R.\*, Tuchman L.**

*University of Wisconsin - Madison ~ Madison WI ~ United States of America*

Parent-Infant/Early Childhood Mental Health work with families living with stresses of poverty and trauma is difficult and often evokes painful and dysregulating affect. Mindfulness has been integrated into a University Certificate Program in Infant, Early Childhood and Family Mental Health to support participating clinician-trainees. The course includes instruction on insight meditation, lovingkindness and self-compassion practices, time to practice together, sharing of experience in practice and impact on their work. Trainees experience how slowing down, pausing, and using contemplative practices helps them deepen awareness of their experience in the present moment and with families with present and past relational trauma histories that may evoke intolerable emotions and judgmental reactions. The mindfulness instructor, a psychotherapist and program reflective mentors create a holding environment environment to provide safety, nurturance and compassion in practicing and sharing of clinical experience. These IMH trainees are growing their reflective insight, self-regulation, self-compassion and skillful capacities to listen and respond rather than react, avoid or be judgmental with parents. Longitudinal self-assessment data on validated measures indicate increased use of contemplative practices over the the year is associated with increases in reflective capacities ( $r = .58, p < .01$ ). Narrative reflections will also be shared about how practicing together and frequency/duration of individual practice are associated with capacity to sit with families with more open interest and tender care through increased self- and mutual awareness, acceptance, regulation and compassion when difficult feelings are evoked. Data support the benefit of incorporating contemplative practices into parent-infant mental health training and practice.

#### **Symposium S42 - ADVANCING CLINICAL UNDERSTANDING OF DISINHIBITED SOCIAL ENGAGEMENT DISORDER**

**Scheper F.Y.\***

*VUmc child psychiatry research department ~ Amsterdam ~ The Netherlands*

Symptoms of Disinhibited Social Engagement Disorder (DSED) have been reported across various populations (Minnis et al. 2013, Pears et al. 2010, Scheper et al. 2016, Zeanah et al. 2002). While these symptoms are relatively stable and associated with functional impairment (Gleason et al. 2011, Rutter et al. 2007), there is still debate on its status in clinical nosology (Allen, 2017). Therefore, there is a need to determine the populations and settings in which Disinhibited Social Engagement Behaviors are most prevalent, their course over time, and the overlap with and distinctions from other aberrant social behaviors. The first speaker will address symptom overlap between Autism Spectrum Disorder (ASD) and Disinhibited Social Engagement Disorder (DSED). Research findings on DSED symptoms in children with ASD will be discussed, as well as the process of developing a clinical observation tool to support differential diagnosis. The second speaker will address the gap in literature on DSED symptoms in home-reared children and long term outcome. Data on consistency between parent reported and professionally observed symptoms of DSED will be presented, as well the relation between DSED symptoms and associated factors and longitudinal findings. The third speaker will talk about comparison of DSED symptoms in populations raised in several adverse caregiving environments. Findings will be presented from German and Georgian studies on DSED symptoms in relation to attachment security and child problem behavior. After the three presentations, the place of DSED in current nosology will be discussed, its clinical relevance, and remaining scientific and clinical questions.

S42.2

**AUTISM SPECTRUM DISORDER AND DISINHIBITED SOCIAL ENGAGEMENT DISORDER: DIFFERENTIAL DIAGNOSIS IN CLINICAL PRACTICE**

**Davidson C.\*<sup>[1]</sup>, Gillberg C.<sup>[2]</sup>, Minnis H.<sup>[1]</sup>**

<sup>[1]</sup>*University of Glasgow ~ Glasgow ~ United Kingdom*, <sup>[2]</sup>*University of Gothenburg ~ Gothenburg ~ Sweden*

Disinhibited Social Engagement Disorder (DSED) is associated with severe early maltreatment or neglect (DSM-5). Children with DSED are indiscriminate friendly, have pervasive social relationships difficulties and problems with social boundaries. They may be at higher risk of language delay and one study by our research group, using standardised measures, demonstrated difficulties with social communication, including building rapport and social language in context, (Sadiq et al, 2012). Social relationship and communication problems, however, are symptoms more typically associated with Autism Spectrum Disorder (ASD). This can make clinical decisions more difficult. Nevertheless, differential diagnosis is of the essence; DSED is associated with maltreatment and ASD is not (Rutter et al, 1999). Following the Sadiq study, we investigated the overlap in symptoms between ASD and DSED from the other perspective; by exploring the profile of children with ASD on standardised measures of DSED (Davidson et al, 2015). 58 children (5-12 years) with ASD, and no maltreatment history, were assessed for DSED via parent and teacher report and structured observation. 22 ASD children also met 'diagnostic' criteria for DSED on parent report. However, 12 of these children had no symptoms on the observation measure. It is possible to differentiate ASD from DSED in the majority of cases. However, a smaller number of complex cases and/or subtle symptoms i.e. ASD girls, may be problematic. There is a need for an observational tool, developed with a focus on the key discriminating factors, to support clinical assessment of complex cases. This is the aim of the first author's current PhD. It is an iterative study to better understand the differences between ASD and DSED using holistic standardised measures, to develop an observational tool and complete preliminary testing.

S42.3

**DISINHIBITED SOCIAL ENGAGEMENT BEHAVIOR IN HOME-REARED PRESCHOOL CHILDREN IN THE NETHERLANDS**

**Scheper F.Y.\*<sup>[1]</sup>, Nauta--Jansen L.<sup>[1]</sup>, De Vries A.<sup>[1]</sup>, Doreleijers T.<sup>[1]</sup>, Schuengel C.<sup>[2]</sup>**

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Evidence supporting clinical relevance and persistence of disinhibited social engagement behavior (DSEB) pertains mostly to children reared in institutions and foster care, and is related to social deprivation and neglect. Little is known about DSEB in children, reared with biological parents, who are referred for treatment of emotional and behavioral problems, and who are at risk of emotional maltreatment. The Disturbances of Attachment Interview, Maltreatment Classification System, the Child Behaviour Checklist and Parenting Stress Index were used in 141 referred home reared children and 59 referred foster children, aged 2.0–7.9 years (Scheper et al. 2016). In a separate study, the course of DSEB was examined in 124 home-reared children (2-6 years) from preschool age until four years after start of treatment. At this follow-up assessment, DSEB was examined by use of parental reports and observational measures. Maltreatment was measured applying the Maltreatment Classification System, effortful control in child temperament by use of the Child Behavior Questionnaire, and externalizing psychiatric disorders by the Kiddie-Sads. DSEB was found to be as prevalent in clinically referred home-reared children as in foster care children. Also, in both groups DSEB was found to be associated with more parenting stress and child externalizing

behavior. Parent reported DSEB was associated with observed DSEB. Parent reported DSEB persisted in more than half of the children from preschool age into middle childhood and was associated with externalizing psychiatric disorders. While explanations for the onset and course of DSEB in home reared children remain elusive, their course and correlates underscore the clinical relevance of DSED symptoms in home-reared children.

S42.4

#### **DISINHIBITED SOCIAL ENGAGEMENT DISORDER (DSED) SYMPTOMS IN GEORGIAN AND GERMAN FOSTER CHILDREN**

**Jorjadze N.\*<sup>[1]</sup>, Bovenschen I.<sup>[1]</sup>, Zimmermann J.<sup>[2]</sup>, Nowacki K.<sup>[3]</sup>, Spangler G.<sup>[1]</sup>**

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DSED symptoms are found in children with experience of maltreatment as well as in children with experience of institutionalization. Studies comparing children with these two experiences are rare. The aim of our study is to investigate attachment security and DSED symptoms in children raised in different kind of adverse caregiving environments. Comparison of the findings from Georgian and German studies of foster children will be reported. The Georgian study included two samples of foster children – half of children had lived in institutional care before moving to foster care (N=30) whereas second half were placed in foster care directly after being removed from their homes (N=30). German sample included foster children (N=55) followed up for one year after placement in foster care. Data assessment involved measure of attachment security (AQS), behavioral problems (CBCL), and DSED symptoms (DAI). Severity of maltreatment was calculated based on information on pre-placement experiences of children, provided by case workers. DSED symptoms scores of German and both groups of Georgian foster children were comparable. Attachment security and severity of maltreatment were not associated with DSED symptoms. A significant association between externalized symptoms and DSED was found in children with experience of institutionalization. Foster children with different kind of adverse experiences did not differ from each other on distribution of DSED symptoms. However different correlations with behavioral problems were shown. Discussion will present detailed comparison of findings from German and Georgian studies.

#### **Symposium S47 - RESEARCH AND POLICY: AN (IM)POSSIBLE RELATIONSHIP TO IMPACT EARLY CHILDHOOD PRACTICE**

**Ius M.\*<sup>[1]</sup>, Jungmann T.<sup>[2]</sup>**

<sup>[1]</sup>*University of Padua ~ Padova ~ Italy,* <sup>[2]</sup>*Universität Rostock ~ Rostock ~ Germany*

According to an ecological approach (Bronfenbrenner, 1979) research and scientific knowledge, program implementation, and policy are situated within the macrosystem and mesosystem that deeply impact life of children in terms of available and accessible resources: human resources (relationships in family, school, community, health/social/educational service, etc.) and material resources (economic help, services, infrastructures, etc.). What is the possible beneficial relationship between research and policy? When is this relationship more likely to impact the other systems of the ecology to foster child development? How can research disseminate results to inform policy? What are the factors promoting the use of research by public officials? How can policy absorb those results and make new decisions in order to use innovation to fight social injustice and to promote equality? Who are the people participating in this debate? Only researchers and public officials and managers (national, regional, local level) or also professionals and service managers?

And what about children and families themselves? What is the role of public opinion, mass media, political parties, interest groups (Gormey, 2011)? The symposium aims at exploring the relationship between research and public policy, within the domain of early childhood, by reflecting on the implementation of social programmes for children and families (aims, context, subjects, results, training and supervision for professionals) and on the research project around them (research method, participation of professionals, families, children,...) in order to discuss examples of processes where researching on practice informed policy and policy decision were made to enable practice (Fixsen and Blase, 2011). In this Symposium we present studies about supporting programs for high-risk families in various perspectives: "ZEPPELIN" with the program "PAT –Learning with Parents" in Switzerland (Lanfranchi et al.), the Family Nurse Partnership in England (Robling et al.), "Walking in family", "SAFE" and other programmes of the GRISIJ in Spain (Vaquero et al.), and "P.I.P.P.I. Programme of Intervention to Prevent Institutionalization" in Italy. (Ius et al.).

S47.2

### **GENERATING EVIDENCE AND INFORMING POLICY WITH EARLY SUPPORT INTERVENTIONS: HOW TO RECRUIT, RANDOMISE AND RETAIN AT-RISK FAMILIES?**

**Lanfranchi A.\*<sup>[1]</sup>, Neuhauser A.<sup>[1]</sup>, Schaub S.<sup>[1]</sup>, Burkhardt S.A.<sup>[1]</sup>, Ramseier E.<sup>[2]</sup>**

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It is often found that the targeted population group with a strong need for prevention, in particular families with a migration background, only rarely participates in early interventions. This prevention dilemma is especially obvious when it is unclear whether the family will get support or not by the time they give consent for participation – as in RCTs. ZEPPELIN is a longitudinal intervention study evaluating effects of the Parent as Teachers program (PAT) in the canton of Zurich, Switzerland. Families were recruited during one year and randomly assigned to the intervention (137 families) and control group (118 families) by stratified block randomisation. After baseline data collection, children's outcomes were assessed annually until three years of age. Results show that the targeted number of 252 recruited at-risk families was met. Randomisation was successful regarding crucial characteristics like sociodemographic characteristics or stress constellation. Moreover, several significant intervention effects were found, mainly on the learning environment at home and language development. ZEPPELIN demonstrates how to realize a highly complex RCT intervention study with at-risk families – particularly with migration background. High standard evaluation studies in families with the highest need for prevention require a high effort, but are essential for policy decision making regarding educational opportunities.

S47.3

### **GENERATING EVIDENCE FOR WHAT WORKS: EXPERIENCES FROM A PROGRAMME OF WORK EVALUATING SPECIALIST HOME VISITING IN ENGLAND**

**Robling M.\*<sup>[1]</sup>, Lugg--Widger F.<sup>[2]</sup>, Cannings--John R.<sup>[2]</sup>, Sanders J.<sup>[3]</sup>**

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Supporting teenage mothers to achieve a healthy pregnancy, successful parenting, and socio-economic stability is a policy priority. Based on theories of attachment, social-ecology, and self-efficacy, the Family Nurse Partnership (FNP) provides intensive support to young mothers in England. FNP comprises up to 64 structured home visits by specialist nurses during pregnancy and until the child's second birthday. Three previous US trials and one contemporary study in Holland

provide positive support for the programme. Our Building Blocks trial investigated the effectiveness of offering FNP, in addition to usual care, at 18 sites. Following randomisation, data were collected at baseline, late pregnancy, and 6, 12, 18 and 24 months postpartum. Primary outcomes were tobacco use at late pregnancy, birth weight, second pregnancy by two years postpartum and emergency hospital episodes for the child. Secondary outcomes included measures of pregnancy and birth, child health and development, and parental life course. 1645 women were recruited. There were no group differences for any primary outcome, with high rates of smoking at late pregnancy (56%) and of second pregnancy (66%) in both study arms. Some secondary outcomes suggested small positive programme impacts. A process evaluation found the programme to have been well-implemented and positively appraised by clients. Short-term evidence provides only limited support for FNP in England leading to immediate programme modifications and evaluation initiated by the service.

S47.4

#### **FROM PRACTICE TO PRACTICE: THE PARTICIPATIVE ACTION-RESEARCH AS A TOOL TO TRANSFORM POLICES AND PROFESSIONAL PRACTICE WITH VULNERABLE CHILDREN**

**Vaquero Tio E.\*<sup>[1]</sup>, Balsells Bailón M.À.<sup>[1]</sup>, Fuentes--Peláez N.<sup>[2]</sup>**

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The participative action-research processes developed with professionals of the social services and the child protection system favour the transformation of the professional practice, because it allows to develop processes of change establishing a dialogue between research and practice. This presentation aims to expose some of the current opportunities and challenges to generate knowledge from the participatory action research methodology and the active involvement of the agents involved; to discuss some strategies to transfer such knowledge for the transformation of policies and professional practices, and to reflect on the benefits and difficulties of transfer and innovation. The GRISIJ group has long experience in focus the research towards scientific purposes that serve social and professional purposes. This experience is based on the development of qualitative, quantitative and mixed research projects whose purpose is the design, implementation, and evaluation of socio-educational support programs that help children and their families in different situations of lack of protection: social, educational, health and wellbeing aspects. This approach has allowed to have positive results with families, children, and professionals. The different products developed by GRISIJ group with this research method, such as the programs "Walking in family" or "SAFE", are a clear example of practice tool to improve the situation of vulnerable families and children. The data collected from families, children and professionals show which benefits and which challenges have this kind of programs to transform policy and professional practice with vulnerable children. The participative action-research methodology aims to transform professional policies and practices based on the active participation of all the actors involved (children, families, and professionals). That is why this methodological approach is understood as a tool that allows the innovation of professional policies and practices with vulnerable children, due to it allows the transformation of real needs into resources for intervention and change.

S47.5

#### **THE PROGRAMME OF INTERVENTION FOR PREVENTION OF INSTITUTIONALIZATION - P.I.P.P.I.: INTEGRATING INTERVENTION, TRAINING, RESEARCH, AND POLICY TO SUPPORT VULNERABLE FAMILIES AND PROFESSIONALS WORKING WITH THEM**

**Ius M.\*<sup>[1]</sup>, Serbati S.<sup>[1]</sup>, Santello F.<sup>[1]</sup>, Colombini S.<sup>[2]</sup>, Zanon O.<sup>[1]</sup>, Di Masi D.<sup>[1]</sup>, Sità C.<sup>[3]</sup>, Petrella A.<sup>[1]</sup>, Milani P.<sup>[1]</sup>**

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From 2011, the Italian Ministry of Welfare together with University of Padua promoted P.I.P.P.I. aiming at supporting vulnerable families through the ecological approach and the Participative and Transformative Evaluation. This first Italian social experiment created a national community of practice and research that documents and shows the outcomes and the outputs of intervention with vulnerable families. Since 2011, P.I.P.P.I. involved 146 territories, 2050 children (20% 0-6 years old), 1736 families, and 5000 professionals. The key elements are: - the Support System: families, services, local and regional authorities, ministry; - the Intervention Plan: home care intervention, parent groups, family helpers, and school-family-service cooperation; - the Evaluation Plan: quantitative tools are used at the same time to assess, plan, intervene, and evaluate within a multi-professional and participative approach; - the Training Plan: basic training at the beginning and Reflective Practice Lab during the implementation where research data are shared to discuss and reflect on practices. Final and intermediate outcomes of the first 5 years of implementation show a statistically significant impact of the programme. On the proximal level P.I.P.P.I. has two results: - in 2017, 20 territories started the Advanced level of the scaling up creating a LabT (Territorial Laboratory) that is a reflective place to locally self-organize training, to self-evaluate practice reflecting on data of their previous implementation, and to plan a social innovation project to develop in their context; - the co-writing (Ministry, University, Regions, and Local Authorities) and issuing of the National guidelines on interventions with vulnerable families. According to P.I.P.P.I., an implementation is more likely to impact on local and national policy when the interconnection between research and practice is fostered on a regular basis, and research results are continuously upgraded and shared as a reflective opportunity to define the next steps along all the phases of the program.

## **Brief Oral Presentations BOP24 - THE BABY'S LIFE FROM SCREENS TO SIBLINGS TO SOCIETY**

BOP24.1

### **ELECTRONIC MEDIA USE RELATED TO EMOTIONAL AND BEHAVIORAL PROBLEMS IN TODDLERS AND PRESCHOOLERS**

**Jusiene R.\*, Laurinaityte I., Praninskiene R., Rakickiene L., Urbonas V.**

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The excessive electronic media use is documented to be a serious risk factor affecting mental health in children and adolescents. The amounts of e-media use and effects of it in early childhood are under-researched. As electronic tools are becoming more and more used in parenting and education of young children, the valid and sound evidence-based recommendations for safe e-media use are needed. The aim of this study is to analyze the reciprocal links between electronic media use and emotional and behavioral problems in the very young children. Over 400 Lithuanian families with children aged 1.5 to 5 years old participated in the study. Parents provided the detailed information about the time duration their children spend on the various screen and about the specific situations and conditions when the electronic media is allowed to use. Toddlers' and preschoolers' emotional and behavioral problems were assessed with CBCL/1.5-5 (Achenbach & Rescorla, 2001). Results showed that children who spent three and more hours per day on screen have significantly higher scores of emotional problems. Moreover, parents of children with the higher scores of emotional problems allowed to use electronic tools and TV during child's meal time and for the soothing purposes more often. Children with behavioral problems also used electronic tools without parental permission more often. Additionally, the more attention problems children

had, the more their parents allowed to use electronic media as a reward for a child. The significant and important role of family rules aiming to regulate screen time and electronic media use is revealed and discussed in this study.

#### BOP24.2

### **PROTECTIVE FACTORS IN THE EARLY HOME ENVIRONMENTS OF LOW-INCOME CHILDREN: CONTRIBUTIONS TO CHILDREN'S LANGUAGE AND SOCIAL SKILLS**

**Kuhns C.\*, Cabrera N., Hennigar A., West J.**

*University of Maryland ~ College Park ~ United States of America*

Although research shows that children living in poverty are at risk for maladjustment, there is evidence of large variability in the outcomes of these children (Cabrera, 2013). Most of this work has focused on the adverse conditions of these children's lives and has paid less attention to the protective factors that might impact development. In general, children have better outcomes when they have access to more family resources, have family routines, are read to more often, and have warm interactions with their parents (Senechal & LeFevre, 2002; Raby, Roisman, Fraley, & Simpson, 2015). The unique and additive effects of these factors have not often been examined in a single study with longitudinal data. Moreover, the combined effects of these factors on children's development are rarely studied. Our study addresses these gaps. We use an ecological and strengths-based approach and ask: (1) What resources (e.g., parental education), parental investments (e.g., father involvement) and parenting practices (e.g., mealtime routines) are found in the families of low-income toddlers?; (2) What are the unique and additive effects of these on children' language and social skills? and (3) Do routines, father involvement, and reading combine interact with mother-child relationship quality to influence children's skills? We use data from Baby FACES, a nationally representative study of children enrolled in Early Head Start programs; a U.S. child development program for children from birth to age 3. Preliminary analyses show that routines ( $r = .17, p < .05$ ), reading activities ( $r = .20, p < .01$ ), and mother-child interaction quality ( $r = .293, p < .01$ ) are significantly positively correlated with language outcomes, while maternal responsiveness ( $r = .172, p < .01$ ) and cognitive stimulation ( $r = .133, p < .01$ ) are significantly positively correlated with social skills at age 3. This study sheds light on the unique and joint effects of protective factors on children's wellbeing.

#### BOP24.3

### **DOES MOBILITY EXPERIENCE INFLUENCE INFANT MOTIVATION TO MOVE?**

**Dennis C.\*, Stansfield S., Rader N., Larin H., Pena--Shaff J.**

*Ithaca College ~ Ithaca, New York, USA ~ United States of America*

Dynamic systems theory (Thelen, 2005) highlights the importance of infant motivation as a driver for development. Thelen describes a motivational cascade in early development, where successful motor experience fuels their motivation to develop new behaviors, yet few researchers have examined the relationship between motivation and movement. This research examined the effect of mobility experience on infant motivation to move. Five-month-old pre-crawling, typically-developing infants ( $n=64$ ) were randomly assigned to a robotic locomotor or non-locomotor group. Infants participated in twelve 16-minute play sessions over two months. Infants in the robotic locomotor condition were able to explore the play environment by leaning in the direction of desired movement using a robotic mobility device (Stansfield, Dennis, Altman, Smith, & Larin, 2017) during play, while non-locomotor infants remained stationary. Infants who began crawling before the end of the study were assigned to a third independent locomotor group. Motivation was assessed at pretest and posttest through 1) researcher observations of motivation to move

(RoMTM; Atun-Einy et al. (2013); and 2) the Infant Motivation to Move Questionnaire (IMMQ; Doralp & Bartlett, 2015), completed by parents. Infants in the independent locomotor group demonstrated greater score increases on the RoMTM than infants in the other groups. There were no significant group differences on parent responses to the IMMQ. Independent locomotion may have increased RoMTM scores, however, RoMTM were scores were moderately correlated with infant motor development, suggesting that the construct of motivation to move may be influenced by infant motor prowess.

BOP24.4

#### **BIRDS OF A FEATHER OR NOT SO MUCH? CHANGE AND STABILITY IN MATERNAL BEHAVIOUR TOWARDS SIBLINGS OF THE SAME AGE**

**Lakatos K.\*, Ozene Kende L., Ney K., Toth I., Gervai J.**

*RCNS, ICNP ~ Budapest ~ Hungary*

Sibling dissimilarity and adjustment of maternal behaviour according to the age of the child have long been known. However, it is also an assumption that parenting behaviour should show some stability across time (therefore siblings), as it is presumably related to mothers' state of mind believed to be stable by adulthood. Our aim was to examine concordance of disrupted maternal behaviour in relation to Infant attachment quality in sibling pairs in infancy. Stability of maternal atypical behaviour (assessed by AMBİANCE) in relation to 12-month-old infants' attachment (assessed in the Strange Situation) was examined in 46 healthy, low-social risk sibling pairs. As expected, atypical maternal behaviour was associated with infants' disorganised (D) and ambivalent (C) attachment. However, maternal atypical behaviour showed no stability across siblings, nor siblings' attachment was similar to the same mother. Nevertheless, stability of maternal behaviour was found in siblings with similar attachment to their mother. Eighty percent of mothers with two secure or avoidant siblings were classified as non-atypical with both infants, whereas mothers of two C or D infants tended to either remain or become atypical i.e., these mothers displayed higher levels of disturbance of affective communication with their second-born infant than those whose both infants or the second child was securely (B) or avoidantly (A) attached. Level of disrupted communication with the first-born child differentiated between mothers with concordant A/B vs. C/D sibling pairs. Initial levels were higher for mothers with two C/D infants. Previous studies showed limited concordance regarding both attachment quality and maternal behaviour across siblings. Our results identify subgroups where persistent disruption of maternal affective communication can be found. Undesired associations of C and D attachment with later behavioural problems highlight the need to understand early predictors of negative developmental pathways in order to establish effective interventions.

BOP24.5

#### **DIRECT AND INDIRECT EFFECTS OF CHILD TEMPERAMENT, PARENTING STRESS, AND PARENTING BEHAVIOR ON DISTINCT TRAJECTORIES OF AGGRESSIVE BEHAVIOR FROM EARLY CHILDHOOD TO MIDDLE CHILDHOOD**

**Oh W.\*, Cardenas J.**

*Texas Tech University ~ Lubbock ~ United States of America*

Although harsh parenting has been linked to negative child outcomes, less attention is paid to individual differences and the processes by which child, mother and parenting factors are associated with child behavior problem. This study examined the direct and indirect effects of infant temperament, parenting stress, both psychological and physical harsh parenting, and observed maternal warmth/sensitivity and engagement on the trajectories of aggression from 3 to 9 years of

age. Maternal reports and observation were utilized using a sample of 3,051 low-income families (2,300 families unwed at the birth) in 18 cities in USA from the Fragile Families and Child Wellbeing Study. Results from growth mixture modeling, a person-centered approach, identified 3 distinct aggression symptom trajectories: Severe at risk group (n=91, 3%) displaying higher than borderline-clinical (92.5%) on CBCL aggression with a significant linear increase over time; High-resilient (n=369, 9%) showing borderline-clinical levels with a significant decrease over time; and Normative (n=2,591, 61%). Path analysis after controlling mothers' age and child sex revealed that both psychological and physical harsh parenting at 5 years, parenting stress at 3 years and child negative emotionality at 1 year directly predicted both the severe-at risk and high-resilient groups, relative to the normative group. In addition, lower levels of observed maternal warmth/sensitivity at 5 years predicted the severe-at risk group from both the high-resilient and normative groups. Results also indicated the indirect effects of parenting stress at 3 years and child temperament at 1 year on both harsh parenting and warmth/sensitivity and engagement, which in turn contributed to the severe/high aggression trajectories. Taken together, dysregulated child temperament was related to more parenting stress, which in turn contributed to psychologically and physically harsh parenting and less warm/sensitive parenting behavior, predicting severe/high aggression symptom trajectories from 3 to 9 years of age.

#### **Poster Workshop PW04 - MOTHERING FROM THE INSIDE OUT-INTERVENTION**

PW04.1

##### **MIO: INTRODUCTION TO THE EVIDENCE-BASED INTERVENTION ADAPTED IN SOUTH AFRICA**

**Suchman N.\***

*Department of Psychiatry ~ Yale University ~ United States of America*

Mothering from the Inside Out (MIO) aims to foster parental reflective functioning (PRF) in mothers with substance use disorders. PRF encompasses the capacity to make sense of strong emotions that arise in the mother during challenging parenting situations and to make sense of children's strong emotions and attachment needs. PRF is an important skill for trauma-exposed parents at risk for substance use and mental illness who may not have access to the natural neurobiological rewards and benefits associated with parenting. In this presentation, an overview of the principles and practices of MIO and findings from the two randomized clinical trials where treatment outcomes and mechanisms of change were tested will be summarized. MIO is based on the theoretical premises of attachment and mentalization (Fonagy et al., 2002). A secure attachment lays the foundation for experiencing affect regulation, epistemic trust and self-organization. Parents with histories of trauma, substance use and mental illness may struggle to mentalize for their children when their capacity to mentalize their own strong emotions is compromised. In MIO, the therapist aims to foster a secure therapeutic alliance and support the mother's efforts to mentalize about her own experience of caring for her child so that she may also make room in her mind for her child's emotional experiences and attachment needs. In the two completed clinical trials, we found that, when mothers' capacity to mentalize about their own and their children's experiences improved, improvement in the caregiving relationship quality followed.

PW04.2

##### **MIO: CLINICAL CHALLENGES OF PARENTING INTERVENTIONS AT LENTEGEUR HOSPITAL, CAPE TOWN**

**Mpinda B.\***

*Department of Psychiatry ~ Stellenbosch University ~ South Africa*

Lentegeur Hospital is a mental health facility, located in a resource poor area of Cape Town. The Child and Adolescent Mental Health service of this hospital has been providing parenting interventions over the years. Recently the service expanded its services to include infant mental health. MIO was included as part of an intervention to improve mentalization capacity in the parents. An overview of parenting programmes used will be presented. The parenting interventions currently used in the unit include manualized group based parenting intervention, individual practical skills parenting training and the recent introduction of mentalization using the MIO model to improve reflective functioning and improve mental health outcomes of the infants. The presenter will describe the clinical experience of utilizing the different parenting models in this setting. The benefits and challenges will be outlined.

PW04.3

### **LESSONS FROM MENTALIZING GROUPS (MIO) WITH MOTHERS PROVIDING KANGAROO CARE TO PREMATURE INFANTS**

**Lachman A.\***

*Department of Psychiatry ~ Stellenbosch University ~ South Africa*

This presentation will highlight the challenges practically and emotionally in providing these groups in a developing world setting. Struggles with logistics, emotional vulnerability and deprivation will be described as limitations to the application, while successes with adapting the model to suit the standard of care will be discussed. The MIO group on the Kangaroo Mother Care Unit (KMC) at Tygerberg Hospital was conducted for 3 six session rounds by 2 therapists. Mothers were invited from the inpatient KMC units, if they were identified as “high risk” by virtue of being young (under 35yrs), having a first premature baby of between 1250 – 1500g weight, and were to be roomed in for at least 4 weeks. Kangaroo care is considered optimal care for low birth weight pre-term babies in developing countries as a cost effective and efficient alternative to neonatal care units. The Skin to skin contact affords touch & stimulates breast milk, increases maternal oxytocin levels and promotes maternal behaviour and baby growth. In Premature deliveries, the mother baby relationship is considered to be more difficult, with higher levels of maternal fragility and lower levels of synchronicity. Babies in their interactions with mothers show reduced expressions and responses. Despite this knowledge, current KMC does not involve specific targeted psychological intervention or exploration with mothers, and there is a need to provide more than “physical support” to encourage mothers to be more psychologically aware of the interactions.

PW04.4

### **“WE HAVE BEEN HOLDING THIS THING IN OUR HEARTS; WE DON’T HAVE ANYONE TO SHARE IT WITH...” A GROUP MIO INTERVENTION WITH MOTHERS OF CHILDREN WHO SUFFERED BURN INJURIES**

**Berg A.\***

*Department of Psychiatry ~ University of Cape Town ~ South Africa*

In the South African context the care of young children is the responsibility of their mothers. It is thus appropriate and culturally congruent to offer a supportive psychotherapeutic intervention to mothers of young children who had sustained burn injuries. A group intervention is likely to make the model more acceptable to mothers, as they will have the opportunity to share their experiences about a similar traumatic event that involved their child; they may also have come to know each other while in-patients and thus being in a group would be considered natural. Pre- and Post-intervention assessments were done assessing parental reflective functioning and maternal sensitivity. The group sessions were audio and video-taped and transcribed and a thematic analysis

conducted. Qualitative analysis of the group process reveals themes, some of which could be considered 'universal' in nature, whereas others are more related to socio-economic hardship, and family disruption due to urbanization. In addition, themes emerged that were specific to the cultural context of the mothers. The group was experienced as a confidential space in which feelings of guilt, anger and shame could be expressed and cultural viewpoints be discussed freely.

PW04.5

## **MIO IN SOUTH AFRICA PART II: INDIVIDUAL PROCESS AND QUANTITATIVE OUTCOMES**

### **1. WHEN MY CHILD'S MIND DOES NOT MAKE SENSE – CLINICAL OBSERVATIONS AND QUALITATIVE REFLECTIONS OF INDIVIDUAL PSYCHOTHERAPY OF MOTHERS WITH PSYCHIATRIC ILLNESS AT STIKLAND PSYCHIAT**

**Voges J.\***

*Department of Psychiatry ~ Stellenbosch University ~ South Africa*

Mothers utilising mental health services may experience more significant challenges in their roles as parents and may require additional support. This qualitative analysis will reflect on the therapeutic process of two mothers with severe psychiatric illness who were seen for 12 individual psychotherapy sessions utilising the Mothering from the Inside Out framework. The challenges experienced during the course of treatment of two mothers with major psychiatric illness will be reflected upon and includes difficulty to establish and maintain a therapeutic alliance with each patient, providing opportunities for the mothers to reflect on difficult internal emotional experiences, while also holding the child and their needs in mind. Mentalization-based therapeutic intervention with mothers with psychiatric illness holds promise, but requires adaptation and awareness of the particular inherent challenges.

PW04.6

### **RESULTS FROM A PILOT TRIAL OF MOTHERING FROM THE INSIDE OUT – AN INTERVENTION THAT TARGETS MATERNAL REFLECTIVE FUNCTIONING WITH PARENTS WHO ARE STRESSED**

**Suchman N.\***

*Department of Psychiatry ~ Yale University ~ United States of America*

In the Western Cape, MIO was adapted in its duration, frequency and configuration for delivery in five clinics serving (a) mothers of premature infants, (b) mothers caring for children with severe burns, and (c) mothers in outpatient treatment for mental illness or substance abuse. The purpose of this pilot clinical trial was to evaluate the preliminary feasibility, acceptability and efficacy of an adapted evidence-based parenting intervention (MIO) to clinical settings in Cape Town, South Africa. Eighteen mothers participated across the five sites. On average, mothers were 27 years old, divorced (40%) or never married (20%), of mixed race (70%), unemployed (80%), living with extended family (80%) and had completed 11 years of education and target children were 22 (Range = 31-48) weeks old. Primary outcomes included maternal capacity for reflective functioning (RF) measured with the Parent Development Interview (PDI; Slade, 2002) and mother-child interaction quality measured with Coding Interactive Behavior (CIB; Feldman, 1998). Ten mothers completed pre- and post-treatment measures. Effect sizes indicate meaningful improvement in maternal RF and mother-child interactions: The mean overall RF score was 2.80 (SD = .56) at baseline and 3.44 (SD = .76) at post ( $d = .68$ ,  $t = 3.69$ ,  $p = .005$ ). The mean potential RF score (highest score received) was 4.20 (SD = .92) at baseline and 4.60 (SD = .97) at post ( $d = .30$ ,  $t = 1.08$ ,  $p = .31$ ). The mean Dyadic Reciprocity score was 2.69 at baseline (SD = .81) and 3.50 (SD = .68) at post, ( $d = .68$ ,  $t = 2.04$ ,  $p < .10$ ). MIO clearly demonstrates promise for improving mother-child relationships in dyads under stress in the Western Cape.

PW04.7

**COMMUNITY BASED PARTICIPATORY RESEARCH – DID IT WORK?**

**Suchman N.\***

*Department of Psychiatry ~ Yale University ~ South Africa*

Launched in May, 2013, the collaboration between Yale School of Medicine Departments of Psychiatry and Child Study Center and the Departments of Psychiatry at the Universities of Cape Town and Stellenbosch involved an equal partnership in adapting and evaluating MIO in five hospital settings with at-risk mothers of children from birth to 14 years of age. The evolving partnership has been guided by the principles of Community-Based Participatory Research (CBPR; Wallerstein & Duran, 2006), one of the most effective methods for adapting evidence-based therapies in culturally-diverse communities. CBPR assumes that community members have critical knowledge and expertise about culture and community characteristics and that this knowledge is essential to the development and implementation of feasible, relevant and effective intervention strategies. Our partnership was characterized by equal involvement and partnership in all aspects of program development and evaluation. We attempted to identify core aspects of the MIO intervention and retain them while adapting peripheral components to the treatment setting and culture. In this presentation, the Drs. Berg and Suchman, the leaders of the partnership, will look back at the successes and failures encountered in adopting the CBPR approach. They will also discuss the planned next steps for the collaboration including qualitative analyses of the collected data and future local training.

PW04.8

**'SENSITIVE' FROM AN AFRICAN PERSPECTIVE: AN EMIC EXPLORATION OF MATERNAL SENSITIVITY AMONGST SOUTH AFRICAN MOTHERS**

**Dawson N.\***

*University of Witwatersrand ~ Johannesburg ~ South Africa*

Maternal sensitivity provides the framework for understanding the behavioural, interactional experiences that underpin attachment security. Various theorists and measures have operationalized this construct, and attempted to identify the specific behaviours that qualify as sensitive and promote attachment security. However, anthropological research and recent psychological literature speak to cultural variation in maternal behaviours, which complicates measurement and intervention. This paper reports on an exploration into local understandings of maternal sensitivity and "good" maternal behaviour in the community of Alexandra Township, South Africa. Findings from a series of interviews with local Alexandra mothers, exploring their understanding of maternal sensitivity, will be shared. Local mothers' understandings of "good-enough" maternal behaviours will be compared and contrasted with the original and current, predominantly Western conceptualisations of maternal sensitivity, in an attempt to engage with culturally diverse manifestations of maternal sensitivity.

**Video Presentations V07 - SHAME AND GUILT - THE BAD FAIRIES OF A DEPRESSED MOTHER, AN ANIMATION DOCUMENTARY FILM "CAT"**

**Turunen M.\*, Ringbom A.**

*BabyFinland, FAIMH ~ Helsinki ~ Finland*

Association BabyFinland together with 18 mental health associations (FAIMH among them) in Finland invited artist Antonia Ringbom to make an animation film based on stories of 8 peoples experiences with mental health problems in order to reduce stigma concerning mental health

issues. The films were accepted to the national tv company and can be seen there online. One of the films presenting the story of a mother's severe depression will be presented and discussed. The artist interviewed each person and made a video of the interview. After that each person could choose for her/himself an animal (the mother chose to be a cat) they would like to be and the animation is based on using this animal, with the background of the persons authentic speaking her/his story. The mother describes how hard it is to try to care for the children when the depression is overwhelming. The feelings of guilt of not being present in the interaction are hard. The mother's efforts to care for the children and manage the household are heartening. Friends and family are not always well on the map what is happening inside the mother's mind. Psychiatric help finally reaches the mother and the road to recovery starts and shame diminishes. The mother also advises us how to react when someone is depressed. She wanted openness, being listened to, not getting minimizing remarks or false encouragement. Just being present and available could be helpful.

### **Video Presentations V08 - CREATING A NATIONAL BABY'S DAY**

**Turunen M.\*, Mäkelä S.**

*BabyFinland ~ Helsinki ~ Finland*

Four persons started BabyFinland society in 2015. The planning involved: the Ministry of Social Affairs and Health, National research institutes and NGOs including FAIMH. BabyFinland is a pro-baby movement. Its aim is Finland that delights in babies and encourages everyone to support baby friendly policies. BabyFinland focuses on baby families, services, professionals, enterprises, politicians and media, bringing them knowledge of early interaction, attachment and brain development. BabyFinland's innovation - the first national Baby's Day was on 29.9.2017, thereafter always on the last Friday of September. In our video session we will show the process, activities and results of the first national Baby's Day in Finland to help other WAIMH member countries do the same. On 29.9. in Helsinki well baby clinics provided guidance in early interaction and reached hundreds of babies. Educational play grounds had 1500 babies participating in activities. The central event in the City Music House collected 1000 visitors to baby dances and an impressive plenary. Police stopped the traffic of the major street for the march of babies in prams from Music House to the steps of parliament. The representatives of all political parties received the Baby manifest and promised to work for it. The most important of these 10 theses is a national program for early parental support. The church invited all Finland's parishes to celebrations. Libraries, NGO's, many workplaces, businesses, cafes and restaurants were active. We were on TV, radio, newspapers, and social media. National health insurance campaigned for the Baby's day on their website.

### **Brief Oral Presentations BOP13 - INFANT MENTAL HEALTH THROUGH A CULTURAL LENS - PART II**

BOP13.1

#### **TRADITIONAL AND CULTURAL BELIEFS ABOUT PARENTING AS A CHALLENGE FOR GLOBAL STRATEGIES FOR INFANTS, FAMILIES AND COMMUNITIES – THE CAMBODIAN CASE**

**Laezer K.L.\*<sup>[1]</sup>, Hoegger Klaus E.<sup>[2]</sup>, Kim T.<sup>[2]</sup>**

*<sup>[1]</sup>University of Applied Sciences Darmstadt ~ Darmstadt ~ Germany, <sup>[2]</sup>Royal University of Phnom Penh Cambodia ~ Phnom Penh ~ Cambodia*

The social experiment of the Khmer Rouge leaders in Cambodia between 1975 and 1979 left a quarter of the population dead and a generation without role models of good parenting due to the systematic separation of families and their deportation into different working camps. In Cambodia, every family has been affected and to a certain degree traumatized. Researchers from the Royal

University of Phnom Penh Cambodia in collaboration with the Sigmund-Freud-Institute Germany conducted the first three-generation study on parent-child-interactions after the Khmer Rouge Regime. This three-generation study also aimed to establish empirical evidence to support UNICEF strategies of “positive parenting” for infants and children in Cambodia. This means to take into consideration that Cambodia is a low-income country rooted in south-east-Asian culture with a strong tradition of Theravada Buddhism and animisms. Based on ethno-psychiatric literature and Cambodian popular sayings about parenting and parent-infant relationships, researchers developed the Beliefs-about-Parenting-in-Cambodia-Questionnaire to investigate the traditional and cultural beliefs about parenting. Further, parenting styles and parental behaviors were measured using the Alabama Parenting Questionnaire, the Parental Bonding Instrument and the Relationship with Parents Scale. The study includes children (generation 3) aged 14 years, their biological mothers (g2) and their grandmothers (g1) (N=1.056). We are now in the middle of the statistical analyses. Results will be presented at the conference. We hypothesize a strong correlation of traditional and cultural beliefs about parenting 1) between all three generations and a strong correlation 2) between traditional and cultural beliefs about parenting and actual parenting styles and parental behaviors. As a byproduct, these traditional beliefs also contradict gender equality and the child’s right to fully reach its potential. Global strategies for infants, families and communities need to address the challenges that ascend from the traditional and cultural beliefs about parenting - often contradicting global positive parenting strategies.

BOP13.2

#### **FUSAM PROJECT: EVALUATION OF A BRIEF PSYCHOSOCIAL SUPPORT FOR MOTHERS AND THEIR SEVERELY ACUTE MALNOURISHED CHILDREN IN NEPAL AND ITS EFFECT ON MATERNAL MENTAL HEALTH**

**Le Roch K.\*<sup>[1]</sup>, Rampa I.<sup>[2]</sup>, Koirala G.<sup>[2]</sup>, Shrestha S.<sup>[2]</sup>, Tofail F.<sup>[3]</sup>, Bizouerne C.<sup>[1]</sup>**

*<sup>[1]</sup>Action Contre la Faim ~ Paris ~ France, <sup>[2]</sup>Action Contre la Faim ~ Nepal ~ Nepal, <sup>[3]</sup>icddr,b ~ Bangladesh ~ Bangladesh*

There is a robust evidence that poor maternal mental health is a serious risk factor for early childhood underweight and stunting (Surkan et al., 2011) but there is also some evidence that poor child growth increases the risk of maternal depressive symptomology (Samaroff, 2009). The FUSAM research project aimed at studying the combined effect of a nutritional and psychosocial intervention on the development of severely acute malnourished children and on maternal mental health. In the frame of this project, we assessed the quality and the frequency of the psychosocial sessions attended by mothers and children as well as the link with maternal mental health.

211 mothers and their malnourished children were offered five counselling sessions in which mothers were encouraged to express their thoughts and feelings regarding their child illness and the current family situation; they were also supported to enhance children’s stimulation and learning. Baseline and post-intervention evaluations were conducted by using EPDS and Rosenberg self-esteem scale. About half of the mothers (51,66%) came to four and five sessions. EPDS scores decrease between pre- and post-test for all mothers excepted for mothers attending one session only (t test=7, 121). For maternal self-esteem, scores increase between pre and post-test for all mothers attending at least three sessions (t test = 9,381). The presence of the father is negatively correlated to EPDS (t test = 2,362) and maternal self-esteem (t test = 3,042) scores. There is no significant link between mother’s level of education and EPDS or self-esteem scores. Barriers to attendance are multiple and constraints remain difficult to overcome. As psychosocial support showed some benefits, more studies would be required to better understand the role of the father and the family environment on maternal and child health and well-being.

BOP13.3

**PSYCHOSOCIAL SUPPORT FOR MOTHERS AND THEIR SEVERELY ACUTE MALNOURISHED CHILDREN: AN EVALUATION FROM FUSAM PROJECT IN NEPAL**

**Le Roch K.\*<sup>[1]</sup>, Rampa I.<sup>[2]</sup>, Koirala G.<sup>[2]</sup>, Shrestha S.<sup>[2]</sup>, Tofail F.<sup>[3]</sup>, Bizouerne C.<sup>[1]</sup>**

*<sup>[1]</sup>Action Contre la Faim ~ Paris ~ France, <sup>[2]</sup>Action Contre la Faim ~ Nepal ~ Nepal, <sup>[3]</sup>icddr,b ~ Bangladesh ~ Bangladesh*

Because play participates in the cognitive and social development of the baby, when it is absent, neglected or inadequate, it is not only the child development, which is affected, but also the fine attunement with his mother is disrupted. When a child is affected by severe acute malnutrition (SAM), the relationship with the mother often become dysfunctional, play is lacking and child's needs are difficult to identify. Hence, adapted psychosocial support allows improving the mother-child's relationship and their well-being. In the frame of the FUSAM project, we compared mother-child interactions between dyads with SAM children and non-SAM children. 427 SAM children received a nutritional treatment. Among them, 211 mothers and their children (intervention group) were offered five psychosocial counselling sessions to enhance childcare practices. A comparison group of 213 non-SAM children was included. We videotaped all mothers and their children at 4 time-point (baseline, post-intervention, 5th and 11th month after admission) during a play session of 4 minutes. Videotapes were analysed using 'ACF mother-child observation grid'. The frequency of interactions is higher from the mother side than the child side. Regarding child interactions scores, the mean scores for the intervention group are lower than the comparison group at all point of test except at 11-month. Regarding total mean scores, there is a statistical difference between both control and intervention groups at baseline ( $p=.006$ ), post-test ( $p=.015$ ) and at 11-month ( $p=.0$ ). A statistical difference exists between the comparison group and the control group at all tests ( $p=0$ ) except at 5-month. The main factor influencing the interactions within the dyads is the level of child stimulation at home. The quality of interactions between the mothers and their children depends not only on the family environment but also on the psychosocial support provided.

BOP13.4

**A CLINICAL CASE SERIES OF MOTHER-INFANT DYADS ATTENDING AN INFANT MENTAL HEALTH SERVICE AT A MENTAL HEALTH HOSPITAL IN CAPE TOWN**

**Mpinda B.\***

*Lentegeur Hospital ~ Cape Town ~ South Africa*

Lentegeur Hospital is a mental health facility, located in a resource poor area of Cape Town. This hospital provides services which includes acute services for male and female psychiatric illnesses, therapeutic services, forensic services, intellectual disability services and child and adolescent mental health services. This facility recently expanded their service to include infant Mental Health with the intention of preventing and reducing the burden of mental illness to this community. Aim of the project is to describe a clinical case series of mother- infant dyads that have attended a newly established infant mental health clinic and describe interventions provided. The case series will include cases referred from the adult mental health services. The dyads include mothers with a severe mental illness such as schizophrenia, bipolar, substance abuse and personality disorders. Other cases include teenage mothers, mothers who previously attended the child and adolescent mental health service and foster caregivers. The themes emerging from this new service will be described with a view to develop practical interventions suitable for this resource limited area.

BOP13.5

**THE RELATIONSHIP BETWEEN SOCIAL SUPPORT, DEPRESSIVE SYMPTOMS AND BIRTH OUTCOMES IN A SAMPLE OF PREGNANT WOMEN IN QATAR**

**Ahmed S.\*<sup>[1]</sup>, Valentine E.<sup>[2]</sup>, Watt F.<sup>[2]</sup>, Altemus M.<sup>[3]</sup>**

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Pregnant women who report lower social support as well as those who are depressed have been found to have infants with lower birth weights and Apgar scores as well as other poor birth outcomes. However, little is known about the relationship between maternal psychosocial factors in diverse samples of pregnant women including those who reside in the Middle East. Qatar is a small nation with a diverse population of 2.6 million people that represent 86 nationalities. The aim of this study was to explore the relationship between social support, depressive symptoms and birth outcomes in a diverse sample of pregnant women residing in Qatar. Participants were a diverse sample of 687 pregnant women in their first trimester who were residing in Doha, Qatar. Women were recruited from prenatal clinics and were asked about their depressive symptoms, perceived social support, demographic as well as health factors and then followed in their second and third trimester and once postpartum. Preliminary correlations found that women who reported less perceived social support reported higher depression symptoms at different trimesters in their pregnancy and women who reported higher social support in their third trimester had delivered higher birth weight babies. Of all nationalities in Qatar, Qatari, and women from non-Qatari Arab Gulf countries and other Arab countries reported the highest amount of social support when compared to all other nationalities residing in Qatar. Muslim participants reported the highest amount of social support. The final analyses will explore the relative contribution of social support and depression symptoms to birth outcomes as well as determine whether social support moderates the relationship between depression symptoms and birth outcomes and whether these relationships differ depending on participant ethnicity and religious affiliation. Results indicate the importance of prenatal social support in predicting birth outcomes. Interventions that target social support for pregnant women especially those at risk for poor birth outcomes as well as cultural implications will be discussed in the final presentation. Implications for the role of prenatal social support and depression in the psychosocial development of infants will also be explored.

BOP13.6

**INTEGRATING PRIMAL WISDOM WITH MODERN SCIENCE AND PRACTICE AS A GLOBAL STRATEGY FOR INFANTS, FAMILIES AND COMMUNITIES**

**Sansone--Southwood A.\***

*Association of Pre and Perinatal Psychology and Health (APPPAH) ~ San Marcos, California ~ United Kingdom*

This presentation, drawing on my experience with the Himba, indigenous mothers and children of Northern Namibia, suggests ways we can learn from primal wisdom to develop attunement, empathy and compassion, fundamental for parents as well as children to thrive, to integrate them with scientific discoveries of epigenetics, interpersonal neuroscience, attachment and mindfulness theory and implement them in practitioners' practice. It challenges our understanding of pre and perinatal processes through cross-cultural studies. Inspiring images and stories of integrated and shared motherhood and childcare offer us insights into the quest of how connected in our society we are to motherhood. This presentation takes a look at parenting and child health in the context of our lives and society and explores Primal Wisdom as the best available window into the social lives

of our ancestors, sustaining uncomplicated birth, motherhood and secure attachment, and uses them as a model of sustainability to integrate with modern sensibility. It introduces an expanded integrative view of human development and health, which begins before conception and moves through early childhood in an unbroken continuum in care. I explain how pregnancy, birth and developmental trauma, a product of our society, can impact parents' wholeness and consequently the relationship with their baby prior to birth and his development, and suggest ways for prevention and healing. This presentation offers practical tools to begin our journey into a new kind of Intelligence to benefit infants, families and communities.

BOP13.7

### **PSYCHOSOCIAL INTERVENTION FOR PREVENTION OF MATERNAL DEPRESSION AND HIS IMPACT ON CHILD DEVELOPMENT, IN A RURAL AREA OF CHAD**

**Dozio E.\*, Bizouerne C.**

*Action Contre la Faim ~ Paris ~ France*

Different studies of the relationship between maternal depression and infant growth in early childhood showed that children of mothers with depression or depressive symptoms were more likely to be underweight or stunted (Surkan PJ et al. al 2011). Thus, the well being of the mother can be a factor favouring the future development of the child. In a context like Chad, in the Kanem region, where the prevalence of acute malnutrition has persisted for decades, women face many difficulties during their pregnancy that can lead to depressive states that have an influence on health status of the child. The study, carried out by the NGO Action Contre la Faim, aims to understand the determinants of maternal depression, including the specific cultural aspect, to propose interventions for the prevention of perinatal depression. We proposed a psychosocial intervention to 106 pregnant women. A first group session was organized during the prenatal consultation. The women were then followed at home, at delivery time and after six months of childbirth. We administered a scale of suffering, social support and EPDS to measure depression, as well as we took information on the child's health and nutritional status. Pregnant women showed elevated depression rates at admission. After home visits this rate decreased significantly ( $p < 0.05$ ). At six months after the childbirth, EPDS score was below the threshold of depression. 96% of children did not have a small birth weight and during the six months of follow-up 90% were not identified as malnourished. In Kanem, perinatal depression is a real and widespread problem affecting the well being of women and consequently the health status and development of the child. Psychosocial interventions during the perinatal period can play a fundamental role in the prevention and care of maternal depression.

### **Workshop WS30 - CHALLENGING PARENTING: THERAPEUTIC TRIAD OF FAMILIES AND INFANTS AT HIGH RISK OF AUTISM**

**Alonim H.\*<sup>[1]</sup>, Tayar D.<sup>[2]</sup>, Braude H.<sup>[3]</sup>**

<sup>[1]</sup>The Mifne Center and Bar Ilan University, School of Social Science ~ Rosh Pinna ~ Israel, <sup>[2]</sup>The Mifne Center and Health Ministry, Israel ~ Rosh Pinna ~ Israel, <sup>[3]</sup>The Mifne Center ~ Rosh Pinna ~ Israel

This presentation analyses the therapeutic triad model of “infant, mother, father” and “infant, parents, therapist,” occurring in treating families and infants with the prodrome of autism using the Mifne Method of therapeutic intervention. The Mifne Method treats infants up to 24 months and their whole families. The therapeutic approach is based on attachment theory and family systems therapy. Individual treatment with the infant occurs via Reciprocal Play Therapy (RPT). RPT focuses on the entire range of developmental components: physical–sensory–motor–emotional–cognitive aspects. Parental therapy occurs through analysis of intra-family relationships, and experiential

guidance in fundamentals of RPT, including individual feedback supervision. Modelling of parent-infant interaction through observation of RPT and feedback supervision are important tools for developing parental reflective capacity, thereby providing the means of improving affective regulation for the parents, siblings, and infant with autism. In this presentation, the dialectical relations between different levels of the triadic therapeutic intervention are analysed in terms of qualitative and quantitative data. Drawing on the Mifne Perception Model this presentation will also emphasize the manner in which parental reflective capacity provides the conceptual link between attachment and family systems therapy in the therapeutic triad. A 10-15 minute video of parental participation in RPT for the purposes of parental feedback will accompany this presentation.

### **Workshop WS31 - STRONG BEGINNINGS: BUILDING STRONGER ROOTS FOR CHILDREN AND FAMILIES IN FOSTER CARE**

**Davey D.\*<sup>[1]</sup>, Novell V.<sup>[1]</sup>, Rosenblum K.<sup>[2]</sup>**

*<sup>[1]</sup>The Guidance Center ~ Southgate ~ United States of America, <sup>[2]</sup>The University of Michigan ~ Ann Arbor ~ United States of America*

Strong Beginnings is an evidence-based therapeutic program designed to improve mental health outcomes for parents, infants and young children involved in the child welfare system, and to strengthen cross-systems collaboration in meeting family needs. Strong Beginnings is adapted from Mom Power, an evidence-based trauma-informed intervention (Muzik et al., 2015; Rosenblum et al, in press), rooted in Attachment and Trauma Theory, and several evidenced-based modalities. Strong Beginnings has separate offerings for both biological and foster parents, as well as intensive cross-discipline case management and education for case workers and other professionals in the judicial system. Birth parents explore issues of grief and loss regarding placement in foster care, associated disruptions in the child-parent relationship, and peer support through group work with other birth parents. Foster parents address issues such as grieving the fantasy foster experience, parenting traumatized children, peer support from fellow foster parents, and working within a complicated judicial system. Supported play based caregiver child interactions provide opportunities for tailored feedback addressing the families' unique experiences and challenges with their child(ren), which ultimately enhances their reflective capacity and allows them to parent more sensitively. Collaboration between therapists, case workers, attorneys, and judges is key not only to improve the developmental outcomes of the specific child(ren) in their care, but also on behalf of children in the future placed in their care. Court personnel are intentionally involved through trainings, curriculum dissemination, weekly case consultation calls, and as invited program guests, so as to build a more developmentally sensitive, trauma-informed justice system.

### **Workshop WS32 - EFFECTS OF ONLINE FACE-TO-FACE REFLECTIVE SUPERVISION/PRACTICE GROUPS**

**Veloni G.\***

*Fielding Graduate University ~ Santa Barbara ~ United States of America*

Growing interest and effort is coalescing in the field of Infant Mental Health (IMH) and early childhood development around Reflective Supervision (RS), Reflective Supervision Consultation (RSC), and Reflective Practice (RP). The beneficial implications of RS has led to federal funding requiring RS in funded home visiting programs. RS research is emerging and demonstrating the positive impact of RS on early learning providers serving families and children. In an extensive literature review, no research related to online face-to-face group Reflective Supervision was found. This phenomenological study was designed to evaluate the lived experiences of Doctoral Students and Nurse Home Visiting Supervisors whom participated in online face-to-face Reflective

Supervision (RS) and Practice (RP) groups. The methodology and semi-structured interview process was designed to gain understanding and meaning of their experiences in this online forum. An iterative process of interviewing, transcribing, and note taking was used to explore themes found in data and was repeated throughout the study. A qualitative analysis program ATLAS.ti7 was used to support data interpretation. Triangulation of the findings was conducted for a comparative review with other researchers and Reflective Supervision Consultants in the field. Analysis of the data revealed the online RS supervision environment was supportive and safe. The online forum was enhanced by the affective interactive exchange between the face-to-face interactions and experiences modeled by facilitators and practiced amongst participants. Modeling and experiencing the “way of being” allowed for skill development through the interactive exchanges experienced. Four themes were found reflecting this interactive “between space” “within relationships” group online. Supervisees’ experienced a HOLD model approach in Reflective Supervision: Holding, Observing, Listening, and Discovering. The holding environment and affective interactive exchange within the reflective process and relationships fostered growth, discovery, and relief. The research found online face-to-face Reflective Supervision Groups worked. These findings will support the growing field of knowledge in infant mental health and reflective supervision. This workshop will present Online Reflective Supervision Consultation Research addressing new challenges for a 3rd Millennium in IMH and RSC.

#### **Symposium S44 - ATTACHMENT IN AT RISK DYADS: HOW INFANTS’ OR MOTHERS’ MEDICAL CHARACTERISTICS IMPACT ATTACHMENT BEHAVIOR**

**Ouss L.\*<sup>[1]</sup>, Muller Nix C.<sup>[2]</sup>**

<sup>[1]</sup>Reference centre for rare epilepsies, Department of pediatric neurology, Necker Enfants Malades Hospital ~ Paris ~ France, <sup>[2]</sup>CHUV ~ Lausanne ~ Switzerland

This symposium aims to study how infants’ or mothers’ medical characteristics have repercussions on infants’ attachment behavior measured by the Strange Situation Procedure (Ainsworth et al, 1978). We know that attachment behavior is rooted in the infant’s biological equipment. Infants’ or mothers’ medical conditions could, in addition to the medical characteristics, affect the attachment behavior, and add a secondary risk for pejorative development. Our aim is to better identify attachment characteristics, their links with medical conditions, in order to identify developmental processes and targets for interventions. We propose to present three different risks for the dyad in three different medical conditions and places. The two first concern infants’ risk: preterm born infants in Switzerland, who are at risk for development; and infants with an early epilepsy during the first year (West syndrome) in a French Pediatric Neurology Unit, who are at risk to develop ASD. The third presentation concerns mothers’ conditions, with visually impaired mothers from a specific consultation for blind mothers. We will show how these three medical conditions affect the processes of attachment construction: in preterm birth through early emotional reactivity at 6 months; in epileptic babies, the insecure attachment is linked with the mother anxiety and sadness, but surprisingly, not with the medical characteristics and their consequences. In infants from blind mothers, mothers’ histories linked with their blindness certainly affect their own attachment style, and the way they interact with their children. The understanding of core processes allow to identify targets for interventions, in order to avoid a secondary risk for developmental processes in dyads who are already affected by their medical conditions.

S44.2

#### **PRETERM BORN ATTACHMENT: MARGINAL SECURITY AND EMOTIONAL REGULATION DEFICIT**

**Borghini A.\*<sup>[1]</sup>, Habersaat S.<sup>[2]</sup>, Faure N.<sup>[2]</sup>**

<sup>[1]</sup>MAEPS UNIGE, SUPEA ~ Geneva ~ Switzerland, <sup>[2]</sup>SUPEA ~ Lausanne ~ Switzerland

Preterm born children are known to be less competent according to their interactive behaviors (Muller-Nix et al, 2004). The prematurity has been also considered as impacting parents' attachment (Borghini et al, 2006) but no infants' attachment quality. The present communication will show that attachment quality in children is crucially linked to emotional maturation and particularly tonico-emotional regulation. The emotional regulation has been assessed through Lab-TAB (Gagne et al, 2011) at 6 months (corrected age for preemies). The attachment quality in infants has been measured at 12 months with the Strange Situation Paradigm (Ainsworth et al, 1978). Fifty infants born very premature (under 33 weeks of gestation) and 25 controls have been assessed at 6 and 12 months old. Preterm infants are showing less emotional reactivity at 6 months during the Lab-TAB. This aloofness is individually correlated with marginal security at 12 months that means infants showing less proximity seeking but also less stress responses during strange situation, and thus without displaying avoidant or resistant behaviors. These results give an opportunity to understand how premature birth can affect emotional development and potentially alter stress-related behaviors.

S44.3

### **MOTHERS' ATTACHMENT REPRESENTATIONS AND INFANTS' ATTACHMENT IN DYADS WITH VISUALLY IMPAIRED MOTHERS**

**Gosme C.\***

*Child and Adolescent Psychiatry Unit, Necker Hospital ~ Paris ~ France*

Mother-child interactions in a context of maternal visual disability have been little investigated until now. To evaluate the attachment representations of mothers with visual impairment (visually impaired and blind) as well as the quality of attachment behavior of their children. Longitudinal and prospective follow-up of 12 dyads of mothers with visual impairment and their baby was carried out from the age of 3 months to 4 years and 19 children from control group. Attachment representations of mothers was explored using Ca-Mir (B. Pierrehumbert, 1996) which had to be adapted to the blind population. A Ca-Mir in Braille and a Ca-Mir in large print were therefore created and proposed. A semi-structured interview was proposed in order to assess more qualitative data about their childhood histories. The infants' attachment behavior were observed at 18 months with the strange situation (M. Ainsworth, 1969). When they were 4 years old, the attachment representations were explored with the MacArthur Story Stem Battery (Stories to be completed, Bretherton, 1990). An assessment of early mother infant interactions with the CIB (R. Feldman, 1998) at 3, 6, 9 and 15 months was also performed. The results showed a less secure, less preoccupied and more detached attachment profile in mothers with visual impairment than in the general population. Semi-directional interviews revealed bruised childhood stories that have left traumatic traces. In the strange situation, the children in the clinical group were significantly more insecure than children in general population. The task of the stories to be completed showed attachment categories in favor of disorganization in 7 out of 12 children. Only one child remained secure. Finally, the analysis of early interactions showed that mothers in the clinical group had a lower maternal sensitivity than the control group. The results highlight both the importance to take care 1) of these mothers so that they can develop their own history 1) of their children, who are confronted with two different interactive styles: those of their mother and those of the seers people, who confront them at two different interactive rhythms and modalities.

S44.4

### **ATTACHMENT BEHAVIOR IN A POPULATION OF INFANTS WITH EARLY EPILEPSY : FROM IDENTIFICATION TO EARLY INTERVENTION**

**Le Borgne G.<sup>[2]</sup>, Ouss L.\*<sup>[1]</sup>**

<sup>[1]</sup>Reference centre for rare epilepsies, Department of pediatric neurology, Necker Enfants Malades Hospital ~ Paris ~ France, <sup>[2]</sup>Child and Adolescent Psychiatry Unit, Necker Hospital ~ Paris ~ France

Some early neurological syndromes which occur in the first year of life are accompanied with severe psychopathological outcomes, like autism spectrum disorders (ASD, 30% in West syndrome) or intellectual disability. The parental stress, due to the early condition of the child, may interfere with the quality of the early interactions and could impact the building of the child attachment patterns. The aims of the study are 1) to characterise infants' attachment behavior and the factors linked with the attachment category, in children with an early epilepsy in the first year of life, who are at risk to develop ASD 2) to identify targets for early interventions, besides medical treatment. This observational, prospective and monocentric study included 29 children with West syndrome and 19 controls. The attachment behavior was assessed at 18 months using the strange situation paradigm. Several clinical features has been assessed: the epilepsy characteristics (e.g resistance to treatment), the development (Developmental Quotient assessed by Brunet Lezine scale and WPPSI), ASD (assessed at 3 years by a clinical examination, DSM 5, ADI-R and CARS), mothers' psychopathological features (anxiety and depression assessed by STA-I and HAD at 12 months), and maternal representations of their infant at 12 months assessed by R Interview (Stern 1989). The prevalence of the secure attachment is lower (B, 38%) compared to the general population (Van IJzeendorn, 1992) with a high rate of A attachment (Avoiding, 38%). A positive and significant association was found between the attachment category and maternal psychopathology (anxiety, sadness), but results were not significant regarding development, status of the epilepsy and ASD. Among children with West syndrome, the quality of attachment were independant from the severity of the neurological conditions and their consequences, but were linked with maternal anxiety and sadness. This finding highlights the therapeutic opportunity of psychotherapeutic interventions with parents, besides medical treatment and rehabilitation, in order to reduce the psychological burdens linked with a severe neurological disease during the first year.

### **Workshop WS38 - ADVANCES IN RESEARCH, IMPLEMENTATION, AND DISSEMINATION OF CHILD-PARENT PSYCHOTHERAPY**

**Manly J.\*<sup>[1]</sup>, Toth S.<sup>[1]</sup>, Lieberman A.<sup>[2]</sup>**

<sup>[1]</sup>Mt. Hope Family Center/University of Rochester ~ Rochester ~ United States of America,

<sup>[2]</sup>University of California San Francisco ~ San Francisco ~ United States of America

Presenters will highlight the current state of research and intervention in Child-Parent Psychotherapy (CPP), bridging common divides between research and clinical practice. In Child-Parent Psychotherapy (CPP), ongoing research has highlighted several important findings that have continued to enhance not only knowledge of developmental psychopathology, but also clinical best practice application. Beginning with an overview of CPP, the workshop will include approaches to intervention with families of young children to address child trauma and support positive parent-child relationships. Recent outcome research in CPP will be reviewed, highlighting longitudinal follow-up of children receiving treatment across multiple samples, including follow-up at one year and six years post-treatment (at children's age of nine years). Change processes will be discussed, including the integration of CPP into a multi-component program for teen-aged mothers. The findings from that study illustrated how this program was related to reductions in maternal depression when children were aged two years, and these reductions in maternal depression were related to improved child outcomes at age four years. The reductions in maternal depression that have been found in multiple CPP evaluations will be discussed as an important process of treatment. Physiological processes also have been examined in CPP evaluations, with CPP related to improvements in maternal and child cortisol. Recent examinations of CPP have been assessing how

shorter versions of the treatment model compare with the original twelve-month CPP model. Finally, dissemination and training in CPP will be discussed to share lessons learned from Learning Collaborative approaches to support implementation and sustainability.

### **Workshop WS39 - THE WORK OF PLAY: PROMOTING SELF-REGULATION THROUGH PLAY**

**Foley G.\*, Salazar R.**

*Co-Director, Graduate Program in Infant Mental Health and development Practice, Adelphi University Institute for Parenting; Co-Clinical Director, New York Center for Child Development (FOLEY); Private Practice, Consultant, Faculty, Fielding university & Pro*

Play is the portal that affords young children access to an array of developmental opportunities including the occasion to practice self-regulation without the need for an imposed task. Play is imperiled and this presentation stands in defense of play. Based on a recently published article by one of the presenters in a refereed journal, the nature of play, the typical stages and features of sensorimotor, functional and symbolic play in the first five years are explicated. The concept of regulation is presented and counterpointed against the sources of dysregulation including: excessive psycho-sensory stimulation, states of intense emotional arousal, anxiety and toxic stress. Factors contributing to the development of self-regulation including: temperament, executive functions; positive parenting, attachment, internal representation and symbolization are reviewed in the context of the expected developmental acquisition of self-regulatory capacities. Specific regulatory functions of play are identified and elucidated including: pretend as regulation, play as regulatory practice, play as novelty and investigation and play as roles and rules. The role of play as a family function is highlighted by addressing the challenges that interfere with naturalistic play and offering a template for supporting play in family life and building parental reflection function through play. Video illustrations of play as regulation and family play will be offered. Empirical support for play as regulation will be examined.

### **Brief Oral Presentations BOP18 - PREGNANCY PERSPECTIVES AND PERIPARTUM DEPRESSION**

BOP18.1

#### **MATERNITY DRAWINGS: AN INDICATOR OF MATERNAL PSYCHIC DYNAMIC**

**Missonnier S., Perelman O.\***

*UNIVERSITE PARIS DESCARTES - Laboratoire PCPP (EA-4056) ~ PARIS ~ France*

The period of pregnancy is a time of somato-psychic and identity rearrangements for the woman who is expecting. The maternal representations concerning "the imaginary child" evolve during this time. Studies in clinical psychology have focused on the representational changes of pregnant women, particularly through semi-structured interviews (Ammaniti, Candelori, & Pola, 1999, Raphael-Leff, 1986, Stern et al., 1989). Unique corporeal and sensory dimensions are experienced by pregnant women, especially through the perception of the fetal movements in the maternal womb. The articulation between the maternal psychic dynamic and the corporeal representations of the pregnant woman has begun to be studied from a more projective perspective with the drawing. The use of drawing during the period of pregnancy is a characteristic indicator of the pregnant woman's psychic movements (Parquet & Delcambre, 1980; Riazuelo-Deschamps, 2007; Swan-Foster, Foster, & Dorsey, 2003). The objective of our symposium is to expose various researches and clinical contexts that have used this tool at different times of pregnancy to underline the interest of drawing in the research field: pregnancy drawings of primiparous women compared to multiparous women drawings (Riazuelo, H.; Carvalho, E.), ultrasound drawings (Perelman, O.) and delivery drawings of primiparous women including women requesting C-section delivery (Bouchard,

A.). The use and analysis of drawings as a projective method is pertinent to the investigation of both the conscious and unconscious dimensions of the maternal psychic dynamic during pregnancy. Moreover they offer an opportunity to explore maternal representations and defense mechanisms related to the specific time of a woman's development that is pregnancy.

BOP18.2

### **ULTRASOUND DRAWINGS IN PRIMIPAROUS PREGNANT WOMEN**

**Perelman O.\***

*UNIVERSITE PARIS DESCARTES - Laboratoire PCPP (EA-4056) ~ PARIS ~ France*

The usual pregnancy ultrasounds are part of the process of becoming a parent. From their clinical practice with pregnant women, perinatal psychoanalysts, interested in the psychic experience of pregnancy, compared the ultrasound situation to a projective test (Soulé, M.; Bydlowski, M.; Soubieud, M.J.; Missonnier, S.). "Clinical experience shows us that the ultrasound image has the same value to stimulate fantastic projections as the cards of the Rorschach test" (Soulé, 2011). This paper presents a qualitative study on the ultrasound situation and explored primiparous pregnant women's psychological changes and evolution during pregnancy. Eight French pregnant primiparous women were included, aged between 27 and 36 years (M= 30,2), and interviewed at each quarterly ultrasound (3rd, 5th, 7th month). The research protocol included several steps: 1) the observation of the maternal discourse during ultrasound, by notetaking, 2) the realization of a drawing of the image they saw on the monitor and their family tree, 3) a semi-structured Interview for Maternal Representations during Pregnancy (IRMAG) at the 7th month, for categorizing the maternal representations (Ammaniti, 1999), 4) and the completion of the Edinburgh Postnatal Depression Scale (EPDS), adapted to the pregnancy period, after each ultrasound. The drawing of ultrasound is the main methodological tool and allowed us to articulate the quality of ultrasound perception and the quality of maternal representations. Through qualitative analysis of drawings and associated discourse, the results revealed invariants for each ultrasound: 1) the elements referring to the child's inclusion in the Human norm; 2) the psychic "reconstruction" of the image of an entire child from a fragmented ultrasound image; 3) the expectation of the real child. To illustrate our point, we will confront several clinical cases accompanied by their drawings. Finally, from the ultrasound framework, some elements of prenatal prevention around parenthood will be discussed.

BOP18.3

### **MATERNITY DRAWINGS : A COMPARATIVE STUDY BETWEEN A FIRST AND SECOND PREGNANCY**

**Riazuelo H.\***

*Université Paris Nanterre, EA 4430, CLIPSYD ~ Paris ~ France*

Mothers' drawings come as a support to the work of pregnancy: to represent and "adopt" this stranger-familiar. They lead the mother to face a figurative staging of her imagination, to verbalize both her child's desire and what she considers about the family cell. This preventive-aimed research attempts to better understand the specificity of both primiparous and secondiparous women representations during pregnancy. This is a comparative study which aims at identifying representations as privileged anticipatory markers, among which drawings. Also, drawings can "initiate" psychic work during pregnancy. 22 primiparous and 20 secondiparous women volunteered to participate. Inclusion criteria: French-speaking, aged between 20 and 38, living with the father of the child, and being within the 7th month of pregnancy. These women should not have any prior or pregnancy-related somatic or psychopathological disorders. Data are collected through a self-questionnaire built from Stern's "R" interview adapted to the epoch of pregnancy, and a semi-directive interview. It also includes Lester's (1981) "baby cries" tape band which serves as a

projective support. The mother is also asked to make a drawing of the child and one of her family as she imagines it. The issue of mother's filiation are further explored through a genogram that she makes, all of which are be included in out analysis. Drawings can either show the mother's body, fetal appendages, fetus, a baby or a child either partially or completely shown. Secondiparous women seem to be able to confront themselves to the perinatal life, with its "disturbing strangeness". Their own body is frequently drawn contrarily to primiparous women, and other issues are at stake

BOP18.4

#### **DRAWING DELIVERY SPECIFICITY OF REPRESENTATIONS OF DELIVERY AMONG WOMEN REQUESTING A C-SECTION FOR A FIRST CHILDBIRTH**

**Bouchard A.\***

*Université Paris 13-SPC, UTRPP EA 4403 ~ Paris ~ France*

Medicalisation of birth, and more widely of human reproduction, is accelerating. We are witnessing the normalisation of c-sections and the emergence of c-sections on maternal request, without medical indication, for a first delivery. Numerous studies examine the manifest content underlying this demand, but what about the latent content? Our hypothesis is that demand for c-sections without medical indication comes from an attempt to treat the sexual excitation, both genital and infantile, aroused by the representation of the physical experience of vaginal birth. In the framework of an action research in a maternity ward, we have asked twelve primiparous women having requested to deliver by c-section and ten primiparous women in the general patient population, in the third trimester of pregnancy, to "draw themselves on delivery day". The affects and representations created by the evocation and the figuration of the coming delivery were collected and interpreted based on the commentary expressed during the drawing process. Initial results point to a higher repression of the representation of vaginal passage for delivery among women from the general population than among women requesting a c-section. For women requesting c-sections, proximity between the vagina and the baby seems to be unbearable, as representations of this proximity are under-repressed. Could requests for c-sections be attempts to bypass the undoable?

BOP18.5

#### **NEW RESEARCH INSIGHTS IN THE FIELD OF PERIPARTUM DEPRESSION AND ANXIETY: THE IMPACT ON THE DEVELOPING MOTHER-INFANT RELATIONSHIP**

**Zietlow A.\*<sup>[2]</sup>, Reck C.<sup>[1]</sup>**

*<sup>[1]</sup>Ludwig-Maximilians-University Munich, Department Psychology ~ Munich ~ Germany, <sup>[2]</sup>Institute of Medical Psychology, Center for Psychosocial Medicine, University Hospital Heidelberg ~ Heidelberg ~ Germany*

Depression and anxiety disorders are the most common psychiatric disorders in the peripartum period. It is well known that these disorders pose a risk for the developing mother-infant relationship. This symposium will draw on new findings from recent studies focusing on maternal mental health and the relationship between mother and infant. Further emphasis will be laid on maternal stress and attachment as psychological factors influencing the mother-infant relationship. First, Corinna Reck will present findings from a longitudinal controlled study carried out during late pregnancy up to 4 months postpartum (N = 80). She will examine associations between maternal-fetal bonding, pre- and postnatal symptoms of anxiety and depression and postpartum mother-infant bonding. Afterwards, Anna-Lena Zietlow will present data from a longitudinal controlled study (N = 63), focusing on the development of maternal bonding in the course of postpartum

depression, considering parenting stress. Subsequently, Nora Nonnenmacher will examine the influence of maternal insecure and dual/disorganized attachment on the mother-infant relationship, taking maternal depression into account. Data originates from a controlled sample of depressed mothers (n = 34) and healthy controls (n = 59). In the final presentation, Margarete Bolten will present data from a sample of mothers with infants affected by excessive crying (N = 76), who were introduced to a specialized outpatient service for infant and toddlers. She will focus on the predictive value of maternal anxiety, stress and self-efficacy on the mother-infant relationship and will highlight the relevance of the results for treatment outcome. The present findings offer new insights in the question if and how maternal psychopathology affects the developing mother-infant relationship. The results are discussed with regard to psychological factors that should be considered in clinical work with the aim to prevent potential long-term consequences of maternal mental health on child development.

BOP18.6

### **POSTPARTUM BONDING: THE ROLE OF PERINATAL DEPRESSION, ANXIETY AND MATERNAL-FETAL BONDING DURING PREGNANCY**

**Reck C.\*<sup>[1]</sup>, Dubber S.<sup>[2]</sup>, Mueller M.<sup>[1]</sup>, Wallwiener S.<sup>[3]</sup>**

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Adverse effects of perinatal depression on the mother-child interaction are well documented; however, the influence on maternal-fetal bonding during pregnancy on postpartum bonding has not been clearly identified. The subject of this study was to investigate prospectively the influence of maternal bonding to the unborn child as well as pre- and postnatal symptoms of anxiety and depression on postpartum mother-infant bonding. This study originated from a longitudinal community-based cohort study carried out in Germany. Questionnaires were administered during late pregnancy and up to 4 months postpartum. N = 80 women were analysed for associations between symptoms of depression and anxiety as well as maternal bonding during pregnancy and in the postpartum. Maternal education, maternal-fetal bonding during pregnancy prenatal birth related anxiety postpartum depressiveness and postpartum trait anxiety were significantly correlated with postpartum bonding. In the final regression model, maternal-fetal bonding during pregnancy and postpartum depressiveness explained 20.8% of the variance in postpartum mother-infant bonding. The results confirm the hypothesized relationship between maternal bonding to the fetus and the later maternal bonding to the child as well as the role of postpartum depression. Identifying postpartum depression and other psychopathologies in mothers is also critical for prevention of mother-infant bonding impairment in the early postpartum period.

BOP18.7

### **PERCEIVED PARENTING STRESS IN THE COURSE OF POSTPARTUM DEPRESSION: THE BUFFERING EFFECT OF MATERNAL BONDING**

**Zietlow A.\*<sup>[1]</sup>, Reck C.<sup>[2]</sup>, Mueller M.<sup>[2]</sup>, Duber S.<sup>[1]</sup>**

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<sup>[2]</sup>Ludwig-Maximilians-University Munich, Department Psychology ~ Munich ~ Germany

Postpartum depression (PPD) bears a risk for the developing mother-infant-relationship as it often affects maternal bonding. Moreover, postpartum depressed mothers frequently report higher parenting stress. Aim of the study was to investigate the link between and the development of maternal bonding and parenting stress in the course of PPD compared to a control group.

n = 31 mothers with PPD according to DSM-IV and n = 32 healthy controls completed the Postpartum Bonding Questionnaire and the Parenting Stress Index-SF at two measuring times: acute depression (T1) and remission (T2). At T1 the clinical group reported lower maternal bonding and higher parenting stress. Maternal bonding was found to partially mediate the link between maternal diagnosis and parenting stress. Furthermore, the clinical group reported lower maternal bonding and higher parenting stress averaged over both measurement times. However, at T2 the clinical group still differed from the controls even though they improved in maternal bonding and reported less parenting stress. A significant increase of maternal bonding was also observed in the control group. Maternal bonding seems to buffer the negative impact of PPD on parenting stress. The results emphasize the need for interventions focusing on MB and mother-infant interaction in order to prevent impairment of the mother-child relationship.

BOP18.8

### **POSTPARTUM BONDING: THE IMPACT OF MATERNAL DEPRESSION AND ADULT ATTACHMENT STYLE**

**Nonnenmacher N.\*<sup>[1]</sup>, Noe D.<sup>[1]</sup>, Ehrental J.<sup>[2]</sup>, Reck C.<sup>[3]</sup>**

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Bonding can be described as the emotional tie of a mother to her newborn, develops gradually after birth and is highly relevant for the establishing mother–infant relationship. It is well documented, that maternal depression poses a risk for this developing mother-infant relationship. Similarly, an insecure attachment style of the mother may limit the ability to adequately connect with the newborn during the postpartum period. Aim of this study was to investigate the effect of maternal depression and insecure attachment (insecure and dual/disorganized) on maternal bonding. n = 34 women with depression according to DSM-IV and n = 59 healthy women were included in this study. Maternal depression was assessed 3 to 4 months postpartum with the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), bonding with the Postpartum Bonding Questionnaire, and maternal attachment style with the Attachment Style Interview. Women with current and lifetime depression as well as women with dual/disorganized attachment style reported lower bonding. Explorative analysis revealed that depression partially mediated the link between dual/disorganized attachment style and bonding with a medium-sized mediation effect. The results suggest that women with dual/disorganized attachment style have an elevated risk for impaired bonding. Especially the combination of maternal depression and dual/disorganized attachment seems to affect the developing mother–infant bond and should be addressed in prevention and early intervention programs.

BOP18.9

### **MATERNAL ANXIETY PREDICTS EFFECTIVENESS OF A SLEEP-TRAINING IN SLEEP-DISTURBED AND IRRITABLE INFANTS**

**Bolten M.\*<sup>[1]</sup>, Di Gallo A.<sup>[1]</sup>, Glanzmann R.<sup>[2]</sup>**

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Infant crying and sleep problems are linked. Parents behavior plays a major role in the development of infant sleep. Especially excessive parental involvement with shorter delays in response to infant signaling seems to have a major impact. Meta-analytic studies have provided support for the effectiveness of brief behavioral interventions for infant sleep problems. Notwithstanding,

practitioners must deal with attrition and compliance difficulties of the parents. One important factor for treatment efficacy may be parental characteristics. We were interested in the predictive value of maternal anxiety, stress load as well as self-efficacy on the treatment outcome in infants affected by excessive crying and associated sleeping problems. Infants between 4 and 7 months of age (n=76) who were introduced to a specialized outpatients service for infants and toddlers because of excessive crying or sleep problems were included into the present study. Mothers completed self-report questionnaires on anxiety, depression, stress as well on relational quality before the treatment. Crying/fussing and sleeping data before and after the intervention were obtained with a validated parental diary. Treatment success was rated by clinicians and parents. Regression analyses show that maternal anxiety predicted multiple treatment success parameters. In families who quit the treatment protocol, mothers had higher levels of anxiety, depression and stress before the intervention. Mothers reporting high levels of anxiety had more problems to follow the instructions. Compared to the low-anxious mothers, we found more night-waking in high-anxious mother-child-dyads before and after the treatment, although there was a reduction by the intervention in both groups. Furthermore, we found in the high-anxious group only minor reductions of parental stress and only a minor improvement of mother-child-relationship. Our results suggest that anxiety in mothers had a main impact on treatment effectiveness in sleep-disturbed and irritable infants. To improve interventions on infant's sleep and crying, practitioners should first focus on parent's anxieties, reduce stress and promote self-efficacy and then start with a behavioral intervention for infant sleep problems. These findings should be explored further to assess their clinical validity and utility.

BOP18.10

#### **DRAWING OF PREGNANCY: CONTRIBUTIONS ABOUT THE DEVELOPMENT OF THE PREGNANT WOMAN'S BODY IMAGE**

**Carvalho E.\***

*Nova Universidad ; Faculty of Social Sciences and Humanities (FCSH) ~ Lisbonne ~ Portugal*

Scientific literature underlines the pregnant woman's body image as an important variable for psychological organization during pregnancy. Projective drawings enable the assessment to body image. However, studies using drawings of pregnancy (DP) are missing in recent literature. Objectives of this study were to assess the evolution of body image between the second and the third trimesters using DP and to observe relationships between DP and sociodemographic and clinical factors. The participants were pregnant women (202 at the second and 159 at the third trimesters) waiting for ultrasounds. A sociodemographic and clinical questionnaire was filled out by the participants. The DP instruction was: "Draw yourself as pregnant". With DP of the second trimester, a principal components analysis yielded four factors: F1- General Representation of the fetus ( $\alpha = .966$ ), F2- Representation of the Maternal Image ( $\alpha = .888$ ), F3- Detailed Representation of the fetus ( $\alpha = .846$ ) and F4- Recognition of Pregnancy ( $\alpha = .588$ ). Between the two moments, only F2 presented a significant difference while F1 and F4 did not. Opposed to predictions, F3 did not presented significant changes. Significant correlations were observed between data of DP and clinical variables as parity, spontaneous abortions, total of abortions and the beginning of maternal perception about fetal movements. In a healthy population, DP seems to be specifically sensitive to changes in maternal image representation. Once that the representation of the fetus and the recognition of pregnancy do not present significant changes, this reinforces the theory about the psychological development during pregnancy.

## **Symposium S54 - INFANT MENTAL HEALTH IN INTENSIVE CARE: AN EMERGING AND ESSENTIAL PRACTICE**

**Browne J.\***

*University of Colorado Department of Pediatrics and Psychiatry ~ Aurora, Colorado ~ United States of America*

Recognition of the impact of early hospitalization on infants, their primary caregivers and intensive care staff shows a dire need for more well prepared infant mental health (IMH) specialists, especially in neonatal, cardiac and pediatric intensive care. The symposium will detail the need for IMH specialists for this subgroup of infants and young children, their families and the professionals who care for them in intensive care arenas. A description of essential training, mentored experience and other qualifications needed to work within an intensive care arena will be provided. Panel members will engage the audience in a discussion of clinical case examples that demonstrate the complexities of work with this population, challenges and rewards of providing reflective consultation in intensive care, and opportunities for clinical work with parents and infants during painful and traumatic events. Additionally, panel members will discuss lessons learned, guidance for those entering the field, and projected next steps, in particular regarding continuity of services from pregnancy to post hospitalization, as well as the need for systems building to support Infant mental health practice in intensive care.

S54.2

### **INFANT MENTAL HEALTH IN INTENSIVE CARE: CONSIDERATIONS FOR SUCCESSFUL PRACTICE**

**Browne J.\***

*University of Colorado Department of Pediatrics and Psychiatry ~ Aurora, Colorado ~ United States of America*

Infant mental health (IMH) in intensive care settings is a newly emerging practice emphasizing the importance of helping manage stressful, and often traumatic events for infants, parents, and staff and supports early relationship development using reflective practice. We will address the broadening need for and role of IMH practice, in neonatal, cardiac and/or surgical units including 1. Recognition and support of efforts to create intensive care environments that facilitate relationship development between babies and their caregivers; 2. Understanding and interpretation of communication abilities of babies and their caregivers during stressful and non-stressful events; 3. Identification of positive and negative caregiving factors and addressing barriers to support of nurturing relationships; 4. Monitoring infant and parent regulation, providing strategies and referrals as needed to support optimal regulation in intensive care and home based services; 5. Supporting staff and families during stressful situations and helping them process the impact after the event occurs. Training and experiential preparation for multidisciplinary IMH providers to work in infant intensive care include education specific to high risk pregnancy, delivery, early born and ill neonates, family dynamics and relationships, intensive care culture and staff needs. Mentored and supervised work for the IMH provider includes extensive reflective consultation for clinical cases, parenting issues and staff and systems negotiation. Emphasis is on high quality, well prepared professionals for emergence into IMH work in intensive care.

S54.3

### **INFANT MENTAL HEALTH IN INTENSIVE CARE CASE STUDIES**

**Sampaio De Carvalho F.\***

*Erasmus Hospital ~ Rotterdam ~ The Netherlands*

Presentation of two case studies will emphasize the importance of a comprehensive understanding of components of the role of the IMH specialist in intensive care. Specifically, one case study will describe how the IMH specialist can assist intensive care staff in understanding the complexities of how traumatic events affect the behavior of both infants and their parents. A second case will address the complexities of how the IMH specialist can support nurturing relationships between infant and parent, parent and staff, and among intensive care staff. The importance of reflective practice in each of the case presentations will be emphasized.

S54.4

#### **IDENTIFYING AND ADDRESSING ADVERSITY IN SUPPORTING SUCCESSFUL IMH PRACTICE IN INTENSIVE CARE**

**Talmi A.\***

*University of Colorado Department of Psychiatry and Pediatrics ~ Aurora ~ United States of America*

IMH services and supports that prioritize nurturing the infant-parent relationship must consider the impact of stress, adverse experiences and environments, and prior history on parents/caregivers and staff working with fragile infant populations. Additionally, it is essential to develop and sustain resources that enhance reflective capacity and promote reflective practice for professionals working with fragile infants and their families. Recommendations for optimizing relationship development and enhancing IMH in intensive care settings that often present significant adversity include: 1) Assuring parental and staff access to IMH professionals, including psychologists, psychiatrists, social workers, and others with specific infant mental health training who can address mental health needs of families. 2) Developing a continuum of IMH services that include intensive care, and home and community based services and supports. 3) Applying best practices in IMH to workforce capacity building efforts that support intensive care and community-based staff who work with fragile infants and their families. 4) Promoting reflective practice and cultivating reflective functioning in professionals and families. 5) Advocating for policies by developing, implementing, and funding integrated IMH services that are incorporated as standard care for fragile infant populations.

S54.5

#### **REFLECTIONS ON REFLECTIVE PRACTICE AMONG INTENSIVE CARE STAFF**

**Warren B.\***

*Family Futures ~ Sydney ~ Australia*

A reflective stance is a key component of infant mental health practice, and reflective supervision is essential to successful practice. However, provision of reflective work is challenging in the arena of a busy and high stress intensive care unit. Of necessity, staff focus is typically on the immediate response to medical concerns, with little time built in for reflection of not only the infant and family perspective, but also on the effect on one's own practice. With the high intensity of an intensive care unit, a reflective stance is essential in order to preserve perspective of what each individual's experience has been, including the infant's. The presenter will discuss her experience of providing reflective support to neonatal staff who practice in intensive care, and the challenges and opportunities for reflective consultation within the constraints of the culture of intensive care.

## Brief Oral Presentations BOP21 - INFANTS IN CONTEXT OF MALTREATMENT

BOP21.1

### **ASSESSING THE FEASIBILITY OF LINKING TRIAL AND ROUTINE DATA TO MEASURE THE IMPACT OF SPECIALIST HOME VISITING UPON MALTREATMENT IN ENGLAND**

**Lugg--Widger F.\*<sup>[1]</sup>, Cannings--John R.<sup>[1]</sup>, Angel L.<sup>[1]</sup>, Moody G.<sup>[1]</sup>, Kenkre J.<sup>[2]</sup>, Segrott J.<sup>[1]</sup>, Robling M.<sup>[1]</sup>**

*<sup>[1]</sup>Cardiff University ~ Cardiff ~ United Kingdom, <sup>[2]</sup>University of South Wales ~ Pontypridd ~ United Kingdom*

The Building Blocks trial of a home visiting intervention for first-time teenage mothers assessed outcomes to the child's second birthday. This current study is examining its medium-term impact, particularly upon maltreatment outcomes using routine records. We aimed to establish the feasibility of the study design, which combines trial data with routine health, social care and education data using a dissent-based linkage model. Trial participant identifiers were linked to routine health, social care and education data if mothers did not dissent. Data were forwarded to a safe haven and further linked to de-identified trial outcome data. The feasibility study aimed first to establish the acceptability of data linkage through a single discussion group of young (non-trial) mothers and by levels of dissent received by the research team. Second, we assessed the level of accurate linkage to both health (via NHS Digital) and education and social care (both via National Pupil Database, NPD). Third, we assessed the availability of data and levels of missingness for key outcomes received for a sample of target study years. Of 1545 mother-child dyads contacted, eight women opted out. The engagement exercise with stakeholders found support for the principle of data linkage, including in the context of maltreatment. Some contributors preferred opt-in consent. Most (99.9%) health records were matched on either three or all four identifiers. Fifty participants were not matched to any health data, indicating either matching failure or Type 2 opt-out. Primary outcome data from NPD is derived from any one of three fields, all of which were satisfactorily returned and provided an indication of cases for analysis. Through study set-up and in this pilot, we provide evidence that the main study is feasible, satisfies governance requirements and likely to generate data of sufficient quality to address our main research questions

BOP21.2

### **MURDER IN THE FAMILY – HELPING INFANTS PROCESS TRAUMATIC LOSS**

**Eyre K.\*<sup>[1]</sup>, Milburn N.<sup>[2]</sup>**

*<sup>[1]</sup>Royal Children's Hospital ~ Melbourne ~ Australia, <sup>[2]</sup>Berry St Take Two ~ Melbourne ~ Australia*

Much has been written about working with infants who have been experienced trauma but, with the exception of Black (1993) and Lieberman (2003), little has been written specifically about assisting infants to process the traumatic loss of a parent or other family member, such as a sibling, through murder. In our role as mental health professionals working we have worked with a number of infants and their families to try and help them make sense of the unthinkable while still holding the infant's subjectivity and thinking mind as paramount. Our work with infants and children who have experienced murder in their family is underpinned by the premise that the baby is a subject and a participant in the work (Paul & Salo, 2013). This work has been undertaken in our capacity as public and private practitioners but not in a trauma centre per se. Taking this approach can be complex and taxing, because the adults involved may not share this view, holding firm to the belief that the child is too young to know about the tragic events that have occurred in their family, won't remember, and never need know. This presentation aims to highlight the complexities and issues that arise in this therapeutic work. Practice principles, guidelines for intervening and reflections on

ending this work are discussed. The aim is to provide some guidance for clinicians who may only encounter one of these cases in the course of their professional life.

BOP21.3

### **PREDICTORS OF SOCIAL ENGAGEMENT AND REGULATION DIFFICULTIES IN SIX-MONTH OLD INFANTS BORN TO MOTHERS WITH A HISTORY OF VIOLENT TRAUMA**

**Burtchen N.\*<sup>[1]</sup>, Giovanelli C.<sup>[2]</sup>, Alvarez--Segura M.<sup>[3]</sup>, Castellanos F.X.<sup>[4]</sup>**

*<sup>[1]</sup>University of Freiburg, Germany ~ Freiburg ~ Germany, <sup>[2]</sup>University of Milano-Bicocca, Italy ~ Milan ~ Italy, <sup>[3]</sup>Hospital Sant Joan de Déu Barcelona, Spain ~ Barcelona, Spain ~ Spain, <sup>[4]</sup>The Child Study Center at NYU Langone Medical Center ~ New York ~ United States of America*

Research in older children and in animal studies has shown that maternal trauma increases the risk for adverse developmental and medical outcomes in the offspring. Early infancy is a particularly vulnerable period; yet it remains unclear if maternal trauma type, associated psychiatric diagnoses, atypical parenting behavior and/or parenting stress best predict the development of psychological and/or medical difficulties in young infants. 198 women and their six-month infants born at term and without complications. A psychiatrist assessed maternal trauma history, Posttraumatic Stress Disorder (PTSD), major depressive disorder (MDD), dissociative symptoms, anxiety, and parenting stress (Life Stressor Checklist-Revised, Clinician Administered PTSD Scale, Structured Clinical Interview for DSM Disorders, Spielberger Trait Anxiety Inventory, Parenting Stress Index-Parent Child Dysfunctional Interaction Subscale). Coders of videos recording mother-infant free play were blind to interview results (Coding Interactive Behavior Scale, CIB; Feldman/1998; Atypical Maternal Behavior Instrument for Assessment and Classification; Lyons-Ruth/1999). Mothers completed the Infant Toddler Symptom Checklist (DeGangi/1995) about infant regulation difficulties ("Fussy Baby"). We computed Structural Equation Modeling to test a model assessing paths leading from trauma-related maternal measures to infant outcome. 48.9% maternal trauma history, 17.7% PTSD, 16.1% MDD, 34.4% maternal "Fussy Baby" concern. Statistical analyses showed significantly more parenting stress and atypical parenting as well as more infant regulation difficulties but less infant social engagement in the presence of maternal trauma ( $p < .05$ ), even if maternal psychiatric symptoms did not fully meet DSM criteria for PTSD, MDD, or both. Structural Equation Modeling revealed that atypical parenting and parenting stress are important mediators in the complex interactional pattern between maternal trauma-associated symptoms and child development outcomes. From a child developmental point of view, screening and intervention tools in the context of maternal trauma need to target atypical parenting and maternal feelings of parenting stress in addition to maternal psychiatric symptoms.

BOP21.4

### **STRONG STARTS COURT INITIATIVE FOR INFANTS AND TODDLERS**

**Chinitz S.\*, Malpe K., Wurmfeld K.**

*Center for Court Innovation ~ New York ~ United States of America*

This presentation describes a Family Court based program that focuses on a large and vulnerable cohort of children, those under 3 years of age who are subjects of child protection cases. It brings a trauma-informed approach to assessing the needs of parents and young children and planning interventions that will bring recovery from individual and parent-infant relational problems. It uses the platform and authority of the court to frequently convene interdisciplinary, collaborative court-teams for babies, consisting of attorneys, infant mental health clinicians and family members, that focus on ensuring the children's well-being as well as on their legal advocacy and protection. It attempts to shift from an adversarial to a collaborative relationship among all parties on a case, to

use a strength-based approach to the complex needs of parents, and to achieve timely permanency for children as an important foundation for their healthy development. Description of the Strong Starts Court Initiative, essential components of the model, and outcomes to date. The NYC Strong Starts Court Initiative is currently operating in two boroughs in NYC and is about to expand to a third. Since its inception in 2015, it has served 60 children and 120 caregivers in the lives of these children (parents and foster parents).

BOP21.5

### **USING TRANS-DISCIPLINARY KEY WORKER APPROACH WITHIN A COMMUNITY HOME VISITING PROGRAM FOR PREVENTION OF CHILD NEGLECT AND ABUSE**

**Goh V., Parasuram R.D., Chay O.M., Goh W.H.\***

*KK women's & Children's Hospital ~ Singapore ~ Singapore*

Kids Integrated Development Service 0-3(KIDS0-3) is a pilot secondary level preventive early intervention program. Its primary objective is to deliver, through a key-worker framework, a home visiting program to low income families with multiple risk factors. These multiple risk factors are assessed accordingly to the Family Advocacy and Support Tool (FAST) that helps communicate the complexity of the cases. After which, a trans-disciplinary team comprising paediatricians, social workers, nurses, community health visitors and allied health professionals support the key worker. Service delivery is based on the Abecedarian approach with the aim of optimizing child development while protecting the child from toxic stress. The trans-disciplinary skilled worker, with the support of professionals on a multidisciplinary team, is well placed to detect early the presence of any signs of infant emotional and physical neglect. KIDS 0-3 collaborate with Child Protection Services (CPS) in using a common tool, Sector Specific Screening Guide (SSSG) and Child Abuse Reporting Guide (CARG) for assessing risk factors in the family environment. By applying this tool, the CPS is able to take appropriate action and work with the KIDS0-3 team or community supporting agencies to step up infant protection strategies. In this paper, we will share on how the key worker trans-disciplinary practice is important to support home visitors in skills required for early detection and assessment of child at risk of neglect and abuse.

BOP21.6

### **INTER-PARENTAL CONFLICT, INTIMATE PARTNER VIOLENCE AND OFFSPRING ATTACHMENT IN THE EARLY YEARS: NEW META-ANALYTIC EVIDENCE, AND IMPLICATIONS FOR POLICY AND PRACTICE**

**Mcintosh J.\*<sup>[1]</sup>, Tan E.<sup>[1]</sup>, Greenwood C.<sup>[1]</sup>, Levendosky A.<sup>[2]</sup>**

*<sup>[1]</sup>Deakin University Geelong, Centre for Social and Early Emotional Development, School of Geelong VIC ~ Australia, <sup>[2]</sup>Michigan State University, MSU Psychological Clinic, Department of Psychology ~ East Lansing, MI ~ United States of America*

Attachment security in the early years plays an important role in a range of psychosocial outcomes in later life, and continues to be an important focus of prevention and intervention research. The couple relationship has long been argued to play a seminal role in offspring attachment. The literature has established longitudinal associations of conflict and violence (IPV) in the couple relationship with later child adjustment problems, yet questions around associations with offspring attachment remains unanswered. This review provides a synthesis of the evidence on the role of inter-parental conflict and IPV in the development of offspring attachment security during infancy and the pre-school years. Two systematic reviews were conducted using search terms encompassing the major concepts (inter-parental conflict/IPV, intergenerational, attachment) in EBSCOHost databases, Informit, Embase and Web of Science. Grey literature search was conducted

in Google Scholar and ProQuest. Two meta-analyses were conducted on the associations of offspring attachment with inter-parental conflict and with IPV. Inter-parental conflict and IPV were negatively associated with attachment security in offspring (8 studies,  $k=17$ ,  $r=-0.28$ ,  $p<0.01$  and 5 studies,  $k=12$ ,  $r=-0.28$ ,  $p=0.01$  respectively). Sensitivity analyses are also elaborated. Findings regarding the negative association of inter-parental conflict and intimate partner violence with attachment security in the early years are unequivocal. Policy and clinical implications are discussed.

#### **Workshop WS44 - BREAKING FREE: A TRAUMA-INFORMED COLLABORATIVE PILOT PROJECT FOR CRIMINALLY OFFENDING PARENTS AND THEIR 0-5 YEAR OLDS**

**Kurtz S.<sup>[1]</sup>, Safyer M.\*<sup>[1]</sup>, Anania S.<sup>[2]</sup>**

<sup>[1]</sup>*Adelphi University Institute for Parenting ~ Garden City, NY ~ United States of America*, <sup>[2]</sup>*Office of the Nassau County District Attorney ~ Mineola, NY ~ United States of America*

This workshop describes a program that is a unique alternative to incarceration for criminally offending parents and their young children that addresses trauma and mental health in the context of the dyadic relationship. Criminally offending parents have complicated histories which frequently include traumatic experiences such as poverty, maltreatment, intimate partner violence, and parental substance abuse, mental illness or incarceration. Subsequently, their children often have disrupted attachments and are at risk for developmental and relational deficits. Closer to the Crib (CTTC) is an alternative to incarceration that aims to reduce recidivism and detention while simultaneously supporting positive developmental outcomes for young children. This collaboration between infant mental health specialists and the local District Attorney's office focuses on addressing intergenerational trauma and parent-child relationships. Supporting healthy relational environments reduces the likelihood that parents will reoffend and that their children will become involved with the criminal justice system. Based on up-to-date developmental neuroscience research this program supports establishing positive parent-child relationships which leads to healthier short- and long-term physical and psychological well-being, and aims to stop this intergenerational cycle. The program provides comprehensive assessment, treatment planning, case management, and Child-Parent Psychotherapy (CPP), the gold standard for treating early relational trauma. Offending parents and their young children participate in an extensive evaluation process followed by approximately 18 months of case management and both individual and dyadic treatment. The goal of CTTC is that parents and children develop healthier relationships and avoid further criminal justice involvement. Preliminary outcome data will be presented.

#### **Workshop WS45 - EXPLORATIONS IN PARENT – INFANT WORK AROUND MATCH AND MISMATCH DURING PREGNANCY AND EARLY LIFE**

**Quagliata E.\*<sup>[1]</sup>, Bruschiweiler--Stern N.<sup>[2]</sup>**

<sup>[1]</sup>*Tavistock Clinic ~ London ~ United Kingdom*, <sup>[2]</sup>*Swiss Brazelton Center Clinique des Grangettes ~ Geneva ~ Switzerland*

This workshop aims at exploring the complexity of the very early dialogue between parent and infant. Through a clinical study and videos of consultations, the authors describe the dyad's struggle for regulation and the psychological pain resulting from dysregulation. On the basis of Freud's well known thesis that there "is much more continuity between intra-uterine life and earliest infancy than the impressive caesura of the act of birth would have us believe" (1925, p. 138), Bion considers whether it might indeed be the case "that there is some connection between post-natal thought and emotional life, and pre-natal life" (Bion, 1974). The subject of prenatal life also interested the early psychoanalysts (Ferenczi 1933; Klein, 1957; Bion, 1974) and their intuition that a child is born with the idea of a relationship with the "other" has been confirmed by the approach of infant

observation (Bick, 1964; Miller, 1989; Magagna, 2005) and by recent studies in the field of infant research (Stern, 1985, 1990, 2010; Trevarthen, 1997; Music, 2011). These contributions bear out the hypothesis that the newborn baby possess an innate inter-subjectivity (Stern, 1985, 1990,2010; Powers & Trevarthen, 2009) and claim that the distinction between self and other is already present in some form at birth. In the last thirty years it has become possible, in particular by the technique of ultrasonography, to confirm that an intimate relationship between a fetus and the mother's body already exists in the womb, and that every fetus displays characteristic behaviours that are in some way also recognizable after birth (Piontelli, 1992; Mancia 1994). This paper describes the origins of the first interactions between mother and child in the intrauterine life and in particular the relationship with three objects most involved in the development of the fetus: the placenta, the uterus and the umbilical cord. Through some clinical examples the author will explore how this first interaction influences the initial relationship between the child and the external world, particularly with the mother's breast.

### **Workshop WS50 - STRENGTHENING CHILD HEALTH SERVICES THROUGH DIFFUSION OF EVIDENCE-INFORMED INNOVATIONS**

**Martini--Carvell K.\*, Cornell E.**

*Help Me Grow National Center ~ East Hartford ~ United States of America*

Describe the implementation approach of a portfolio of child-, family-, and provider-focused initiatives with the capacity to mitigate the impact of toxic stress. The Help Me Grow (HMG) system enables jurisdictions to leverage existing resources to ensure that families are supported in ensuring young children's healthy development. For over 20 years, a growing network of more than 25 HMG affiliates across the United States have, through implementation of HMG, engaged child health providers to ensure early detection, referral and linkage to services for children with developmental concerns. The HMG foundation provides the infrastructure necessary to scale innovations, specifically those that support providers in mitigating the impacts of toxic stress among vulnerable infants, young children, and families. Within this session, participants will become familiar with HMG and a broad set of pediatric interventions focused on supporting child health providers in mitigating the impacts of toxic stress. These interventions leverage unique strategies and are implemented in a variety of communities across the U.S. by renowned researchers and interventionists in the field of early childhood. Innovations in this portfolio focus on strengthening pediatric provider capacity to address infant mental health, developmental surveillance and screening, and social determinants of health. Lessons learned from the collective implementation of these initiatives inform the best practices needed to identify at-risk young children and families and link them to needed services. The implications of this effort apply broadly to related initiatives that similarly seek to address child health and development, expand workforce capacity, and enable needed policy reform.

## **Workshop WS51 - ADVANCING THE PRINCIPLES AND PRACTICES OF INFANT MENTAL HEALTH ACROSS MULTIPLE DISCIPLINES AND DOMAINS**

**Walsh T.\*<sup>[1]</sup>, Gilkerson L.<sup>[2]</sup>, Paris R.<sup>[3]</sup>, Ribaud J.<sup>[4]</sup>**

*<sup>[1]</sup>Rutgers University ~ New Brunswick ~ United States of America, <sup>[2]</sup>Erikson Institute ~ Chicago ~ United States of America, <sup>[3]</sup>Boston University ~ Boston ~ United States of America, <sup>[4]</sup>University of Michigan ~ Ann Arbor ~ United States of America*

To explore the integration of an IMH perspective and knowledge base into the multiple disciplines and domains in which IMH professionals train and work, and strategize how best to convey and apply the core principles and practices of IMH across disciplines and domains. Across the range of human services and settings, trainees receive varied exposure to an IMH perspective and knowledge base. Using social work as a model, we will first examine current trends in inclusion and omission of IMH principles, scholarship, and intervention approaches, and consider the potential contribution of an enhanced focus on IMH. Second, we will report on a federally funded effort in the US to include infant and early childhood mental health in social work training. Finally, we will explore variation across disciplines by examining the focus in early education on social emotional learning and describe the similarities and differences with an IMH approach. Presenters will engage attendees in discussing the integration of IMH within their respective disciplines and domains of practice, and strategizing how best to convey and apply IMH principles and practices across disciplines and domains. Included will be a discussion of how we “hold” the emotional experiences of a wide range of professionals as they begin to comprehend the importance of understanding the interpersonal world of infants and young children. Presenters are faculty members from four social work programs around the US, who collectively have received and delivered training in multiple disciplines and multidisciplinary programs, and identify as IMH researchers, practitioners, and educators.

## 13:15-14:45 General Sessions

### Symposium S34 - CONSECUTIVE SYMPOSIUM II: CLINICAL PARADIGMS IN PARENT INFANT PSYCHOTHERAPY (PIP)

**Ludwig--Koerner C.\***

*International Psychoanalytic University Berlin ~ Berlin ~ Germany*

Miri Keren (Israel) reflects in her speech "The concept of Co-Parenthood Constellation as the basis of the triadic father-infant-mother psychotherapy" the father's significance in PIP. It turned out that new fathers develop a Primary Paternal Preoccupation as well as new mothers do. A case vignette will illustrate how, in the triadic interaction, the infant meets the expression of an internalized mental representation of each parent's own co-parenting experiences he/she has lived in their childhood. Elizabeth Tuters (Toronto) is concerned with the questions how do we as psychoanalysts and psychotherapists approach the problems parents present to us with their infants and young children? How do we begin to unpack the symptoms and gather information to help formulate the issues? In her model "Observation, Understanding, Reflection (OUR)" she shows how with the use of a psychoanalytic lens, which values being attentive to our own internal states in contact with the impact of the primitive emotional states within parent-infant/child relationships. Women who became pregnant during their psychoanalysis or who started being pregnant with psychotherapy sometimes need PIP after birth. Christiane Ludwig-Körner (Berlin) deals in her contribution "Methodological considerations regarding parent-infant psychotherapy" how this setting change can succeed.

S34.2

#### **THE CONCEPT OF CO-PARENTHOOD CONSTELLATION AS THE BASIS OF THE TRIADIC FATHER-INFANT-MOTHER PSYCHOTHERAPY**

**Keren M.\***

*Geha Mental Health Center, Infant Mental Health Unit and of the Child and Adolescent Division, Tel Aviv University Medical School ~ Tel Aviv ~ Israel*

In this presentation, a case vignette will illustrate how, in the triadic interaction, the infant meets the expression of an internalized mental representation of each parent's own co-parenting experiences he/she has lived in their childhood. This is the specific mental representation that I suggest naming the Co-Parenthood Constellation. The concept of Motherhood Constellation has become the theoretical framework of mother-infant psychotherapies. Many clinics tend to treat mostly mothers and infants, in spite of the fact that the role of the father in the psychic life of the child has been an important focus of research in the last two decades. Indeed, it turned out that new fathers develop a Primary Paternal Preoccupation as well as new mothers do. Consequently, in a two-parent family, the intrapsychic changes that the new mother goes through with intrapsychic changes the new father goes through as well. The nature of this "encounter" will determine the characteristics of the co-parenting, that is the extent of solidarity and mutual support that the parents convey to the infant in the triadic interaction. In his/her interactions with each parent, the infant thus experiences the motherhood constellation and the fatherhood constellation.

S34.3

#### **OBSERVATION, UNDERSTANDING, REFLECTION (OUR)**

**Tuters E.\***

*Hincks-Dellcrest Centre ~ Toronto ~ Canada*

How do we as psychoanalysts & psychotherapists approach the problems parents present to us with their infants and young children? How do we begin to unpack the symptoms and gather information to help formulate the issues? These are the questions my colleagues and I ask ourselves when we meet a new family with troubled infant-parent relationships. Over time we have developed a model we call Observation, Understanding & Reflection (OUR). We base this model on the use of play and following the lead of the infant/young child. We use a psychoanalytic lens, which values being attentive to our own internal states in contact with the impact of the primitive emotional states within parent-infant/child relationships. We must contain the impact linked to the emerging anxieties expressed in our talking arising from our Observations, Understandings and Reflections. There is a parallel movement within the mind of the therapist and the minds of the infant/child-parent relationship. This intersubjective contact is generated within the therapeutic process. The interweaving of transference and countertransference represents the core elements to transform psychic suffering. What we find so beautiful is the interaction between and within all these elements that creates the change.

S34.4

#### **METHODOLOGICAL CONSIDERATIONS REGARDING PARENT-INFANT PSYCHOTHERAPY**

**Ludwig--Koerner C.\***

*International Psychoanalytic University Berlin ~ Berlin ~ Germany*

The number of women seeking help in psychotherapy because of problems in their pregnancy is increasing. The needs of the patients vary from anxiety, depressions, obsessive ideas, experiences with domestic violence to ambiguity concerning their pregnancy. Sometimes it becomes clear that the mother will be in need of help also after the birth of the child. Not only for herself but also to build a healthy relationship with her baby. How can the change from a “normal” psychoanalytic treatment to a parent-infant-psychotherapy succeed? Under which conditions is it appropriate to change the treatment to parent infant psychotherapy and maybe later – when there is no more need for parent infant psychotherapy – to return to the individual therapy setting? When does it make sense to separate the individual sessions from the parent infant psychotherapy, meaning that in addition to the classical treatment there is parent infant psychotherapy? Which experiences have we gained so far with the different settings? Which methodological difficulties could arise? Should both therapists know from each other, exchange experiences (with the consent of their patients) or should they even use the “simultaneous analysis” as Dorothy Burlingham recommended in the fifties. At that time, the treatment materials from the individual therapeutic session of the mother and those from the child therapy were evaluated and confirmed by an independent person, a “coordinator”.

#### **Symposium S31 - GLOBAL PERSPECTIVES OF BUILDING WORKFORCE COMPETENCY IN PERINATAL AND INFANT MENTAL HEALTH AT A PRIMARY HEALTH CARE LEVEL OF SERVICE DELIVERY**

**Priddis L.\*<sup>[1]</sup>, Foley M.<sup>[2]</sup>**

*<sup>[1]</sup>Edith Cowan University ~ Perth, Western Australia ~ Australia, <sup>[2]</sup>Research and Practice Consultant: Children, Families and Organisations WAIMH Affiliates Council Chair ~ Geneva ~ Switzerland*

This symposium will present a range of international training models that aim to build knowledge, skills and competencies in perinatal and infant mental health with practitioners working within a primary health care setting. Different perspectives will be provided across Ireland, Turkey and Australia demonstrating the effectiveness of training general practitioners, home visitors and child health nurses and community workers. Finally an economic perspective on the role of training in building workforce competency will be provided.

S31.2

**ISTANBUL95**

**Aksakoglu Y.\***

*Bernard van Leer Foundation ~ Istanbul ~ Turkey*

Istanbul95 is part of Bernard van Leer Foundation's global Urban95 program. 95cm is accepted as the average height of a 3 year old. We are developing solutions with city leaders to provide services and infrastructure for children under 3 and their parents. Istanbul95 consist of knowledge and implementation partners. The implementation partners are the district municipalities. The administrative structure in Turkey does not allow the municipalities to provide basic services such as health, education and welfare. District municipalities, although not responsible for such services, are usually providing sporadic social services. In an effort to strengthen the capacities and improve services of municipalities reaching young children and their parents, we have collaborated with Bogazici University, for adaptation and development of a local home visitation program. The program development team received the home visitation training from West Indies University on the Reach Up and Learn methodology. Later on they have worked with Path from the USA in order to include modules for the first six months after birth and nutrition. The team also identified high rates of maternal depression in disadvantaged urban areas. Therefore they have also added components on coping with stress. Finally the team has developed curriculum, training manual, toy manual and supervisor manual for a bi-weekly visit series starting from last trimester of pregnancy until 36th month of the child. The training program for designated home visitors from 4 municipalities took place in September 2017. The fieldworkers are now in the stage of recruiting families. A strong measurement component is also accompanying the field work. The academic team developed a measurement framework based on a few instruments, such as the ASQ (adapted and validated in Turkey), maternal depression and Turkish language development. All 480 families participating will be subject to pre, mid and post tests throughout the implementation period. Control groups from the same neighbourhood, 480 families will also be visited simultaneously, which will allow a comparative analysis of the impact of the program. Considerations of the implementation and adaptation of Reach Up and Learn and Path in Istanbul are explored and future directions discussed.

S31.3

**AN INFANT MENTAL HEALTH INTERDISCIPLINARY TRAINING AND COACHING PROGRAMME IN AN IRISH COMMUNITY AREA-BASED PREVENTION AND EARLY INTERVENTION PROGRAMME: HOW PROGRAMME CONTENT, PROCESS AND ADAPTABILITY IMPACT CAPACITY BUILDING.**

**Maguire C.\*, Buckley L., Harford K.**

*Young Knocknaheeny Area Based Childhood Programme ~ Cork ~ Ireland*

Young Knocknaheeny is an area-based community prevention and early intervention programme located in Cork city, Ireland, developed to address poverty and get every child's life off to the best possible start. The Programme has four interconnected strategies: Infant Mental Health and Wellbeing, Speech, Language and Literacy, Early Childhood and Education and Prosocial Behaviour and Self-Regulation. Underpinning the programme is an interdisciplinary infant mental health (IMH) capacity building and coaching framework. Based on the North Cork Infant Mental Health Learning Network Model (2015) and international best practice, two-day interdisciplinary IMH Master Class blended learning training and coaching programmes were delivered to frontline practitioners. Interagency participation and collaboration were pivotal and facilitated delivery of the training. Learning objectives aimed to increase scientific knowledge of early childhood, enhance practitioner

competencies and practice. Monthly IMH Learning Network Groups were established to consolidate core competencies, facilitate safe spaces for reflection, processing and integration of new and emerging skills. Mixed method approach using quantitative and qualitative tools were developed to measure its approach and implementation, and the effectiveness of practitioner learning outcomes. Quantitative analysis was conducted using IBM SPSS 20.0. Qualitative analysis used Thematic Analysis, guided by the Framework for Qualitative Analysis in Public Health. Four Master Classes were analysed, n =120. Two Network Groups were examined, n=12. Results show significant increases in practitioners' knowledge of IMH pre and post training. Significant shifts in practice were observed in practitioner awareness of IMH-related content and process issues in their professional practice. Results demonstrated significant increases in IMH knowledge, skills and practices among interdisciplinary practitioners. Service changes have slowly emerged and paved the way for improvements in the quality of community-based services for the pre-birth to five year developmental period.

S31.4

#### **BUILDING WORKFORCE CAPACITY IN IMH AT A PRIMARY HEALTH CARE LEVEL IN WESTERN AUSTRALIA - AN ECONOMIC PERSPECTIVE**

**Kiely D.\***

*Bank West Curtin Economics Centre, Curtin Business School, Curtin University ~ Perth, Western Australia ~ Australia*

This paper addresses key economic themes on education, training and the development of workforce capacity in infant mental health (IMH). A review of the literature presents the economic benefits to human resource development, as well as strategies to deal with the costs and provide incentives to engage practitioners and stakeholders. The economics of building workforce capacity is discussed in the context of the Western Australia Primary Health Alliance (WAPHA) and Edith Cowan University 'Better Together' project. Related issues of who receives the benefits and the question of who should pay are presented. Formal, informal and in-employment training options are reviewed, as are issues of access and equality of access to training. Barriers to training, strategic policy and joint solutions are also presented. The 'Better Together' project is collecting information related to PIMH services in the Wanneroo/Joondalup catchment area and the training needs of these services. Data will be analysed using a social network analysis and series of qualitative interviews. Strategies for overcoming problems of workforce development are presented in relation to data collected from the 'Better Together' project. Training networks offer an innovative method of remaining competitive, by sharing best practice and combining resources to reduce the costs of training. Government programmes should target skills needs, providing funding to providers of these programmes rather than to individual companies or their employees. Public private partnerships, tax incentives and loan schemes to increase investment in training, while also providing equality in access to training are presented. Economic theory and evidence shows the benefits of investing in education and training. This investment presents challenges. Solutions relevant to the PIMH field are presented. Co-operative approaches across the State sector as well as funding instruments that balance the needs and responsibilities of employers, individuals and the State are reported.

S31.5

#### **DEVELOPING AND EVALUATING AN INTERDISCIPLINARY, ACROSS AGENCY PERINATAL AND INFANT MENTAL HEALTH (PIMH) TRAINING PROGRAM FOR GENERAL PRACTITIONERS**

**Matacz R., Priddis L.\***

*Edith Cowan University ~ Perth, Western Australia ~ Australia*

Edith Cowan University (ECU) was awarded a grant by the Western Australia Primary Health Alliance (WAPHA) in 2017 to assess the functioning of the PIMH system within the Wanneroo and Joondalup catchment area ('Better Together' project). A crucial component of the project was to assess the training needs of those practitioners working at a primary level of care. A social network analysis (SNA) was conducted as part of the evaluation of the PIMH system and in defining the system a challenge arose in engaging participation with general medical practitioners (GP's). A 3 hour training module for GP's was developed to achieve the following learning outcomes and to provide an opportunity for engagement with GP's:

1. Discuss and understand the definitions and practice of PIMH
2. Use of tools and clinical observation to increase capacity for responding to PIMH concerns
3. Discuss current referral pathways for accessing PIMH services
4. Discuss the benefit of healthpathways (online directory of mental health services).

The training was developed and delivered collaboratively with four key agencies actively involved in PIMH service provision. As a requirement for attending the training GP's participated in the SNA, which used a process of collaborative inquiry to identify the shared view of the system of care. Pre and post evaluation of the training was conducted using qualitative analysis of a case vignette (piloted and confirmed to be an credible description of a family who may present for consultation with PIMH concerns). Qualitative analysis using Thematic Analysis of the responses was conducted and results used to ascertain the nature of any changes in GP awareness of infant mental issues, observation skills and detection of PIMH concerns. Findings from the SNA will be briefly presented to describe the communication networks within the system of care network and specifically the degree to which GP's are connected to other services within the PIMH system. Pre and post evaluation of the training module will also be presented. The project demonstrates a creative response to the challenges in engaging GP's with the wider PIMH system. Implications and project developments related to this training component will be explored.

### **Symposium S37 - EXPLORING THE INNER WORLDS OF CHILDREN: REPRESENTATIONS AND BEHAVIOURS**

**Hillman S.<sup>[1]</sup>, Giovanelli C.<sup>[2]</sup>, Varischio L.\*<sup>[3]</sup>**

<sup>[1]</sup>Anna Freud Centre ~ London ~ United Kingdom, <sup>[2]</sup>Centro TIAMA (per la cura dei Traumi dell'Infanzia e dell'Adolescenza, Maltrattamenti e Abusi) ~ Milan ~ Italy, <sup>[3]</sup>AIPPI (Associazione Italiana di Psicoterapia Psicoanalitica dell'Infanzia, dell'Adolescenza e della Famiglia) ~ Milano ~ Italy

The symposium focuses on attachment representations and behaviours among young children from clinical and non-clinical samples. Study 1 will present two researches aiming at investigating how adverse perinatal events impact the socio-emotional development of children in a longitudinal way, and particularly the quality of attachment. The first research will report data on 42 children born very premature and 22 controls examining whether attachment pattern show stability in both samples. The second research, with the same aim, will report data on 35 children born with a cleft lip and palate and a control group of 24 subjects. Study 2 reports data on 233 children from 4 to 12 years of age (73 preschoolers) and 22 outpatient preschoolers with conduct disorder. The data suggests that the link between attachment representation and hostile intention attribution varies according to age. It also suggests that disorganization in preschoolers is associated with higher scores of hostile intention attribution. Study 3 will present data on 68 4- to 8-year-old maltreated children and 53 controls. The authors analyzed whether maltreated children modify their doll-play narratives in the presence of the caregiver in the room compared to non-maltreated controls. They aimed to examine whether patterns of over-compliance and inhibition emerge in maltreated child's play as a result of the presence of a maltreating caregiver. Study 4 reports data on 30 4- to 8-sexually abused children and 30 gender-matched non-abused controls. The study aims to investigate

the association between a specific, often hidden, early trauma (child sexual abuse) and later representations, attachment, behaviour and symptomatology, indexed by narrative story-completions and questionnaires filled in by the caregivers.

S37.2

### **ATTACHMENT QUALITY ACROSS TIME IN TWO SAMPLES OF AT RISK CHILDREN**

**Borghini A.\*<sup>[1]</sup>, Turpin H.<sup>[2]</sup>, Muller--Nix C.<sup>[1]</sup>**

<sup>[1]</sup>*Liaison child psychiatry Child and Adolescent Psychiatry Unit (SUPEA) ~ Lausanne CHUV ~ Switzerland,* <sup>[2]</sup>*Research Unit Child and Adolescent Psychiatry Unit (SUPEA) ~ Lausanne ~ Switzerland*

Attachment quality is known for its stability across time but attachment is also sensitive to adverse events. The following communication will present two studies that assessed attachment quality in a longitudinal perspective in clinical population that have been exposed to two perinatal adverse events: the premature birth and a cleft lip and palate malformation. The objective of these studies was to understand how adverse perinatal events will impact the socio-emotional development of children in a longitudinal way, and particularly the quality of attachment. The first study was conducted on 42 children born very premature and 22 controls, assessing attachment issues at 4 and 11 years old. Both attachment measurements were made on the basis of narratives: the Attachment Story Completion Task (ASCT, Bretherton et al, 199x) at age 4, and the Children Attachment Interview (CAI, Shmueli-Goetz et al, 2007) at 11 y.o. The second study was conducted on 35 children born with a cleft lip and palate and a control group of 24 subjects. The Strange Situation Paradigm (SSP, Ainsworth et al, 1978) was proposed at the end of the first year and the ASCT was administered at age 4. The results show that significant changes occur between the different ages of assessment. Those changes are more important in the clinical populations than for controls. Therefore control subjects show more stability of attachment quality across time than their peers. The observed changes in the clinical samples tend to show a decrease in the attachment quality across time. Assessment of attachment quality in clinical populations will benefit from longitudinal assessments that could highlight specific particularities and help for understanding the impact of several early stressful conditions.

S37.3

### **LINKS BETWEEN ATTACHMENT REPRESENTATIONS AND HOSTILE INTENTION ATTRIBUTION AMONG PRESCHOOLERS WITH OR WITHOUT CONDUCT DISORDER**

**Miljkovitch R.\*, Vanwalleghem S., Vinter A.**

*I.E.D. Laboratoire Paragraphe Université Paris 8 ~ Paris ~ France*

According to Bowlby, internal working models (IWMs) of attachment are likely to influence the perception of relationships. However, when insecurity leads to defensive exclusion, IWMs may prevent the integration of new contradictory information and thus lead to biased social perceptions. Little is known about the scope of influence of IWMs according to age, and whether it varies in case of psychopathology associated with biased social perceptions, such as conduct disorder. Examine the links between attachment representations and hostile intention attribution (HIA) (1) among preschoolers as opposed to older children and (2) among preschoolers with conduct disorder (CD) as opposed to non-clinical preschoolers. The Attachment Story Completion Task (Bretherton et al., 1991) was used to assess attachment representations. Narrative completion was videotaped and later coded using the ASCT Q-sort (Miljkovitch et al., 2004) yielding scores of security, deactivation, hyperactivation, and disorganization. The Intention Attribution Test for Children (IAT-CH; Vanwalleghem et al., in press), which comprises 16 cartoon strips presenting situations of provocation that are intentional, accidental, or ambiguous as to the character's intention, was also

administered. Links between attachment representations and HIA varied according to age. More specifically, associations were found among children from the age of 8, but not among preschoolers. In the CD preschool group however, disorganization was associated with higher scores of HIA in ambiguous situations as well as in situations of non-intentional harm. Although generalizations based on IWMs seem more likely as children grow older, disorganized attachment may precipitate the development of pervasive IWMs, leading to an increased tendency to systematically attribute hostile intentions, as observed in conduct disorder.

S37.4

#### **THE PLOT THICKENS: MALTREATED CHILDREN TELL MORE “PLEASING” STORIES IN THE PRESENCE OF THEIR CAREGIVERS, BUT NOT IN THEIR ABSENCE**

**White L.O.\*<sup>[1]</sup>, Sierau S.<sup>[1]</sup>, Michel A.<sup>[1]</sup>, Borelli J.<sup>[2]</sup>, Von Klitzing K.<sup>[1]</sup>**

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During interactions with their caregivers, maltreated children exhibit over-compliance and pervasive inhibition of exploratory play. However, the exact situations and forms of maltreatment that lead to such over-compliance and inhibition or their clinical implications remain understudied. We examined whether the mere presence of the caregiver in the same room would be sufficient to lead maltreated children to tell stories with content that might be assumed to please the caregiver, but would also contain evidence of inhibition. Additionally, we evaluated whether over-compliant and inhibitory behaviors would be associated with certain dimensions of maltreatment and mental health concurrently and 3-4 years later. Our sample comprised 121 children aged 4 to 8 with maltreatment (n=68) or without maltreatment histories (n=53) recruited from child protection services (CPS) and the general population. Children completed four story-beginnings about distressing scenarios. Caregivers entered into the room after the first two stories. Narratives were transcribed and rated by trained coders blind to maltreatment status of the child and condition in which the story was told (absence vs. presence of caregiver). Maltreatment characteristics were coded from CPS files and parent interviews using the Maltreatment Classification System. Multi-informant reports of mental health were collected using questionnaires and interviews. Preliminary analyses in n=91 children showed that after their caregivers entered the same room, but not before, maltreated children portrayed parent characters more positively, portrayed less aggression between characters, but also told less coherent stories compared to non-maltreated controls. The increase in positive parent portrayals evoked via presence vs. absence of the caregiver was also positively related to child internalizing and externalizing behaviors. We conclude that over-compliance and excessive inhibition may serve to minimize the odds of hostile encounters with caregivers, but may predispose to maladaptation because it involves suppression of the child's true feelings and distorted perceptions of reality

S37.5

#### **EARLY TRAUMATIC EXPERIENCE OF CHILD SEXUAL ABUSE: IMPACT ON CHILD REPRESENTATIONS AND BEHAVIOUR**

**Giovanelli C.\*, Bertonati C.**

*Centro TIAMA ~ Milan ~ Italy*

Sexual abuse can be considered a traumatic experience, which has a specific impact on children's psychological well-being. As it often happens in family context, it specifically impacts on children's representations and expectations of self, others and relationships - particularly with caregivers. This can influence their attachment pattern and their emotional and behavioural development.

Caregivers of early maltreated children often experience stress and they can be at risk of enhancing child problematic behaviours (Timmer, Urquiza, & Zebell, 2006). The present study investigates the connection between traumatic impact of early sexual abuse, children's representations of self, others and relationships, psychological well-being and the level of behaviour problem and symptomatology. The measures used were: Story Stem Assessment Profile - to investigate child's representations of self, others and relationships and attachment pattern to parents (Hodges et al., 2013) -, Child Behavior Checklist - to identify problem behaviour in the child (Achenbach & Rescorla, 2000) -, Parent Stress Index - to evaluate the magnitude of stress in the parent-child system, as seen by the mother (Abidin, 1990) - and Trauma Symptom Checklist for Young Children -to measure the level of post-traumatic symptomatology (Briere, 2005). Preliminary data suggest that abused children, compared with non-abused children, showed more behavioural and post-traumatic symptoms and representations and less secure attachment. Their caregivers reported a higher level of parental stress. As expected, sexually abused children show representations and behaviours that differ from a non-clinical sample. The assessment of both aspects can provide some highlights which could help for the understanding and treatment of these traumatized children.

#### **Symposium S40 - CARE ENVIRONMENT, PARENT-INFANT INTERACTION AND DEVELOPMENT OF PRETERM INFANTS: NEW RESEARCH INSIGHTS AND CLINICAL IMPLICATIONS**

**Sansavini A.\***

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According to the transactional model of development, infant and parental behaviors and characteristics are mutually influential, and this dynamic interaction influences infant development in significant ways (Sameroff, 2009). Thus, exploring how a preterm birth (< 37 weeks gestation) impacts parental communicative and relational strategies may contribute to efforts to explain the differences observed in the communicative and cognitive development of these infants. Characteristics of the early care environment such as those of the Neonatal Intensive Care Unit (NICU) as well as severity of preterm birth should also be integrated in this model. This symposium aims to discuss new research findings about the relations between care environment, parental and infant behaviors in the preterm population from their first years of life to school age. In particular, three contributions will examine the role of environmental and relational aspects on infant development at the NICU: how quality of developmental care might mitigate development outcomes in VPT children; early forms of reciprocal communicative regulation between mothers and preterm infants; fathers' emotional experiences of- and reactions to- their preterm infant. The other two contributions will examine the relations between infant and maternal behaviors in the first years of life and infant developmental outcomes: the relations between maternal responses and infants' communication skills at 12 and 24 months in mothers of extremely low gestational age infants; the relations between biological risk, children's capacities, and maternal stimulation with cognitive functioning at toddler and school age. Clinical implications of these findings in order to identify which environmental and relational factors can better support parent-infant relationship and infant development will be discussed.

S40.2

#### **LEVEL OF NICU QUALITY OF DEVELOPMENTAL CARE IN NICUS AND SHORT- AND LONG-TERM OUTCOMES IN VERY PRETERM INFANTS**

**Montirosso R.\*, Giusti L., Borgatti R.**

*0-3 Centre for the at-Risk Infant Scientific Institute, IRCCS Eugenio Medea ~ Lecco, Italy ~ Italy*

Preterm birth and Neonatal Intensive Care Unit (NICU) stay are early adverse experiences, which may affect developmental outcomes even in the absence of prematurity-related morbidities. Developmental Care (DC) practices (e.g., kangaroo care) in NICUs have been associated with both short- and long-term neurodevelopmental outcomes. Nevertheless, most of NICUs do not use systematic DC methods and the application of DC procedures varies considerably among NICUs. Little is known about how variation of level of NICU quality of DC affects infants and their developmental outcomes. Moreover, this variation limits the possibility of evaluating the effectiveness of DC across NICUs. Using data from the Neonatal Adequate Care for Quality (NEO-ACQUA) project, a large, multicenter, longitudinal study in 25 regional NICUs in Italy, we examined the relation between the level of DC, and neurobehavioral profile, behavioral problems, language skills, and quality of life outcomes. To evaluate the level of DC, we used a questionnaire designed to measure a variety and levels of DC practices used in NICUs. 178 VPT infants and 110 full-term (FT) infants were assessed when they were discharged from the hospital, then at 18, 36, and 60 months. In the preterm group, the children's performance was compared by splitting the 25 NICUs into units with high- and low-quality DC. For all developmental domains analyzed in the neonatal period (i.e., the neurobehavioral profile) and at preschool age (i.e., behavior, language, and health-related quality of life), high-quality DC was associated with better outcomes of VPT children to such an extent that they had a profile similar to that of the FT children. Findings suggest that higher quality of DC in NICU might mitigate short- and long-term development outcomes in VPT children. Importantly, measuring the variation of DC is essential for examining its efficacy.

S40.3

#### **CHANGES IN INFANT-DIRECTED SPEECH AND SONG ARE RELATED TO PRETERM INFANT FACIAL EXPRESSION IN THE NEONATAL INTENSIVE CARE UNIT (NICU)**

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In their first weeks of life in the NICU, preterm infants are deprived of developmentally appropriate stimuli, including their mother's voice. However, the maternal voice, infant-directed and modulated, is known to support bonding and survival in humans. The current study explores the immediate association of two preterm infant behaviours (open eyes or smiling) with the quality of a mother's infant-directed speech and singing. Participants are 20 mothers who were asked to speak and sing to their medically stable infants placed in incubators. The final population was composed by 19 newborns ( $34.4 \pm 4.3$  wGA). Eighty-four vocal samples were extracted from continuous recordings when they occurred in the presence of an infant's behavioural display (open eyes or smiling) and compared with random selections, matched for duration, obtained during periods of absence of any infant behavioural display. The results of the acoustic analysis show that infant-directed maternal voice presented more marked emotional qualities when infants displayed a behavioural change than when infants were passive and expressionless. Specifically, higher values of mean pitch and maximum sound pressure level, as well as greater variability of these parameters were associated with a behavioural display. During episodes of preterm infant's behavioural display the acoustical features of maternal voice are more similar to infant-directed speech and songs, when compared to the absence of infant's behaviour. These changes are predictive of emotion attribution in adult listeners. Early forms of reciprocal regulation between mothers and preterm infants need to be investigated especially in their neural correlates in order to assess the impact of an emotional infant-directed voice on the preterm-infant's brain development.

S40.4

#### **FATHERS' EXPERIENCES WITH THEIR PRETERM BABIES ADMITTED TO NEONATAL INTENSIVE CARE UNIT: A MULTI-METHOD STUDY**

**Stefana A.<sup>[1]</sup>, Padovani E.M.<sup>[2]</sup>, Biban P.<sup>[2]</sup>, Morelli M.\*<sup>[1]</sup>, Lavelli M.<sup>[1]</sup>**

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A phenomenological approach was used to explore fathers' narratives during their preterm babies' hospitalization in NICU. This study aimed to investigate fathers' emotional experiences of- and reactions to- the preterm birth and the subsequent stay in the NICU, and representations of the father's role. Twenty fathers were recruited from a level-III NICU. A multi-method approach was used and included ethnographic observation, semi-structured interviews, self-report questionnaires, and clinical information. Data were analyzed using a mixed-method: a thematic analysis of data from the interviews/informal talks and quantitative analyses to examine possible associations among the emerged themes and between each theme and both fathers' and infants' characteristics. Two clusters were identified. The "fathers-of-preterm-infants" touched their baby (mean GA: 32.47 weeks) as soon as they were given the opportunity and without fear that doing so they could have harmed their infant. They were struck by their baby's physical appearance, but they did not report any fear of losing their baby. When these fathers talked about their experience of becoming a father, they focused solely on the experience of becoming father per se, without referring to their baby's preterm birth and hospitalization. In contrast, the "premature-fathers" preferred not to touch their baby (mean GA: 29.09 weeks) when had the first possibility to do so, because of the fear of breaking/damaging/infecting him/her. They were struck by both the baby's physical appearance and the technology/equipment covering him/her and were afraid that their infant would die. When talking about the experience of becoming father, they reported worries about preterm birth and their baby's medical conditions. All fathers in cluster1, but only 63% of fathers in cluster2, were actively engaged in infant care activities. Fathers of preterm infants should receive a support specifically addressed to them and personalized based on their individual emotional state.

S40.5

#### **MATERNAL RESPONSES AND COMMUNICATION DEVELOPMENT IN EXTREMELY PRETERM INFANTS**

**Sansavini A.\*<sup>[1]</sup>, Benassi E.<sup>[1]</sup>, Guarini A.<sup>[1]</sup>, Savini S.<sup>[1]</sup>, Caselli M.C.<sup>[2]</sup>, Iverson J.<sup>[3]</sup>**

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Among preterm infants, those born extremely preterm (i.e. with an extremely low gestational age – ELGA- GA < 28 weeks) are at higher risk for language impairment from the first years of life through school age. However, environmental factors related to ELGA infants' communicative development have been not been thoroughly investigated. The present study aimed to examine maternal responses to infants' spontaneous communicative behaviors at 12 months and the relations between maternal responses and infants' communication skills at 12 and 24 months in a sample of mothers and their ELGA infants, compared to a sample of mothers and their full-term (FT) infants. A sample of 20 ELGA infants and 20 FT infants was examined during 30 minutes of mother-infant play interaction at 12 months (corrected age for ELGA infants). Maternal responses were coded according to their contingency and degree of relevance to the infant's spontaneous communicative

behaviors which were coded as gestures and vocal productions. Infant communication and cognitive skills were evaluated with the Bayley Scales (BSID-III) at 12 and 24 months. Despite the less advanced gestural abilities of ELGA infants, their mothers produced high percentages of contingent and relevant responses, as did mothers of their FT peers. Maternal contingent and highly relevant responses (i.e. relevant responses with a repeated label) were associated with ELGA infants' receptive and expressive communication skills at 12 months and predicted expressive communication skills at 24 months. Results suggest that contingent maternal responses with a repeated label following infants' spontaneous communicative behaviors support communicative development from the first to the second year of life, particularly among ELGA infants.

S40.6

#### **ATTENTION, ATTENTION! EARLY IDENTIFICATION OF IMPORTANT DEVELOPMENTAL TRAJECTORIES IN MODERATE PRETERM AND TERM BORN CHILDREN**

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Why do many preterm children, even those born moderate or late preterm, show difficulties in development? Biological (risk) factors, next to specific child characteristics and parenting and interaction between parents and children are all supposed to be important according to the unified theory of development (Sameroff, 2010). An integrated model of biological risk, children's capacities, and maternal stimulation was investigated in relation to cognitive functioning at toddler age and early development was related to cognitive functioning and behavior problems at school age. Participants were 200 Dutch children, of whom 52% were born preterm (gestational age 32-41 weeks); 51% boys, 96% Dutch nationality, 71.5% highly educated mothers. At 18 months (corrected) age, attention capacities were measured with the Utrecht Tasks for Attention in Toddlers using Eye-tracking (UTATE) and mother-infant interaction was observed, specifically maternal behavior regarding maintaining or redirecting attention. Cognitive functioning was measured at 24 months using the Bayley-III-NL. At six years 191 children were examined with the WPPSI intelligence test and mothers answered the CBCL on behavior problems. Cognitive functioning at 24 months was directly predicted by children's attention capacities and maternal attention-maintaining behavior at 18 months. Gestational age was indirectly related to cognitive functioning through children's attention capacities, and through maternal attention-redirecting behavior. Therefore, a combination of gestational age, children's attention capacities and maternal stimulation was found to be associated with early cognitive development. Next, a differentiated pattern of relationships appeared at 6 years, with gestational age relating to WPPSI processing speed and CBCL attention problems, Bayley language skills at 24 months relating to total and verbal IQ, and orienting attention at 18 months relating to attention problems. Important characteristics of developmental trajectories between infancy and school age consist of gestational age, attention capacities, maternal interaction characteristics and language skills.

#### **Symposium S43 - POST TRAUMATIC STRESS FOLLOWING CHILDBIRTH (PTS-FC): TOWARDS A DIALOGUE BETWEEN RESEARCH, CLINICAL PRACTICE AND POLICY**

**Frenkel T.\***

*Ziama Arkin Infancy Institute, Baruch Ivcher School of psychology, Interdisciplinary Center Herzliya ~ Herzliya ~ Israel*

Data suggest that 19-45% of all births are described by mothers as traumatic, eliciting subjective experiences of threat for physical integrity of the self and/or newborn. Approximately 25% of women develop symptoms of post-traumatic-stress-following-childbirth (PTS-FC), and 4-15%

culminate into full post-traumatic-stress-disorder (in normative and high-risk populations respectively). Furthermore, PTS-FC may increase risk for difficulties in the emerging mother-infant relationship, and associated infant-outcomes. Importantly, PTS-FC can trigger a range of symptoms which may yield various phenomenological clinical presentations. Due to particular vulnerability of the postpartum-period, and up to 75% comorbidity with postpartum-depression, risk for misdiagnosis is especially high. From a clinical perspective, accurate diagnosis is critical in formulating theoretical frameworks, to guide/inform treatment targets. While prevalence and risk factors of PTS-FC are well documented, several domains warrant further empirical attention: Prospective studies which assess predictive models, are limited. These are necessary for developing optimal screening of pre-existing vulnerabilities both prior to childbirth and during postnatal hospital-stay. Such models are key in informing preventive policy pertaining to perinatal-care. Furthermore, longitudinal charting of the time-course and phenomenological presentation of PTS-FC and comorbidities during the first-year of life would facilitate accurate diagnosis. Particularly scarce are studies which delineate mechanisms through which PTS-FC hinders emerging mother-infant relations and potential moderators of risk that should be targeted within dyadic interventions. Finally, intervention research on preventive strategies that may be disseminated and administered by medical staff during childbirth, and clinical-case-studies describing treatment of PTS-FC are lacking. The following symposium aims to present a multidisciplinary perspective to create a dialogue between research, policy, and clinical practice. Presentations will utilize data from a longitudinal cohort to address and shed light on each of the domains detailed above: Finally, a clinical-case synopsis will be presented, in which parent-infant-psychotherapy (PIP) was administered in the context of PTS-FC.

S43.2

### **PTS-FC: ITS IMPACT ON THE MOTHER-INFANT RELATIONSHIP AND POTENTIAL FACTORS OF RISK AND RESILIENCE**

**Frenkel T.\*<sup>[1]</sup>, Rousseau S.<sup>[1]</sup>, Feldman T.<sup>[1]</sup>, Shlomi Polachek I.<sup>[2]</sup>**

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Research shows that 25% of new mothers show significant symptoms of post-traumatic-stress-following-childbirth (PTS-FC). While evidence generally suggests negative impact of PTS-FC on the emerging mother-infant relationship, findings are inconsistent. Particularly limited, are studies that examine associations between PTS-FC and observed maternal-interactive-behavior. Some studies reveal PTS-FC-related risk for diminished maternal-sensitivity, increased negative-control, and avoidance of direct-gaze toward the infant. Other studies reveal no PTS-FC associations with maternal-interactive-behavior. Inconsistent findings suggest the presence of potential moderating mechanisms. While for some mothers, PTS-FC may increase risk for negative interactive-behavior, other mothers may be resilient, displaying adaptive behaviors despite significant symptomology. To date, no longitudinal studies have delineated mechanisms which may moderate PTS-FC-related risk. The present study aims to utilize data from a longitudinal cohort to examine interactive influences of PTS-FC and early emergence of feelings of maternal-bonding with her newborn, on later observed maternal-interactive-behavior. PTS-FC and maternal self-reported feelings of bonding with her infant were measured at 1 and 4-months postpartum. Maternal interactive-behavior was observed during freeplay at 4 and 9-months postpartum. Results revealed that higher levels of maternal PTS-FC significantly increased risk for functional/emotionally-detached maternal-behavior, but only for mothers who reported low feelings of bonding toward her newborn at one-month postpartum. Mothers whom despite

symptoms of PTS-FC, were able to develop feelings of closeness toward their newborn at one-month, did not display significant associations between PTS-FC and later observed-interactive-behavior. Results underscore the protective nature of maternal-bonding against detrimental effects of PTS-FC. Results inform policy pertaining to perinatal-care, suggesting that in the context of traumatic childbirths, it may be particularly important to foster early-maternal bonding (e.g., via increased skin-to-skin), to thereby increase resilience. Furthermore, findings suggest that therapeutic interventions in the context of PTS-FC, should target maternal feelings of bonding to minimize negative impacts on later maternal-interactive-behavior.

S43.3

### **THE VALUE OF CHILDBIRTH-RELATED INTERVENTIONS ADMINISTERED BY MEDICAL STAFF TO PREVENT PTS-FC**

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Past research indicates that objective and subjective childbirth experiences significantly shape risk for post-traumatic-stress-following-childbirth (PTS-FC). The childbirth event might therefore be a crucial focal point during which medical-staff may intervene to prevent risk. The current study examined whether simple preventive strategies, administered during childbirth, may serve to influence factors that moderate risk for PTS-FC. Potential moderating mechanisms include maternal feelings of control and maternal feelings of connectedness with her newborn during the childbirth experience, which may serve to shift her focus of attention to the positive (rather than traumatic) aspects of the childbirth event. Specifically we examine outcomes of two birth-related interventions: biofeedback during childbirth and doula-assisted childbirth. Using trans-perineal ultrasound, the biofeedback intervention provides parturients with visual-biofeedback on the effect that their pushing efforts have on progression of the fetal-head towards the birth canal during the second stage of labor. The doula study investigates the effect of doula-assisted-birth. In both studies, participants were followed-up longitudinally during their postnatal hospital-stay and into the postpartum period. Participants in the doula study were also assessed for prenatal risk-factors during the last trimester of pregnancy. Biofeedback during labor significantly predicted higher pushing efficacy during labor, and decreased prevalence of perineal-tearing. In addition, biofeedback significantly increased maternal feelings of connectedness with her newborn which in turn mediated the link between biofeedback and decreased levels of acute-stress and PTS-FC measured at 2-days and 1-month postpartum respectively. Presence of doula during childbirth significantly moderated prenatal anxiety-related risk for acute stress 2-days postpartum, which in turn predicted decreased levels of PTS-FC at 1-month postpartum. This study underscores the promising potential of preventive interventions which may be easily disseminated and administered by medical staff to prevent PTS-FC, even in the context of prenatal anxiety-related risk. Study limitations and future directions are discussed.

S43.4

#### **THE MANY COLORS OF PTS-FC: DEVELOPMENT OF A PREDICTIVE SCREENING MODEL AND ADDRESSING DIAGNOSTIC CHALLENGES AND PATTERNS OF COMORBIDITY**

**Rousseau S.\*<sup>[1]</sup>, Shlomi Polachek I.<sup>[2]</sup>, Frenkel T.<sup>[1]</sup>**

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Alongside an increase in PTS-FC research, several domains warrant further empirical attention. Firstly, methodological challenges arise in diagnosing/defining PTS-FC. To date, measurement relied solely on DSM-IV based, self-report-questionnaires, borrowed from other trauma-related contexts (e.g., war). Due to the particular status of the childbirth-event, and associated physical/emotional changes, sensitive diagnostic tools are required for accurate differentiation between normative/clinical aspects of the postpartum-period. Structured clinical-interviews may be particularly informative and have yet to be implemented in PTS-FC research. Additionally, implications of DSM-V criteria on prevalence of PTS-FC are yet to be determined. Second, the natural-course of PTS-FC is still poorly understood, and longitudinal methods are necessary to chart onset/duration/recovery. Longitudinal data-driven classification techniques may delineate trajectories of PTS-FC presentation, and differential patterns of association with comorbid postpartum-pathologies. Importantly, high comorbidity with depression (75%) emphasizes the clinical necessity to accurately differentiate between depression that is primary, versus depression that is secondary to PTS-FC. Finally, prospective studies developing predictive models are limited. Such models are key in informing policy pertaining to preventive-perinatal-care. (1)Chart the time-course and phenomenological presentation of PTS-FC and related comorbidities during the postpartum period, (2)Develop a screening model to identify women at-risk prior to childbirth and during the postnatal hospital-stay. Women were followed prospectively from pregnancy, during the postnatal hospital-stay and postpartum. Self-report questionnaires and the Clinician-Administered-PTSD-Scale-for-DSM-5 clinical interview were employed to quantify PTS-FC, and potential comorbid pathologies. Preliminary analyses reveal significant differences in questionnaire versus interview diagnosis of PTS-FC. Data-modelling indicates distinctive profiles of symptomology, differentiating between women whom display primary-depression, versus those that display depression which appears to be secondary to PTS-FC. Finally, analyses yielded a predictive model, predicting high levels of variance in postpartum pathology. Results support the potential of simple/cost-effective screening methods. Study limitations, and clinical/methodological implications are discussed.

S43.5

#### **PTS-FC IN THE THERAPEUTIC CONTEXT: A CLINICAL CASE SYNOPSIS**

**Segal Y.\***

*Ziama Arkin Infancy Institute, Baruch Ivcher School of Psychology, Interdisciplinary Center, Herzliya, Israel ~ Herzliya ~ Israel*

Our clinical experience indicates relatively high prevalence of birth-related trauma. We strive to reach trauma-inflicted parents as early as possible due to the assumption that early-intervention can prevent later development of post-trauma. The current presentation demonstrates the importance of this outlook. Referred to us were parents of twins born at gestational week 25, weighing 700 and 800 grams, and hospitalized in the NICU. Two-weeks postpartum, one of the twins died, and the parents came to see me. They were in poor emotional state involving intense, conflicting feelings of pain, anxiety, anger and hope, all of which “threatened their sanity”, as the mother expressed in retrospect. Because I met them in the stage of shock and trauma, the

therapeutic goal was complex: to allow them to grieve their lost baby, while simultaneously building an attachment toward the baby who survived, despite her life being at risk. The first phase of therapy lasted five-sessions, until baby was released from the NICU, and our relationship continued in an ambulatory fashion. The therapy demonstrates how intervention at the time of trauma allowed for immediate transformations in all aspects of the triad: forming relationship with the baby that lived, grieving the baby who died, working on the mother's intrapsychic layers that placed her at risk for depression, addressing aspects of intergenerational-transmission on the side of the father, and creating a non-judgmental support-system leading up to their discharge from the hospital. I believe that intervention at such an early stage in trauma has great preventative value.

## **Symposium S48 - BUILDING AND EVALUATING REFLECTIVE CAPACITY: APPROACHES IN DIVERSE SYSTEMS AND CULTURAL CONTEXTS**

**Watson C.\***

*University of Minnesota ~ St. Paul ~ United States of America*

Given recent emphasis on reflective supervision and consultation (RS/C) as essential tools for best practice in the infant mental health field, this workshop considers what we have discovered about reflective process, what more we need to know, and how we can build capacity in diverse settings. The presenters, from different disciplines and cultural contexts, have extensive experience with reflective supervision and consultation (RS/C) and have developed methods to evaluate reflective process. The goal of the symposium is to articulate questions and share solutions to further our understanding of the challenges as we embed RS/C into practice and evaluation. Each of the four co-presenters will summarize their work specific to reflective supervision/processes. Next, the presenters will invite participants to enter into conversation by posing and responding to questions about the realities of RS/C, for them personally, for those they supervise and for their programs or organizations. We have good evidence that parental reflective functioning (RF) can be measured and supported (e.g., Arietta Slade's work). We have relatively less information about measuring and supporting provider/clinician RF, and if increased provider RF leads to changes in the parent, the parent child-relationship, and child focused outcomes.

Questions to be addressed will include:

- Is RS/C "right" for every program and individual in the infant field?
- Should it be mandatory or optional?
- Can clinician/provider RF be nurtured?
- If RF can be nurtured, to what extent and how?

Of increasing importance is the research and evaluation agenda:

- Can provider/clinician RF be measured?
- Can change in one's reflective capacity be captured?
- Can increased RF lead to better outcomes for babies and families?
- What outcomes can we measure that link to RS/C as a core element of infant practice?

S48.2

## **EVALUATING THE IMPACT OF REFLECTIVE SUPERVISION/CONSULTATION IN DIVERSE INFANT PRACTICE SETTINGS**

**Watson C.\***

*University of Minnesota ~ St. Paul ~ United States of America*

Use of reflective supervision/consultation (RS/C) is growing rapidly, spanning multiple disciplines. It is theorized to improve staff competence and morale, intervention efficacy, and ultimately child outcomes. This paper will summarize evaluations of two initiatives: one in early intervention and

the other in public health home visiting programs. The goals of the first study were to begin to establish the effects of reflective consultation on early intervention practice as well as its potential to address work stress. The home visiting study explored the outcomes of a statewide tiered system of mentoring, consultation, and reflective supervision to build capacity in reflective practice. Survey instruments and standardized self-report measurements provided quantitative data and interview protocols gleaned qualitative data from study participants. Early interventionists reported the impact of reflective consultation on interventions: greater effectiveness, being able to meet the family where they are, being more flexible in their responses to families and a reduction in “trying to fix” all the family’s problems. Participants noted a reduction in feelings of overwhelm, isolation, and anxiety. Interviews with home visitors and supervisors elicited five themes connected to reflective consultation: Pause and Reflect (Slowing Down and Listening); Wondering, Not Fixing; Parallel Process; A Focus on the Baby; and Going Deeper. Home visitors talked about the importance of having the opportunity to express their thoughts and emotions in a safe environment. They talked of feelings of personal accomplishment, a mitigating factor for stress. The studies revealed common results from participation in reflective consultation, including perceptions of increased self-efficacy and the importance of having the opportunity to express thoughts and feelings in a safe environment. These data affirm that participants’ experiences in reflective supervision are consistent with the goals of the reflective process described in the literature.

S48.3

#### **MEASURING REFLECTION IN EARLY INTERVENTION PROVIDERS: EARLY EFFORTS AND NEXT STEPS**

**Tomlin A.\***

*Indiana University ~ Indianapolis ~ United States of America*

The value of reflection, reflective practice, and reflective supervision/consultation in fields that serve very young children and their families is well-established in practice and has a strong theoretical base; however empirical data supporting these practices has been limited. We report on efforts to gather information about practitioners’ awareness of reflection as a practice, their ratings of importance of reflective practice to their work, and their self-reported use of reflection in their work in contrast to other direct service tasks. In addition, we present some pilot data using a narrative approach to understand how early intervention providers think about their process with families. This set of studies aimed to contribute empirically derived data to undergird practices that develop and support reflective skills of providers, including reflective supervision/consultation. The initial studies used researcher created surveys to collect quantitative data. In the third study participants responded to researcher created vignettes of challenging situations with families. Responses to vignettes were evaluated qualitatively. Across studies early intervention professionals are able to identify reflective practice methods and reported that they place a high value on use of reflective practice to support relationships with and within families. However, the behaviors that they report they would actually perform were less reflective; e.g., involved teaching parents coping skills or about child development. Emphasis has been placed on supporting the use of reflection by the early intervention workforce. Providers in these studies have some knowledge of reflective practice but seem to need more training in order to implement it effectively in practice. We discuss our results as supporting the case for use of reflective supervision/consultation to enhance the skills of the early intervention workforce.

S48.4

#### **DESIGNING TOOLS TO EVALUATE REFLECTIVE PRACTICE SKILLS FOR IMH HOME-BASED PROVIDERS**

**Shea S.\***

*Eastern Michigan University ~ Ypsilanti ~ United States of America*

Reflection is an essential competency in infant mental health (IMH) practice and reflective supervision is explicitly designed to support the growth of this competency. However, despite the IMH profession's commitment to this unique supervision experience and the strong theoretical justification for its use, until recently, there has been minimal attention to measuring reflective practice. In response to this need, self-report measures were constructed to capture reflective practice tasks and skills. The aim was to create user-friendly assessment tools designed to measure reflective practice skills specific to IMH home-based supervisors and IMH home-based supervisees. A small group of experts in reflective supervision, IMH professional development, and research on IMH training reviewed the theoretical and practice literature regarding IMH reflective supervision. Self-report measure constructs were also reviewed to assess the most appropriate measure format. Measures describing reflective practice skills and tasks, specific to home-based IMH supervisees and supervisors, were created and refined. The Reflective Supervision Self-Efficacy Scale for Supervisees and the Reflective Supervision Self-Efficacy Scale for Supervisors are 17-item, self-report measures that ask respondents to rate their confidence on a 5-point scale as it relates to specific reflective practice skills and tasks. Self-efficacy, the central construct of both measures, is appropriate for a relational assessment tool given the role of relational efficacy in attachment theory. The Reflective Supervision Self-Efficacy Scale for Supervisees and the Reflective Supervision Self-Efficacy Scale for Supervisors were created in response to a growing need to assess reflective practice skills in the context of reflective supervision. These tools provide a means for clinical programs to assess their IMH supervisees' and IMH supervisors' reflective practice skill development. The tools now exist within a framework of a variety of evaluation efforts in this area and further exploration of the ways in which such efforts complement each other is warranted.

S48.5

#### **FROM REFLECTIVE CONSULTATION TO REFLECTIVE SUPERVISION – A SOUTH AFRICAN EXPERIENCE** **Berg A.\***

*University of Cape Town ~ Cape Town ~ South Africa*

Infant Mental Health came into being in South Africa in 1995. This new concept seemed foreign to many. Bringing services into communities around Cape Town was a challenge on many levels. Evidence-based interventions had little place, as these were generated in situations where language, culture and socio-economic conditions were very different to the local ones. This presentation will describe how reflective consultation between patient, clinician and cultural counsellor was the way this challenging situation was successfully approached. One of the outcomes of this community work was a surge in interest in infant mental health, such that it led to the establishment of a Masters' Degree in IMH. A central pillar of the two-year course is the weekly Infant Observation (IO) and Seminar. Observing the development of babies and their parents, all from diverse backgrounds, provides a rich opportunity to reflect – not only on personal responses to a particular situation, but also collectively in terms of the South African context with its inequalities and traumatic past. The ability to observe and to reflect forms an essential part of the training of students who bring with them diverse skills sets and cultural backgrounds. The IO Seminar has proven to be a container for infantile anxieties to be expressed and reflected upon. Learning from experience is thus made possible. What started with a clinician and cultural counsellor working in the community has developed into an academic programme, the basis of which was and continues to be the ability to reflect.

#### **Symposium S50 - THE MORAL SELF OF INFANCY**

**Nicolais G.\*<sup>[1]</sup>, Oppenheim D.<sup>[2]</sup>**

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The study of moral development is enjoying a resurgence of theoretical and methodological innovation (Lapsley and Carlo, 2014). Much of our moral development occurs early in life, so that under normative conditions by 3 years of age the child's self is a moral self (Emde, Biringen, Clyman, and Oppenheim, 1991). Moral emotions (empathy, guilt, discomfort following transgressions, shame), conducts (rule-compatible, internalized behaviors), and cognitions (understanding of rules and standards of conduct, together with the ability to represent consequences of violations of those standards for oneself and others) represent the core aspect of what can be considered a virtuous disposition in the child – i.e., knowing the good as motivational force to do the good. Within this framework, the goal of the symposium is to offer a developmentally-sensitive recognition of the most salient aspects and processes implied in the building up of a moral conscience during childhood. In the first presentation, the author illustrates and elaborates on Reciprocity, Empathy and Valuation as the most essential aspects of human morality. These REV functions, prepared for us by our background of human evolutionary adaptedness, are essentially relational and call for emotional regulation by caregivers. Within this interplay, the author defines virtues as aspirational aspects of moral development with regard to parenting behavior. In the second presentation, the authors illustrate data of a cross-sectional study set up to investigate how moral core self's mental representations develop from age 3 to 6 years (N=143). Results confirm the emergence of a developmental turning point at around age 4, when procedural moral activation in children starts predicting the declarative feature of moral conscience. In the third presentation, the authors illustrate a theoretical and empirical perspective on the development of guilt in childhood. Presenting the first validation data (N=599) of the Interpersonal Guilt Rating Scale-15 for children (IGRS-15c; Gazzillo et al., 2017), the authors describe the development of guilt in the first years of life as an adaptive emotion stemming from prosocial motivations.

S50.2

#### **EARLY CONSCIENCE: THE INTERPLAY BETWEEN DECLARATIVE AND PROCEDURAL MORAL KNOWLEDGE**

**Nicolais G.** <sup>[1]</sup>, **Fazeli--Fariz Hendi S.** <sup>[2]</sup>, **Modesti C.** <sup>[2]</sup>, **Presaghi F.** <sup>[2]</sup>

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Developmental psychology has not yet shown how prosocial inborn tendencies and internalized standards of conduct on one side, and actual moral behavior on the other side, work together in early years to develop an integrated, multifaceted conscience. In fact, we expect that, from a certain point in development onward, moral core self's mental representations will tend to be activated in moral-related behaviors — with these behaviors predicting correspondent moral declarative abilities. Main purpose of the study was to investigate developmental change in preschoolers with respect to declarative and procedural knowledge of early conscience. N=143 children were enrolled in the study (M age=4,2). We measured key elements of children's conscience — emotion, conduct and cognition — as declared by preschoolers in response to a short played stories procedure (MSPSP), a new measure of declarative knowledge. We then assessed children's procedural moral activation (prosocial vs. proself outcomes) in response to two dilemmatic situations (“Simulated distress” and “Animal game”). Our data confirm the hypothesis of a mild developmental trend characterized by the prominence of moral conduct over moral emotion and cognition. Of particular relevance is the emergence of a developmental turning point at around age 4, when procedural moral activation in children starts predicting the declarative feature of moral conscience. Our

empirical evidence suggests that the acquisition of a “mature” theory of mind around 4 years of age seems to play an integrative role with respect to procedural and declarative sides of morality, actually binding them together.

S50.3

### **GUILT IN CHILDHOOD ACCORDING TO CONTROL-MASTERY THEORY: FROM THEORY TO EMPIRICAL ASSESSMENT**

**Bush M.<sup>[1]</sup>, Gazzillo F.\*<sup>[2]</sup>, Nicolais G.<sup>[2]</sup>, Gorman B.<sup>[3]</sup>, Silberschatz G.<sup>[1]</sup>, De Luca E.<sup>[2]</sup>, Fimiani R.<sup>[2]</sup>, Rodomonti M.<sup>[2]</sup>, Fazeli--Fariz Hendi S.<sup>[4]</sup>**

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According to Control Mastery Theory (CMT; Weiss, 1993; Gazzillo, 2016) and recent developments in moral evolutionary psychology and emotional neurosciences, guilt is basically a healthy and adaptive emotion originating from pro-social motivations developed thanks to group selection pressures. However, when associated with pathogenic beliefs stemming from traumatic experiences, guilt may generate dysfunctional feelings, attitudes and behaviors. This work will offer a brief review of the empirical literature about the development of guilt in childhood. We will then show the first validation data of the Interpersonal Guilt Rating Scale-15 for children (IGRS-15c; Gazzillo et al., 2017), a self-report which assesses Survivor Guilt, Omnipotence Guilt, Self-Hate according to CMT. We reviewed some of the most representative empirical contributions about moral development in childhood. About the research on IGRS-15 for children, it was conducted on a sample of 599 children between 8 and 12 years old. We conducted a three-factor Confirmatory Factor Analysis (CFA) assessed concurrent/discriminant and construct validity of the IGRS-15C. CFA points out that the overall fit of the model discriminating Survivor Guilt, Omnipotence Guilt and Self-Hate is good and EFA shows the same factor solution model. In addition, we have found: positive and significant correlations between IGRS guilt and the scales of the Interpersonal Reactivity Index (IRI; Albiro et al., 2006); positive and significant correlations between Survivor and Omnipotence guilt and the scales of guilt and shame of BSGQ (Novin & Rieffe, 2015) and Pro-socialness Scale (Caprara et al., 2005); finally, Self-Hate differentiates children with secure attachment from children with anxious attachment. On the bases of the analyses conducted, it can be claimed that the IGRS-15C is a good measure of children interpersonal guilt.

S50.4

### **"REV" FUNCTIONS AND THE DEVELOPMENT OF VIRTUES IN INFANCY**

**Emde R.\***

*University of Colorado ~ Denver ~ United States of America*

The contribution offers a systematic reflection on the development of virtues in infancy. Drawing from clinical experience in educational settings as well from research on early moral development, the author presents a theoretical framework where the core features of human morality – reciprocity, empathy and valuation, for convenience referred to as REV functions – are described as proto-virtues in infancy. Being biologically based processes that can be considered inborn, the REV functions are universal functions shaping much of our moral development early in life. The author illustrates the nature and processes underlying these three functions, stating that they cannot be conceived without the regulation provided by parental interactions from the start. By their very nature, they involve forms of emotional connectedness with caring others, thus can be better

described as REVR functions – ones where parental regulation from the beginning, and child's development of negotiation skills later on define their inherent relational nature. The author further elaborates his contribution reflecting on basic principles in the process of development, asking if they can be considered background resources for REVR functions and virtues from the earliest infancy throughout the lifespan. Together with a clear acknowledgement of the fact that there actually are virtues in development, the contribution is concluded with specific remarks addressing still unclear aspects of virtues development in infancy (with specific regard to the issue of individual differences), and pathways for future research on REVR functions and their polarities from infancy on.

### **Symposium S51 - IDENTIFICATION OF AND PRE-EMPTIVE INTERVENTIONS WITH INFANTS AT-RISK FOR AUTISM: A DUAL, RELATIONAL AND SENSORI-MOTOR, PERSPECTIVE**

**Saint-Georges C.\*<sup>[3]</sup>, Muratori F.<sup>[1]</sup>, Laznik M.<sup>[2]</sup>**

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Studies with family home movies have shown that autistic children present motor anomalies as early as the first year of life (Esposito 2009). These studies also showed that though motherese prosody can help them to connect with their care-giver (Cohen 2013), these infants lack of social initiative to engage with them as early as the first 6 months (Muratori 2010). PREAUT grid was built on this observation and had already shown his accuracy to predict autistic outcome in small at-risk population with West syndrome (Ouss 2014). A new study with 4800 babies in the community (PMI centers: Center for Protection of Mother and Infant) showed that this grid allows identifying, at 4-months and 9-months, babies who will present neurodevelopmental disorders (under revision). But screening must be followed by a care proposal. A dual therapeutic approach (associating a specific parents-infant psychotherapy and a specific sensori-motor approach (Bullinger) by a psychomotrician) (Laznik 2014) have shown interesting clinical effects on babies' interactive patterns (videotaped sessions of therapy will illustrate it). Notwithstanding, it appears necessary to scientifically assess mechanisms and efficacy of these therapies. A study is currently carried with videotaped therapy sessions of 67 infants under 11 months. Qualitative and quantitative analyses are performed on therapeutic processes and outcome effects.

S51.2

#### **VIDEO PRESENTATION OF THE TWOFOLD TREATMENT OF A BABY AT RISK FOR AUTISM, BY A PSYCHOTHERAPIST/ANALYST AND BY A PSYCHOMOTRICIAN (BULLINGER METHOD): A CLINICAL EXAMPLE**

**Laznik M.\***

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This presentation aims to illustrate a dual therapeutic approach for infants who are at-risk for autism, associating a specific parents-infant psychotherapy and a specific sensori-motor approach (Bullinger 1998, Kloeckner 2009) by a psychomotrician. Taking into account the difficulties in organization of the body (sensory-motor assessment), the baby is placed in such a way that all his energy is not lost in attempts to reunify his body, and such that he may hear the motherese prosody of the adult speaking to him. Scientific studies have shown that infants becoming autistic are sensitive to it (Cohen 2013). The difficulty of the baby at risk for autism is his inability to solicit a relation with the other (Preaut grid: Ouss 2014, Olliac under revision)). The psychotherapist uses

motherese prosody to develop strategies for a psychic reanimation: to make the infant seeking pleasure of engaging, first with the therapist, and then very quickly with the parent, who participates in the work as a collaborator (Laznik 2014, 2018).

S51.3

### **EARLY COMMUNITY-BASED SCREENING FOR AUTISM SPECTRUM DISORDER WITH THE PREAUT GRID, AN INFANT AND DYADIC ASSESSMENT**

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Very few tools have been prospectively tested with infants of less than 12 months old. The PREAUT grid, based on dyadic assessment through interaction and shared emotion, showed good metrics for predicting ASD in very-high-risk infants with West syndrome. Ability of the PREAUT grid to predict ASD in low-risk individuals was assessed by screening and prospectively following 12,179 infants with the PREAUT grid at four and nine months. A sample of 4,835 toddlers completed the Preaut grid at 4 months and/or 9 months and the CHAT at 24 months. Clinical outcome was available for 45% of the 100 positive at one screening, and 52.6% of a sample of 1100 negative children randomly selected. Of the 100 children who screened positive, 45 received a diagnosis at follow-up; of these, 22 were healthy, 10 had ASD, 7 had an Intellectual Disability, and 6 had another Developmental Disorder, meaning that 50% of infants positive at one screening received subsequently a neurodevelopmental diagnosis. Specifically, 52.6% of infants positive at 4 months with PREAUT received subsequently a neurodevelopmental diagnosis. The PREAUT grid scores were significantly associated with ASD risk status at CHAT-24 months (odds ratios of 12.1,  $p < 0.001$ , and 38.1  $p < 0.001$ , at four and nine months, respectively). PREAUT-4: Sensitivity (Se) = 16-21%, positive predictive value (PPV) = 25-26%; PREAUT-9: Se = 30-41%, PPV = 20-36%; and CHAT-24: Se = 34-41%, PPV = 27-30%. The repeated use of the screening instruments increased the sensitivity [70-78%]. Particularly, repeating the screening at four and nine months with the PREAUT grid allowed a detection of half of the ASD diagnoses, as early at 9 months of age. The PREAUT grid can contribute to very early detection of ASD, and its combination with the CHAT may increase the effectiveness of early ASD and other neurodevelopmental diagnoses

S51.4

### **QUALITATIVE AND QUANTITATIVE EVALUATION OF MEANS AND EFFECTS OF A SPECIFIC MOTHER-INFANT PSYCHOTHERAPY FOR INFANTS AT-RISK FOR AUTISM**

**Parlato De Oliveira E.\*<sup>[1]</sup>, Laznik M.<sup>[2]</sup>**

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PREAUT grid allows us now to very early spot autistic disorder risks in a baby (Ouss, 2013). MC Laznik to whom we owe the third stage of the drive circuit (Laznik, 2006) provides consultations to babies and their parents to help these babies at-risk for autism to have a better outcome. The clinical parent-infant work aims to make the infant seeking pleasure of engaging with another (go into this third stage of the drive circuit) and deviate from an autistic development. The aim of this research is to validate a psychoanalytically oriented psychotherapy method with babies who are under 11 months and their parents, by exploring therapeutic tools and mechanisms, including motherese. As every session is filmed, we will carefully study it with "ELAN", software that allows annotations on video and audio resources. We are analyzing 103 babies followed between 2008 and 2017. The

babies were less than 11 months at the first consultation. They were classified in: (a) brother/sister of autistic people, (b) associated pathology, (c) perinatal accident or prematurity, (d) « without autistic risk factor». We are looking for the moments of exchange between the baby and her mother or therapist and we are observing the comportments of each partner that happens just before. We are scoring PREAUT grid at 4 months and 9 months and M-CHAT at 18 months. For the sample who has reached 3 years of age, we consider the effect of 1) age of beginning of treatment (before or after 6 months), 2) the numbers of consultations, and 3) if there was also or not a sensorimotor treatment and how it may affect the final outcome. The results show that: the earlier the treatment is started, the better the results. The use of the motherese as a therapeutic strategy has positive effects for the synchrony. A specific mother-infant psychotherapy could help to inflect the autistic trajectory of infant at-risk for autism.

S51.5

### **NON-SYNCHRONIC MOTOR-VOCAL PATTERN AND RECIPROCITY IN INTERACTION IN THE FIRST YEAR OF LIFE IN AUTISM**

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From early infancy onwards, young children appear motivated to engage reciprocally with others and share psychological states during dyadic interactions. Although poor reciprocity is one of the defining features of autism spectrum disorders (ASDs), few studies have focused on the direct assessment of real-life reciprocal behavior; consequently, our knowledge of the nature and the development of this core feature of autism is still limited. In this study, we describe the phenomenon of reciprocity in infant-caregiver interaction. We analyse family movies taken during the first year of life of 10 infants with ASD and 9 infants with typical development (TD). We analyzed reciprocal behaviors by means of a coding scheme developed for this purpose (caregiver-infant reciprocity scale (CIRS)). Infants with ASD displayed less motor activity during the first semester and subsequently fewer vocalizations, compared to TD infants. Caregivers of ASD infants showed in the second semester shorter periods of involvement and a reduction of affectionate touch. These results suggest that from the first months of life a nonsynchronous motor-vocal pattern may interfere in different ways with the development of reciprocity in the primary relationship between infants later diagnosed with ASD and their caregivers.

### **Poster Workshop PW05 - EMOTIONAL AVAILABILITY, TRAUMA AND INFANT BRAIN DEVELOPMENT**

PW05.1

#### **PRENATAL EXPOSURE TO STRESS, MATERNAL MENTALIZATION AND POSTNATAL MOTHER-CHILD INTERACTION. PRELIMINARY FINDINGS FROM THE FINNBRAIN BIRTH COHORT STUDY**

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*FinnBrain Birth Cohort Study, Turku Brain and Mind Center, University of Turku ~ Turku ~ Finland*

Maternal psychosocial stress during pregnancy has multiple and long-lasting effects on the offspring's outcomes (Glover, 2014). Quality of care and elements of parent-child interaction moderate the negative effects of prenatal stress. In addition, good mentalization ability is considered central for sensitive caregiving behaviour (Slade, 2005). Mechanisms enabling identification of potential foci for prevention and treatment still remain largely unrevealed. Aim of

the study was to explore how is maternal mentalization at the 6 months of child's age associated with the quality of mother-child interaction among prenatally stressed mothers and their controls at the 8 months of child's age. Material and methods Participants (n=182 mothers) were part of a Focus Cohort sample drawn from the FinnBrain Birth Cohort Study: 71 prenatally stressed mother-baby pairs and 111 controls. Prenatal stress was defined using the clinical cut offs of EPDS, SCL and PRAQ questionnaire results at 14, 24 and 34 gestational weeks. Mother-infant interaction was video-recorded at 8 months of child's age in a 20 minutes free-play situation. Mother-infant interaction was analysed with Emotional Availability Scale. Mothers postnatal mentalization was assessed using Parental Reflective Functioning Questionnaire at 6 months of child's age. Preliminary analysis at correlational level showed that maternal postnatal mentalization capacity was positively associated with maternal sensitivity in the interaction situation, but only within the prenatally stressed mother-baby group. More specifically, higher score in a factor regarding maternal ability to reflect on child's mental states underlying his/her reactions was found to be related to higher maternal sensitivity ( $r = .264$ ,  $p = .043$ ). According to preliminary data analysis, higher maternal mentalization in the postnatal phase seems to be connected with more sensitive maternal interaction among prenatally stress-exposed mother-baby pairs. More detailed results and clinical implications of the findings will be discussed in the symposium.

PW05.2

#### **MATERNAL TRAUMATIC EXPERIENCES, DYADIC INTERACTION AND CHILD EMOTION REGULATION - A SAMPLE OF 2-YEAR-OLDS WITH PRENATAL SUBSTANCE EXPOSURE**

**Hyysalo N.\*, Punamäki R., Flykt M.**

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Parents' earlier life experiences influence their own child rearing habits and their ability to create a secure attachment with their child. A secure attachment is the basis for the development of a child's adaptive emotion regulation (Brumariu & Kerns, 2013). Mothers who abuse substances are more likely to have experienced traumatic events in their lives, such as physical, emotional or sexual abuse (Velez & Jansson, 2013), and are less sensitive (Belt et al., 2012) and more hostile, intrusive and withdrawing in interaction with their child (Pajulo et al., 2006). Although current research suggests that maternal traumatic experiences may affect her parenting, to our knowledge, no previous studies have examined the association among substance-abusing mothers. The aim of the study was to investigate first, how mother's traumatic experiences are associated with the quality of mother-toddler interaction, and second, how mother's traumatic experiences are associated with child emotion regulation in families with mother's prenatal substance abuse.

Participants were 31 mother-child dyads recruited at child's age of two years (T2) from a Finnish child health clinic specialized in families with substance abuse problems. Mother's prenatal substance abuse (T1) was assessed by registry information and retrospective self-report. At T2, a self-report Traumatic Antecedent Questionnaire (TAQ; Herman, Perry & van der Kolk, 1989) was used to analyse mother's traumatic experiences, and the Emotional Availability Scales (EAS; Biringen 2008) were used to evaluate the mother-child interaction. Child emotion regulation was assessed by the Emotion Questionnaire (Rydell et al., 2003) at T2. We hypothesize that maternal traumatic experiences are associated with lower Emotional Availability in mother-child interaction and with child's maladaptive emotion regulation in families with mother's prenatal substance abuse. Final results will be presented and discussed at the conference.

PW05.3

**PARENTING DIFFICULTIES OF MOTHERS WITH CHILDHOOD TRAUMA  
- THE "DARING TO CARE" GROUP INTERVENTION PILOT STUDY**

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The "Daring to care" group intervention has been developed at Traumacentre Finland as part of the project Severe traumatization and parenting. This conjoint cognitive group intervention is intended for parents with childhood abuse and neglect. The group consists of a total of 30 weekly meetings over a period of 10 months. The focus is to help parents recognize, understand and regulate their traumatic emotions and symptoms that arise in triggering situations with their children. As part of the group development process we conducted a follow up study of the pilot groups. The aims were to increase knowledge of relationships between trauma symptoms and parenting and examine effects of the pilot groups. Previous research has found that dissociative symptoms and posttraumatic stress disorder pose risks for optimal parenting and reflective functioning. Parental traumatization has also been associated with intrusiveness and hostility in parent-child interaction. 27 mothers completed the intervention. Trauma measures included history of traumatic experiences (T.E.C), posttraumatic stress symptoms (DTS), dissociation (DES), and somatoform symptoms (SDQ-20). Parenting variables were parental stress (PSI), reflective functioning (PDI) and emotional availability (EAS). Measurements were made prior to, 2 months from the start of the intervention, at the end, and 3 and 12 months post intervention. We will present 5 case examples of mothers of toddlers to illustrate clinically significant parenting difficulties in the areas of reflective functioning and mother-child interaction with regard to emotional availability. Advances made by participant mothers will be described. Findings regarding emotional availability are illustrated through video examples.

PW05.4

**SEX-SPECIFICITY IN THE DEVELOPMENT OF INFANT EMOTIONAL REACTIVITY: ASSOCIATIONS WITH EARLY LIFE STRESS AND NEONATAL AMYGDALA VOLUME**

**Nolvi S.\*<sup>[1]</sup>, Tuulari J.<sup>[1]</sup>, Bridgett D.<sup>[2]</sup>, Shceinin N.<sup>[1]</sup>, Korja R.<sup>[1]</sup>, Lehtola S.<sup>[1]</sup>, Kataja E.<sup>[1]</sup>, Merisaari H.<sup>[3]</sup>, Saunavaara J.<sup>[4]</sup>, Parkkola R.<sup>[5]</sup>, Karlsson L.<sup>[1]</sup>, Karlsson H.<sup>[1]</sup>**

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Emerging work shows that the associations between early life stress (ELS) and child emotional reactivity are sex-specific. Some studies also show sex-specific links with infant amygdala volumes and function. However, the research on the sex-specificity of the neural mechanisms of emotional reactivity is currently scarce. The aim of this study is to present a model of sex-dependent neural and ELS mechanisms of infant emotional reactivity. To accomplish this goal, several findings from the FinnBrain Birth Cohort Study showing sex-specific links between ELS and infant reactivity and neonatal amygdala volumes and emotional reactivity are presented. Subsamples of the FinnBrain Birth Cohort Study (N = 282–427) that have taken part in more intensive follow-up of pre- and postnatal maternal psychological distress (EPDS, SCL-90, PRAQ-R) and emotional reactivity (IBQ-R, Lab-TAB) from 6 to 8 months of age are used across the studies. Moreover, sample that participated

in MR imaging at 2–5 weeks of age is used to study neonatal amygdala volumes and reactivity (N = 54). Our findings suggest that the association between maternal pre- and postnatal psychological distress and infant negative emotional reactivity is dependent on infant sex (Nolvi et al., 2017; under review). Second, our recent finding shows that there is a sex by neonatal left amygdala interaction ( $\beta=3.87, p=.007$ ) and sex by right amygdala interaction ( $\beta=-2.96, p=.016$ ) in predicting infant negative reactivity at 6 months of age after controlling for total GM volume and child age. Expanding upon our work considering emotional reactivity, we also anticipate presenting new findings regarding associations between neonatal white matter microstructure and emotional reactivity. Our findings provide evidence for sex-specificity in both infant emotional reactivity in the presence of ELS and associations between neonatal amygdala and infant reactivity. The important implications and future directions will be discussed.

PW05.5

**MATERNAL SYMPTOMS OF DEPRESSION AND ANXIETY DURING THE PRE- AND POSTNATAL PERIODS AND INFANT ATTENTION TO EMOTIONAL FACES AT THE AGE OF EIGHT MONTHS**

**Kataja E.\*<sup>[1]</sup>, Karlsson L.<sup>[1]</sup>, Leppänen J.<sup>[3]</sup>, Parsons C.<sup>[2]</sup>, Nolvi S.<sup>[1]</sup>, Pesonen H.<sup>[1]</sup>, Häikiö T.<sup>[4]</sup>, Hyöna J.<sup>[4]</sup>, Karlsson H.<sup>[1]</sup>**

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Maternal symptoms of depression and anxiety are common during the pre- and postnatal periods and may predispose the child to a risk for self-regulation problems and mental health disorders<sup>1</sup>. Both depression and anxiety are characterized by deviances in processing social-emotional information from faces. Our aim is to study how infants of mothers with anxiety and/or depressive symptoms attend to emotional faces. Early differences in attention allocation may inform us about the personal salience of different emotions, and reveal differences in attention that may shape child development. The sample (n=363) is a sub-sample of mother-infant dyads from a large, multidisciplinary FinnBrain Birth Cohort Study (N=3808, [www.finnbrain.fi](http://www.finnbrain.fi)). Eye-tracking (EyeLink1000+) was used to study the associations between eight-month-old infants' attention to faces and maternal self-reported symptoms of depression (EPDS), general anxiety (SCL-90) and/or pregnancy-related anxiety (PRAQ-R2). Mothers reported their symptoms five times between gestational week 14 and six months postpartum. The overlap-paradigm<sup>4</sup> was used to study differences in infant attention patterns to faces (neutral, happy, fearful and phase-scrambled face) and distractors. We will present the eye-tracking findings from this large sample of infants, and show how different types of maternal psychiatric symptoms and moreover the time-courses of symptoms are related to infant attention patterns to faces. For instance, maternal depressive symptoms from early pregnancy to six months postpartum are differently related to infant attention patterns, depending on the timing, duration and intensity of symptoms. It also seems that depressive and anxiety symptoms differentially predict infant attention profiles. While the detailed results of our project are still in preparation, it appears that children at risk for self-regulation problems and mental health disorders based on their mothers' history of psychiatric symptoms may show very early deviances from their peers in how they attend to emotional faces. We will continue our investigations to gain more information on the significance of these variations as markers of early developmental adaptive/maladaptive trajectories and for child's later emotional and social development.

PW05.6

## THE ASSOCIATIONS BETWEEN MATERNAL CARETAKING BEHAVIOR AND INFANT ATTENTION TO EMOTIONAL FACES AT THE AGE OF EIGHT MONTHS

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According to previous literature, emotional attention is related to mental health in adults and in children. However, little is known about the developmental pathways of emotional attention and factors affecting this development. Infants' emotional attention develops rapidly during the first year of life. To our knowledge, there are only few reported studies of associations between infants' emotional attention and one of the infants' main developmental contexts: mother-child-interaction. The aim of this study is to investigate, to what extent mother's and her infant's emotional availability is associated with infant's attention to facial expressions at the age of 8 months. This sample comprised 149 infants. The overlap paradigm was used in an eye-tracking experiment to measure the infant's tendency to disengage attention from fearful, happy and neutral facial expressions and from a non-face control stimulus at the age of 8 months. Emotional availability was coded in the 20 minutes' free play mother/infant situation at 8 months of child's age. EA Scales consist of six dimensions to describe the interaction between an adult and a child including scales of Maternal Sensitivity, Structuring, Non-intrusiveness, and Non-hostility and Child's Responsiveness and Involvement. Our preliminary results showed that disengagement from fearful face is associated with maternal sensitivity ( $r=0.17$ ,  $p=0.039$ ), structuring ( $r=0.21$ ,  $p=0.012$ ), non-intrusiveness ( $r=0.20$ ,  $p=0.014$ ) and non-hostility ( $r=0.27$ ,  $p=0.001$ ) and child responsiveness ( $r=0.20$ ,  $p=0.016$ ). The more emotionally available the mother was the more likely the child shifted the gaze from fearful face towards a new stimulus. According to our preliminary results, all aspects of mother's emotional availability and infant's responsiveness in the interaction situation were associated with infant's attention to fearful faces during the eye-tracking measurement. Infants' whose mothers had lower emotional availability had heightened attention to fearful faces. More detailed analysis and discussion will be presented at the conference.

## Video Presentation V09 - BEYOND WORDS: INTRODUCTION TO CODING PARENTAL EMBODIED MENTALIZING (PEM)

Mc Devitt--Shai D.\*

Academic College Tel Aviv Yaffo ~ Tel Aviv ~ Israel

Parental mentalizing—the capacity to consider and treat the child as a psychological agent motivated by mental states—is a significant factor shaping infant development (Slade, 2005). Parental Embodied Mentalizing (PEM) is an approach and method focusing on implicit nonverbal processes, and refers to a parent's ability to understand a baby's mental states as conveyed through body movement (Shai & Belsky, 2011, 2016; Shai & Fonagy, 2014). Research supports the reliability and validity and predictive reliability of this novel approach to parental mentalizing (Shai & Belsky, 2011, 2016; Shai, Dollberg, & Szepsenwol, 2017). Assessing PEM involves examining full-body parent-infant interactions through the observation of video recordings with sound turned off, while focusing on the interactive quality of movements rather than the action performed, and how one partner responds bodily to the other. The aim of this video workshop is to introduce the concept of PEM and to demonstrate how the PEM coding system is applied to a videotaped parent-infant

interactions. We will review the concept of PEM and focus on how to code videotaped parent-infant interactions using the PEM coding system. The workshop will illustrate the components of the coding scheme using video clips. These clips will allow to get a flavour of the coding process and considerations taken into account when coding PEM. This introductory “taster” of PEM is aimed to be helpful in informing theoretical, empirical, and clinical work.

## **Brief Oral Presentations BOP14 - POSTNATAL DEPRESSION AND ANXIETY & THE BABY**

### **BOP14.1**

#### **DEVELOPMENT AND PRELIMINARY EVALUATION OF A GROUP INTERVENTION TARGETING MATERNAL MENTAL HEALTH AND MOTHER-INFANT INTERACTIONS: A CASE SERIES REPORT**

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Postnatal depression and anxiety are prevalent and may have negative effects on mothers and their infants. Though the mechanisms through which maternal mental health problems affect infant development are not clear, mother-infant interaction patterns have been suggested to mediate adverse developmental outcomes (Bergman, Sarkas, Glover, & O`Connor, 2010). Interestingly, treating maternal mental health symptoms does not have a positive impact on the mother-infant relationship, therefore, it has been suggested that treatment interventions targeting maternal symptoms of depression and anxiety should include an explicit focus on the mother-infant relationship (Richter & Reck, 2013). The purpose of this study was to investigate the outcomes of an Emotional Wellbeing Group intervention developed to treat maternal depression and anxiety while concurrently supporting positive development of the mother-infant relationship. Five women diagnosed with depressive and/or anxiety disorders and their infants completed the Emotional Wellbeing Group, a 10 session (2 individual and 8 group sessions) intervention oriented to improve maternal mental health symptoms and to nurture the developing mother-infant interaction. The intervention combines elements from psychoeducation and CBT (Muñoz et al, 2007; O`Mahen et al, 2012) with an infant mental health model of intervention. The participants completed pre- and post-intervention assessments, which included self-report measures of mood and the motherhood experience, and a video-taped, unstructured play session between mothers and their infants. Four of the participatns reported a clinically significant decrease in their symptoms of anxiety. All mothers reported more positive perceptions of their infants and their experience of motherhood, and showed enhanced maternal sensitivity and responsiveness towards their infants. Depression levels were not shown to improve consistently across participants. This study provides initial positive evidence to support future research directions and clinical efforts to develop interventions that target both the treatment of perinatal depression and anxiety and the quality of the mother-infant interactions.

### **BOP14.2**

#### **THE EFFECT OF MATERNAL POSTNATAL DEPRESSION ON INFANTS' VERBAL AND NONVERBAL COMMUNICATION SKILLS: A VIDEO-BASED ANALYSIS**

**Eirinaki V.\***

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Postnatal depression (PND) affects approximately 20% of women following childbirth. Research shows that mothers with PND are less involved in enriching and educational interactions with their babies (i.e., play, singing songs, face-to-face contacts). These deficits in mother-child interactions

have been found to negatively affect the child's development. Children of mothers with PND are at increased risk of poor developmental outcomes. However, there is no research focused on infants' non-verbal and verbal communication skills during interactive activities with severely depressed mothers, and especially in the context of an inpatient Mother-Baby Unit (MBU). MBU provide psychiatric care for mothers with severe mental health problems and therapeutic input for mothers in order to address their relationship difficulties. In this in-patient ward, mothers are admitted with their babies and the mother-infant interaction is video-recorded for interventions purposes. The main aim of this study is to examine the effect of mothers' PND on infants' verbal and non-verbal communication skills during three common yet crucial activities in child development; play, mother singing and face-to-face interaction. This will be the first study to provide a detailed examination of the emergent use of verbal and non-verbal communication skills in infants during these multiple activities with their mothers. Pre-existing video-recording material from inpatient MBU, that contain footages of 40 mothers with PND and their infants (aged up to 18-month-old) interacting during play, maternal singing and face-to-face contact, will be analysed. A comparison group of 40 mothers without PND and their infants (aged up to 18-month-old) will be recruited from Maternity Services and Children's Centres. These mothers will be screened for eligibility to ensure that they are not suffering from undiagnosed or unreported PND. Mothers without PND and their infants will be video-recorded under the same conditions as the case group. It is expected that the findings will glean a deeper understanding regarding the constellation of needs of children with a mother with severe PND as well as to produce suggestions for improvement to the existing policies for school-based early intervention for this population.

BOP14.3

### **THE ASSOCIATIONS BETWEEN MATERNAL ANTE- AND POSTNATAL DEPRESSIVE SYMPTOMS AND FIRSTBORN'S INTERNALIZING, EXTERNALIZING AND DEPRESSIVE SYMPTOMS AT DIFFERENT DEVELOPMENTAL STAGES DURING 27 YEARS**

**Luoma I.\*<sup>[1]</sup>, Korhonen M.<sup>[2]</sup>, Salmelin R.<sup>[3]</sup>, Siirtola A.<sup>[4]</sup>, Puura K.<sup>[5]</sup>**

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The risk for intergenerational transmission of depression is currently well acknowledged. However, there are not very many longitudinal studies extending from pregnancy to adulthood. The aim of the study was to investigate the associations between maternal depressive symptoms at ante- and postnatal stages, and internalizing, externalizing and depressive symptoms in children from middle childhood to adulthood. The sample of 349 expectant first-time mothers was collected from maternity centers in Tampere, Finland, in 1989-90. Maternal depressive symptoms were assessed by the Edinburgh Postnatal Depression Scales antenatally, after delivery and at two and six months. The internalizing and externalizing problems of the firstborns were assessed by the Child Behavior Checklists, completed by the mothers, at the age of 8-9 and 16-17 years, and by Adult Self Reports, completed by the firstborns, at the age of 26-27 (n = 144). Depressive symptoms of the firstborns were assessed by the Edinburgh Depression Scales at the latest study stage. Maternal antenatal depressive symptoms were associated with the firstborns' externalizing symptoms in middle childhood and adolescence and depressive symptoms in adulthood. Maternal postnatal depressive symptoms at two months predicted firstborns' externalizing symptoms in middle childhood and depressive symptoms in adulthood. Maternal postnatal depressive symptoms at six months also predicted the firstborns' depressive symptoms in adulthood. Maternal ante- and postnatal

depressive symptoms showed long-term associations with the firstborn's emotional well-being. The symptoms of the children showed different profile at different developmental stages.

BOP14.4

#### **PERSISTENT AND SEVERE POSTNATAL DEPRESSION: ITS LONG TERM COURSE AND IMPACT ON CHILD DEVELOPMENT**

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Maternal postnatal depression (PND) is common and associated with negative effects on child development. These effects are not inevitable and it is critical to identify those most at risk. Previous work suggests the risks are increased in the context of persistent PND and severe PND, but this has not been systematically studied. We used data from the ALSPAC study to examine PND that is, persistent, at three thresholds of severity: moderate, marked, and severe. PND was defined as persistent when the questionnaire score was above threshold at both 2 and 8 months postnatally. For each of these categories, we examined (i) the trajectories of later maternal depression scores (6 time points: 21 months - 11 years after birth) and (ii) child behavioural problems at 3.5 years, school-leaving maths scores at 16 years, and depression at 18 years. Compared to women with PND that was not persistent and to women who did not score above threshold at all, for all three severity levels, women with persistent PND showed elevated depressive symptoms until 11 years postpartum. PND, whether persistent or not, doubled the risk of child behaviour disturbance. Persistence was particularly important to child outcome in severe PND, substantially increasing the risk for behavioural problems at 3.5 years (OR 4.84, 95%CI 2.94,7.98), for lower maths scores at age 16 (OR 2.65, 95%CI 1.26, 5.57), and for depression at age 18 (OR 7.44, 95%CI 2.89,19.11). Depression tended to follow a chronic course, especially where the early mood disturbance was both severe and persisted until 8 months postpartum. PND that was persistent and severe substantially raised the risk on all child outcomes. Meeting criteria for depression both early and late in the postnatal year, especially where the mood disturbance is severe, should alert health care professionals to a depression that is likely to be persistent and to be associated with an especially elevated risk of multiple adverse child outcomes. Treatment for this group should be prioritised.

#### **Brief Oral Presentations BOP16 - INFANT MENTAL HEALTH THROUGH CULTURAL LENS - PART III**

BOP16.1

#### **CHINA'S TWO-CHILD POLICY: ITS IMPACT ON FAMILIES' PSYCHOLOGICAL HEALTH**

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The Chinese governmental implementation of the two-child policy to counteract the demographic changes, skewed sex ratio, and decreasing number of labor force, has significant impact on all levels of society and economy. The child policy based decisions are discussed during the phase of immediate change. The study, part of a larger ongoing population based study, aimed to analyze how Mainland Chinese families, face this new decision-making on their reproduction and family planning and captures factors contributing to the judgment and decision-making. It describes the families' reflections on the former one-child policy, by targeting families affected by this new policy, particularly women. The present study included a sample of 40 participants, the majority women, average age 28.9 years, well-educated with bachelor degrees from Shanghai and Hangzhou city. The

results provide primary insight in the multiple layers that contribute to the judgment and decision-making on whether to have a second child or remain with one, or childless. It highlights the impact of the policy on perinatal health, societal, and economic changes. The study demonstrated the need to continue understanding the impact of the child policy shift for families and the society of the PRC on multiple levels. Due to the primary center of the Chinese society around the family, the child policy shift impacts all areas of society and has both short-term and long-term consequences on socio-cultural, political, public health, perinatal health, educational, as well as labor market impacts. With the outcomes of research on the families' judgment and decision-making of with regards to a second child, support can be targeted where it is needed the most. The acquired knowledge may serve as a prognosis for the child policy's future development and used to target perinatal care and education of health care specialists, essential to governmental planning and resource allocation.

BOP16.2

### **PARENTING AND FAMILY PROCESS ACROSS CULTURES: CLINICAL ISSUES AND RESEARCH FINDINGS**

**Moro M.R.\*<sup>[1]</sup>, Maldonado--Duran J.<sup>[2]</sup>**

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The link between culture and family is one of the challenges of the third millenium. A fundamental issue that must be considered is the way we should adapt our infant mental health care to deal efficiently with these global human changes. Taking into account the diversity of cultural contextes and conditions, how parenting processes are restructured, modified and adjusted in order to ensure a healthy infant development? Researchers and clinicians from different perspectives propose to share and discuss clinical issues and research findings on children and families dynamics across cultures.

BOP16.3

### **THE TRANSCULTURAL TRANSFORMATION OF THE GENOGRAM TO DEAL WITH MIGRANT FAMILY PROCESS**

**Rizzi A.T.\***

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The genogram is a very powerful tool to untangle the complexity of relationship patterns and multi generational processes of a family in psychotherapy. Created by the pioneers of the systemic therapy, it has been taken over by psychoanalysis and attachment approach. The genogram enables to project on a paper the family over three generations. Floating and malleable object, it results from the therapeutic interaction, and it is modified over time. The genogram highlights the places, roles, constellations, patterns, as well as said and unsaid of the family processes. However, the use of the standard genogram in transcultural psychotherapeutic situation is not adapted to represent the intricacy of migrants families and their children of the first, second and third generation. For example: How to draw the filiation and affiliation patterns that follow others cultural logics? What about the rituals of parentage, marriage or affinity? Or, how to draw the birth, nomination, humanization and welcoming rites? The transcultural approach has therefore complexified the genogram in order to adapt it to the migrant populations who fall into other cultural representations

of the family than the occidental ones - monogame and patrilineal. Through some clinical cases we will present and discuss the transcultural genogram.

BOP16.4

#### **EVOLUTION OF FAMILY STRUCTURES, FILIATION AND AFFILIATION IN THE CHINESE ONE-CHILD POLICY CONTEXT**

**Vu Augier De Montgremier M.\***

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The aim is to show how the rapid sociocultural changes in China are impacting the family and specifically the only child. The One-Child policy was initiated in the 80's, in order to stop a demographic explosion and to promote the country's modernization. Prior to that, large families were the norm and culturally encouraged. This policy became a major component in the changes that occurred to family structures, and the socialization of younger generations in China. Recent studies show that younger generations in China are experiencing social difficulties; hyper-sensibility, problems with interpersonal relationships, extreme pressure at school and psychiatric disorders risk. A culture clash could partly explain this phenomena: a conflict that arises from the interaction between people with different cultural values or when an individual has to adapt to a mutating society and must find a balance between tradition and modernity. Empowerment is particularly complicated for chinese teenagers because open conflicts are avoided in order to maintain harmony and to respect filial piety. The intergenerational divergences between children and their parents in China might also cause a culture-clash. Chinese parents are experiencing difficulties parenting their only child under the effect of growing individualization in Chinese society. All these factors contribute to weaken the identity building, inducing individuation difficulties, familial and parenthood difficulties.

BOP16.5

#### **PATERNAL PSYCHIC REALITY DURING PREGNANCY: PATERNITY DRAWINGS OF ULTRASOUND**

**Perelman O.\***

*Clinical psychologist - Day Hospital for children Erasme - Montrouge Paris - PhD student University Paris Descartes - PCPP EA-4056 ~ Paris France ~ France*

Becoming a parent is common to both women who become mothers and men who become fathers. Taking into account parental and conjugal dimensions, pregnancy is a period of psychological and identity changes for each partner of the parental couple. Becoming-father men present particular clinical characteristics during pregnancy and prenatal consultations are relevant times to explore these rearrangements (Genesoni & Tallandini, 2009; Sénécal, 2013). In France, three main obstetric ultrasounds are proposed during pregnancy, and fathers are more and more present during these consultations. Despite this relatively new trend, studies concerning the paternal psychological dynamic during ultrasounds remain rare. Focusing on paternal dynamics during ultrasound situations, the goal of the current study is two-folded. On the one hand, it aims at investigating the impact of ultrasound images on paternal representations and on the other hand this study aims at providing a psychosocial prevention with collaboration between perinatal period professionals (psychologists, ultrasound obstetricians, midwives). To do so, we met 10 primiparous fathers at three successive appointments during the pregnancy (3rd, 5th and 7th month), right after ultrasound examinations. At each meeting, fathers were asked to realize a projective drawing of the image they saw on the monitor during the examination. Projective drawings offer precious informations regarding paternal representations, about the unborn child, themselves as future

fathers and their impressions regarding ultrasounds situations. A semi-structured interview was conducted in the seventh month of pregnancy, to determine the category of paternal representations (Ammaniti, Candelori, & Pola, 1999). Paternity drawings confronted to ultrasounds impressions and paternal representations offer a valuable opportunity to explore the paternal psychic dynamic during pregnancy and their rearrangements. We will illustrate our preliminary results, research problematic and hypotheses through several clinical examples.

### **Workshop WS33 - NURTURING THE NURTURERS: DEVELOPING A PROTECTIVE SHIELD FOR REFLECTIVE SUPERVISORS TO SUPPORT INFANT MENTAL HEALTH PRACTICE IN AN UNSTABLE WORLD**

**Nicholls D.\*, Wilson K., Ogilvie G., Daligga B.**

*Michigan Association for Infant Mental Health ~ Southgate ~ United States of America*

In the midst of the global climate of social and political unrest, it is paramount for reflective supervisors to offer clinicians the stability and calm necessary to reflect on the tremendous obstacles faced by the parent-infant dyad. Supervisors are also burdened by the weight of ensuring quality services for at-risk families while fueling the clinicians to build relationships and hold hope amidst chaos and uncertainty. To do that, supervisors also need a protected environment for connection and processing their own internal responses. Unique in this community, our agency has created a group reflective consultation for supervisors using an outside consultant and thought-provoking questions to provide structure and a starting-point for reflection. This workshop aims to describe our reflective consultation group model for supervisors and share our experiences of this group as a protective space. Focusing on the supervisor, this presentation will use discussion to identify and elaborate on the integral parts for thinking deeply about attending, regulating, listening carefully, and responding to the emotion-laden content brought to supervision. More specifically, presenters will provide an overview of the group consultation process with emphasis on the five protective factors necessary to enhance the supervisor's resiliency against compassion fatigue. Protective factors discussed will be reflective supervision, fostering use of self, understanding and building relationships, professional development, and encouraging tools for self-regulation.

### **Workshop WS35 - DESIGNING FOR PLAY: HOW TO DEVELOP LOCALLY SOURCED PLAY EXPERIENCES THAT SUPPORT WHOLE CHILD DEVELOPMENT**

**Popp J.\*<sup>[1]</sup>, Mariam E.<sup>[3]</sup>, Clarke J.K.<sup>[2]</sup>**

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The aim of this workshop is to provide participants with hands-on examples from community interventions in Africa and Bangladesh on how to successfully design and culturally adapt play experiences using locally sourced materials and facilitated by local youth and young adults as play leaders. At the end of this workshop, participants will have resources and ideas to successfully incorporate playful learning into their work with young children and families. Young children who actively engage in play experiences with adults and peers are practicing skills that benefit them throughout their lifetime. Yet, our knowledge of how to adequately create meaningful play experiences in low resource countries is just beginning to emerge. In this workshop, community interventions in Africa and Bangladesh that promote playful experiences will be showcased. We will consider how to engage and develop community youth and adults as play leaders in facilitating play that supports whole child development. Each presenter will describe the process of developing meaningful play-based activities for children and how they are integrated into existing educational

curriculums for early childhood. Presenters will facilitate activities from the interventions and discuss with participants how to modify for their work with children and families.

### **Workshop WS52 - AN ATTACHMENT-BASED TRAINING PROGRAM FOR INFANT TODDLER**

#### **TEACHERS: PRELIMINARY FINDINGS FROM HEARTS AND MINDS ON BABIES**

**Stacks A.\*<sup>[1]</sup>, Vallotton C.<sup>[2]</sup>, Barron C.<sup>[1]</sup>, Weathington B.<sup>[1]</sup>, Muzik M.<sup>[3]</sup>, Brophy--Herb H.<sup>[2]</sup>, Muzik M.<sup>[3]</sup>**

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This workshop describes implementation and evaluation of an attachment-based program of professional development for infant/toddler teachers in Early Head Start (EHS), a government funded school readiness program in the USA. The training was adapted from a parenting intervention, Mom Power, and is being implemented and evaluated. Vallotton will review research detailing the need for new training models for infant/toddler teachers. One-third of EHS toddlers show high-rates of behavior problems when they exit the program. High quality and intensive interventions can impact developmental trajectories. EHS is designed to be such an intervention, however information-based professional development has not had an impact on teacher practices or child outcomes. Barron/Weathington will describe the Hearts and Minds on Babies intervention that was adapted from Mom Power, an intervention shown to improve parents' reflective functioning and working models of attachment. They will share visuals from the curriculum that are used to help teachers anticipate, observe and reflect on their own, children's and parents' behaviors. They will also describe mindfulness/stress reduction techniques taught as part of the curriculum. Stacks will describe findings from satisfaction surveys, self-report measures and reflective functioning interviews (N=46). Preliminary findings show high rates of risk (ACEs and Depression) at baseline. Overall, 95% of teachers report that the group is useful and other teachers could benefit; 80% report an increased ability to understand children's feelings. Paired sample T-tests show improvements in knowledge of family needs ( $p=.01$ ;  $d=.48$ ), communication with families ( $p=.08$ ,  $d=.35$ ), mindfulness ( $p=.06$ ,  $d=.37$ ) and reflective functioning ( $p=.01$ ;  $d=.64$ ).

### **Workshop WS41 - INCORPORATING ARTS THERAPY WITH THE PEEK A BOO CLUB™ TO ENHANCE ATTACHMENT AND DEVELOPMENT OUTCOMES FOR MOTHER-INFANT DYADS LIVING IN REFUGE**

**Hodges E.\*<sup>[1]</sup>, Morrison B.<sup>[2]</sup>**

<sup>[1]</sup>*AAIMHI ~ Melbourne ~ Australia,* <sup>[2]</sup>*~ Australia ~ Australia*

The aim is to present a case study contributing to the practice knowledge of trauma-informed approaches with highly vulnerable mother-infant dyads living in refuge. We illustrate Arts Psychotherapy as a valuable addition into the Peek-a-Boo Club™ program that enhances outcomes for attachment repair in a time-limited setting. Early intervention programs with infants in refuge are ideal opportunities to support children at risk of abuse, neglect, and trauma arising from Family Violence (FV). The impact for infants is overlooked in FV organisations in Australia conceptualising infants as an extension of their mother; a mother who is traumatised, struggles to understand her child's perspective of FV, and experienced as a frightening/frightened caregiver. Since 2013, FV organisation, Emerge, has implemented the Peek-a-Boo Club™ (PABC) with eight groups and 30 mother-infant dyads. The PABC is an infant-led group promoting attachment, and helps to story the infant's perspective of FV to overcome the effects exposure to FV has on children. Attachment-focused Arts Psychotherapy interventions are incorporated into the program to enhance outcomes for mother-infant dyads around attunement, mentalisation, and attachment repair. Emerge will

present a case study describing the benefits and challenges of incorporating Arts Therapy in an infant mental health group addressing two distinct issues in working with this cohort. First, the urgent need to provide effective and meaningful early intervention with dyads prioritising the mental health of the infant. Second, we consider how to maximise outcomes in the context of refuge- insecure environments that can further inhibit emotional availability in the mother-infant relationship.

## **Brief Oral Presentations BOP19 - INFANTS AND DISABILITY HELPING**

### **BOP19.1**

#### **NURTURE VERSUS NATURE: A FEASIBILITY STUDY OF PEDIATRICIANS' ATTITUDES TOWARDS INFANTS WITH DISABILITY-RELATED DIAGNOSES**

**Treptow R.L., Feder J.\***

*Fielding Graduate University ~ Santa Barbara ~ United States of America*

Implicit bias, a prejudice resulting from subtle cognitive processes outside awareness, has been identified in professional attitudes towards persons with disabilities. Often positive expressed attitudes towards this population coexist alongside unspoken negative perceptions—with no data about such discrepancies when infants are the targetted group. One concern is that early bias from powerful social figures (e.g., pediatricians) might undermine developmental trajectories for infants with pejorative diagnoses (e.g., Trisomy 21 [T21]) by disrupting parent-infant bonding. No known research paradigms have as yet examined this question, however. Investigatory processes for a pilot study of pediatricians' attitudes towards newborn infants with disability-related diagnoses, as well as towards those infants' parents, will be presented. The pilot's aim was to inform and validate the full study protocol and help build a research line addressing early implicit bias. A pilot was launched for a large N research trial designed to assess pediatricians' attitudes towards infants diagnosed with T21 and other disability-related diagnoses, as well as towards the infants' parents. This online Qualtrics® study merged implicit association test (IAT) and vignette experiment methodologies to quantify pediatricians' (N = 50) implicit biases against cognitive disability and measure their attitudes towards infants diagnosed with disability-related diagnoses (e.g., T21, cerebral palsy), as well as towards the infants' parents. Expert feedback informed study design and pilot outcomes are expected to validate its feasibility and give preliminary data about pediatricians' attitudes towards these populations. Negative implicit bias towards cognitive disabilities is expected for most pediatricians with higher negative bias linked to lower developmental expectancies for infants. Birth diagnosis is expected to predict pediatricians' perceptions—of an infant's potential and of the infant's parents. The pilot process (e.g., design feasibility and challenges), as well as its data, will inform the larger planned study and lay groundwork for more research on implicit bias in infants' early milieus (e.g., hospitals, early intervention sites).

### **BOP19.2**

#### **MOTHER'S PERCEPTIONS OF BIRTH DEFECTS IN SOUTH WEST NIGERIA: IMPLICATIONS FOR INFANT MENTAL HEALTH**

**Eromosele B.\*, Obazee I., Anyanwu R.**

*College of Medicine, University of Ibadan (Medical Student) ~ Ibadan ~ Nigeria*

Birth defects are estimated to occur in 6% of total births worldwide and 2-4% of live births in Nigeria. Having an infant with a congenital defect is a cause of significant psychological distress both for the infant and the caregivers. This is especially due to the myths surrounding the etiology of the defects, resultant stigma and lack of resources for the additional health challenges the infant might be faced

with. This study aims to determine the knowledge and attitude of women of reproductive age in a semi-rural community in south west Nigeria towards birth defects in infants. The study was a cross sectional study with a total of 360 women aged 15-49 as participants. Data collection was by an interviewer administered knowledge and attitude questionnaire. Good knowledge and positive attitude were classified by having a mean score equal to or above the mean score of 8 and 2 respectively. About half (53.3%) of the women had good knowledge of risk factors for birth defects such as advanced maternal age and a family history of birth defects. Good knowledge was significantly associated with higher level of education ( $\chi^2=23.991$ ,  $P<0.001$ ). More than half (53.1%) of the women had a positive attitude towards birth defects. Positive attitude was significantly associated with older age ( $\chi^2=16.268$ ,  $P=0.012$ ). Most women felt that children with birth defects constitute huge financial and emotional burden (87.5%). However, majority also believed that the children should be loved and cared for (93.6%) and taken to seek medical care (95.3%). There is a need for policies which will support provision of resources for mothers and families of infants with birth defects. These should include financial aid, access to medical services, as well as emotional support. This would ensure better quality of life for infants with congenital birth defects and their families.

BOP19.3

#### **FIRST STEPS WITH MOM AND DAD: THE CONSULTATION FORMAT AS EARLY CLINICAL INTERVENTION FOR VISUALLY IMPAIRED CHILDREN**

**Mercuriali E.\*, Perelli D., Stringhetta N., Tessari L., Turra G., Berto G., Pizzeghello G.**

*Robert Hollman Foundation ~ Padova ~ Italy*

To present a specific consultation format which is not only a diagnostic path, but a global clinical intervention for the whole family as well. This format aims to intervene as soon as possible in the individual and relational developmental pattern of the blind child, considering that blindness itself makes this pattern a high risk one. The birth of a visually impaired child entail several difficulties. Some of those belong to the disability itself, while some other are blindness specific characteristics: 1) lack of eye-contact, which is the first means of parents-child communication; 2) child sensory deprivation 3) lack of efficient interactive signals. This is why blindness itself represent both a significant risk factor in blind children psychic and relational development, and a potential suffering element for the whole family. Starting with these assumptions, the Robert Hollman Foundation developed a specific consultation format for 0 to 24 month-old blind children. The format characteristics are peculiar regarding:

- 1) The setting, that is thought for the families and dedicated to them
- 2) The team is always composed by the psychologist along with the therapist
- 3) The multidisciplinary integration, promoted by the team guiding the family in the medical examinations
- 4) The duration, which is dilated in six weekly meetings with the team, followed by ten group meetings with other families

The intervention path wants to sustain the parents in reading and interpreting the blind child signals, helping the relation to get started and becoming a protective factor itself. We analyzed so far 130 families clinical data.

BOP19.4

#### **IDENTIFICATION AND COURSE OF NEURODEVELOPMENTAL CONCERNS IN PRE-SCHOOLERS**

**Sim F.\*, Thompson L., Wilson P.**

*University of Aberdeen ~ Aberdeen ~ United Kingdom*

Neurodevelopmental difficulties identified in the preschool years often persist and their association with adverse physical, mental health and forensic outcomes in adulthood is widely accepted. The aim of the present project is to explore the scope and predictive validity of universal community-based screening for neurodevelopmental difficulties in pre-schoolers. This presentation comprises data from four papers produced throughout the course of a doctoral research project and addresses the following questions:

- 1) What is the performance of available preschool screening tools for language and socio-emotional concerns?
- 2) What is the prevalence of neurodevelopmental concerns identified by a universal preschool screening tool?
- 3) Can we refine a brief and accurate preschool neurodevelopmental screening tool for use in the community?
- 4) What do neurodevelopmental concerns identified in the preschool years predict in the early school years?

- From a community sample of 486 preschool children, 3-8% of children were reported to have language delay depending on the method of assessment and 31.1% had socio-emotional difficulties
- A universal preschool screening tool comprising the Strengths and Difficulties Questionnaire (SDQ) and the Sure Start Language Measure (SSLM) had sensitivity 87%; specificity 64%; positive predictive value 31%; and negative predictive value 97% in the prediction of any kind of neurodevelopmental problem 1-2 years later

- Data on 2200 children from a national cohort study demonstrated that the presence of preschool language or behaviour concerns is associated with language, general development, school life, health and behavioural concerns in the early school years. Lone parent family, low income and male gender were identified as risk factors for poorer outcomes in the domains measured.

This body of work provides an overview of the performance of screening tools, the prevalence and the outcomes of neurodevelopmental concerns identified in the preschool years. We present an example of a universal screening tool and discuss its performance in one community setting and its applicability to a wider audience. The authors acknowledge the persistent and pervasive nature of preschool language and behavioural concerns and strive to equip practitioners, educators and parents with the tools to identify and communicate these concerns.

BOP19.5

### **EFFECTS OF MOTHERS' INTERACTIONAL BEHAVIOR ON MOTOR PLANNING OF TODDLERS WITH AND WITHOUT SENSORY PROCESSING DISORDER**

**Jaegermann N.\*, David A., Adi--Japha E.**

*Bar Ilan University ~ ramat gan ~ Israel*

Motor planning refers to the human ability to create, plan, and execute purposeful gross and fine motor movements in a dynamic day-to-day environment (i.e., tool using). Developmental Dyspraxia (DD), known also as Developmental Coordination Disorder (DCD), refers to difficulties in motor planning, considered to be associated with sensory processing disorders (SPD). DD has significant implications on the child's emotional wellbeing, daily functioning, play and developmental outcome. Although clinicians can identify motor planning challenges before 24 months; there is a lack of research on early childhood DD, and no clinical description of how this impairment is expressed at a very young age. Toddlers with SPD (n=29) and without (n=37), and their mothers, were examined and compared for toddler's motor planning abilities assessed using an observation tool that was developed for the purpose of the current study and parent-child quality of interaction was evaluated by the OMI- Observing Mediational Interaction scale : emotional, communicational and teaching

parent behavior. The findings reveal significant differences between the two groups in toddler's motor planning abilities and in the quality of interaction with the mother.

The study offers two findings with clinical value:

1. Specific maternal behavior impact child's motor planning within play interaction.
2. Observation assessment of motor planning abilities in very young children that was found to capture differences between toddlers with and without SPD.

BOP19.6

### **INFANTS AND THOSE AT RISK OF DEVELOPMENTAL DISORDERS: AN OBSERVATIONAL STUDY OF KINEMATICS DURING THE FIRST YEAR OF LIFE**

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Early prevention and intervention are crucial in child psychopathology. Many researchers have attempted to identify specific and reliable indicators of neurodevelopmental disorders, in high-risk populations during the first year of life. However, early clinical signs often lack specificity. Hand movements (HM) reflect key developmental milestones for the acquisition of communicative skills (Iverson 2010), and can provide relevant cues for early detection of developmental disorders. We aimed to discriminate between typical and atypical developmental trajectory patterns of at-risk infants in an interactive setting in this observational and longitudinal study, with the assumption that hand movements (HM) reflect preverbal communication and its disorders. We examined the developmental trajectories of HM in five cohorts of at-risk infants and one control cohort, followed from ages 2 to 10 months: 25 West syndrome (WS), 13 preterm birth (PB), 16 orality disorder (OD), 14 with visually impaired mothers (VIM), 7 early hospitalization (EH), and 19 typically developing infants (TD). Video-recorded data were collected in three different structured interactive contexts. Descriptors of the hand motion were used to examine the extent to which HM were associated with age and cohort. We obtained four principal results: (i) the kinematics of HM (spatial use, curvature, acceleration, and velocity) were significantly associated with age in all cohorts; (ii) HM significantly differed at 5 to 6 months of age in TD infants, depending on the context (iii) environmental and developmental factors shaped the developmental trajectories of HM in different cohorts: environment for VIM, development for PB and WS, and both factors for OD and; (iv) the curvatures of HM showed atypical development in WS infants when developmental age was considered. These findings support the importance of using kinematics of HM to identify very early developmental disorders in an interactive context and would allow early prevention and intervention for at-risk infants.

BOP19.7

### **ROBOTIC MOBILITY EXPERIENCE IN VERY YOUNG INFANTS: EFFECT ON EXECUTIVE FUNCTION**

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Executive function involves processes associated with cognitive flexibility, inhibitory control, and the planning, execution, and assessment of voluntary action. Researchers have hypothesized that motor experiences, such as locomotion, are important in the development of executive functioning. Indeed, executive dysfunction has been reported in children with conditions that involve motor impairment, including Down syndrome, developmental coordination disorder, autism, cerebral palsy, spina bifida, and others. Evidence is growing to support the view that mobility impairment may contribute to cognitive dysfunction. The purpose of this research was to examine whether experience with robotic-assisted mobility influences the development of executive function in typically-developing pre-crawling infants. Five-month-old infants were randomly assigned to a locomotor or non-locomotor condition. Both groups participated in twelve 16-minute play sessions with similar protocols over two months. While playing, infants in the locomotor group used a robotic mobility device that translated their leaning behavior into movement of the robot. At seven months, infants completed tasks associated with executive function that included a rule-switching task and an A-not-B object permanence task. Performance was assessed using an eye-tracking system. We hypothesized that infants who received the robotic-assisted locomotor experience would perform better than the control infants. Preliminary results indicate that infants assigned to the locomotor condition performed significantly better on measures of executive function than those in the control group. These results suggest that self-guided locomotor experience may contribute to cognitive function. Findings have implications for providing very early mobility to infants with motor impairment.

#### **Symposium S55 - TO HAVE AND TO HOLD: THE IMPORTANCE OF MOTHER-INFANT PHYSICAL CONTACT FOR MOTHERS, INFANTS AND THEIR RELATIONSHIP**

**Bigelow A.**<sup>[4]</sup>, **Williams L.R.**<sup>[1]</sup>, **Little E.E.**<sup>[2]</sup>, **Van Puyvelde M.**<sup>[3]</sup>, **Norholt H.**<sup>[5]</sup>

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#### **Discussant: Norholt H.**

As the symposium's discussant, comments will be focused on the significance of each of the research papers, the interplay among the findings, and fruitful directions for future research that explores the importance of physical contact between infants and their caregivers. The discussion will be open to the audience. Close body contact between mother and infant has historically been the norm, but modern means of infant care, such as formula feeding, institutional medical practices, and baby gear that limits contact with caregivers, have reduced the physical closeness of mother and infant. What is the cost to infant development and maternal well-being? This symposium explores the effects of mother-infant physical contact across a variety of contexts: infant engagement and social behavior, breastfeeding, postpartum depression, mother-infant affective touch and vocal synchrony, and long term effects on mother-child dyadic communication. Paper 1 (Can infant carrying improve mother-infant interactions? Evidence from a randomized study with teen moms) examines the longitudinal effects of babywearing (carrying infants in cloth carriers worn on the body) on engagement between infants and their teenage mothers across infants' first six months. Paper 2 (The effect of physical contact on breastfeeding responsiveness) investigates the longitudinal effects of babywearing on mothers' response to infant hunger cues and breastfeeding duration across infants' first three months. Paper 3 (Vocal touch during skin-to-skin contact in a still-face procedure) examines the

effects of maternal affective touch and vocal pitch in infants' early months and longitudinal effects of skin-to-skin contact on the vocal tonal synchrony of mothers and infants over infants' first three months. Paper 4 (Mother-infant skin-to-skin contact: Effects on the mother, the infant, and their relationship) explores the longitudinal effects of mother-infant skin-to-skin contact on mothers' postpartum depression and infant feeding practices and infants' emerging social behaviors over infants' first three months and subsequently in a nine-year follow-up study of these dyads' communication about emotion. This symposium from international researchers presents multiple perspectives of the effects of mother-infant physical contact on the well-being of infants, their mothers, and the developing mother-infant relationship. The implications will be framed within a global perspective by the discussant.

S55.2

### **CAN INFANT CARRYING IMPROVE MOTHER-INFANT INTERACTIONS? EVIDENCE FROM A RANDOMIZED STUDY WITH TEEN MOMS**

**Williams L.R.\***

*School of Social Work, Arizona State University ~ Phoenix, Arizona ~ United States of America*

Young mothers are more likely to experience difficulty bonding with their baby and are at higher risk for child maltreatment/neglect. Limited research on infant carrying (i.e., holding or carrying a baby in a cloth carrier that is worn on the body) indicates that frequent close physical contact increases maternal responsiveness. Seventy-four high-school aged mothers were randomly assigned to the intervention condition (n=36; received an infant carrier and instructions to use it for one hour daily) or the control condition (n=38; received a baby book set). In-home assessments were conducted at 2-4 weeks postpartum (W1), and 3- (W2) and 6- (W3) months later. At W3, the Still-Face Paradigm assessed observed mother-infant interactions. Videos were coded for observed infant and mother engagement behaviors based on Tronick's scoring systems, including facial expressions, direction of gaze, and vocalizations. A meta-analysis review supports positive associations between infant positive affect during the still-face task and secure attachment at one year. Repeated measures ANOVA indicated that compared to the control condition, infants in the intervention condition spent significantly less time in infant protest,  $F(1,32)=4.22$ ,  $\eta^2 = .12$ ,  $p < .05$ , negative affect  $F(1,31)=5.04$ ,  $\eta^2 = .14$ ,  $p < .05$ , and object/environment engagement,  $F(1,32)=6.95$ ,  $\eta^2 = .18$ ,  $p < .05$ ; mothers in the intervention condition spent significantly more time in social positive engagement,  $F(1,32)=6.52$ ,  $\eta^2 = .17$ ,  $p < .05$ , and in exaggerated positive engagement,  $F(1,32)=7.10$ ,  $\eta^2 = .18$ ,  $p < .05$  (moderate to large effect sizes). Preliminary results hold promising policy implications for the promotion of infant carriers and the practice of infant carrying as an effective tool at promoting infant attachment and ultimately reducing child maltreatment. Video clips will be used in the presentation to highlight observed markers of strengths and challenges within mother-infant interactions.

S55.3

### **THE EFFECT OF PHYSICAL CONTACT ON BREASTFEEDING RESPONSIVENESS**

**Little E.E.\*<sup>[1]</sup>, Hahn--Holbrook J.<sup>[3]</sup>, Legare C.<sup>[2]</sup>**

*<sup>[1]</sup>Nurturely ~ San Diego ~ United States of America, <sup>[2]</sup>Department of Psychology, University of Texas at Austin ~ Austin, Texas ~ United States of America, <sup>[3]</sup>Department of Psychology, University of California Riverside ~ Riverside, California ~ United States of America*

Mother-infant skin-to-skin contact immediately after birth is critical for breastfeeding initiation, setting infants on a positive trajectory for physical health, cognitive development, and bonding with caregivers. Yet very little is known about how physical contact contributes to breastfeeding success

or whether this effect persists after the immediate postpartum period. One explanation is that physical contact increases maternal responsiveness to infant hunger cues, which has been shown to ameliorate common breastfeeding challenges and increase milk supply. The aim of this project was to test whether mother-infant physical contact increases maternal responsiveness to infant hunger cues and whether this increases the likelihood of exclusive breastfeeding. In the US, one-hundred mothers filled out a three-day feeding log to assess whether individual variation in mother-infant physical contact predicted initiating breastfeeding in response to early hunger cues (e.g., rooting, hands-in mouth). In a subsequent intervention study, mothers (N = 100) were randomly assigned to the physical contact group (provided an infant carrier during the first week postpartum to facilitate increased physical contact) or the control group (provided an infant swing to facilitate less physical contact while controlling for movement). Maternal responsiveness to hunger cues (assessed with the three-day feeding log) and breastfeeding outcomes (proportion of mothers exclusively breastfeeding) will be compared between the physical contact group and the control group at baseline, six weeks and 12 weeks postpartum. The feeding log demonstrated that individual variation in mother-infant physical contact predicted responsiveness to early hunger cues ( $p < .01$ ). We hypothesize that the intervention study will mirror this result by demonstrating that physical contact facilitates increased responsiveness to hunger cues and increased likelihood of exclusive breastfeeding. This project makes a novel contribution to the current literature by experimentally testing a behavioral pathway through which physical contact may contribute to breastfeeding success.

S55.4

#### **VOCAL TOUCH DURING SKIN-TO-SKIN CONTACT IN A STILL-FACE PROCEDURE**

**Van Puyvelde M.\*<sup>[1]</sup>, Everling F.<sup>[2]</sup>, Gorissen A.<sup>[2]</sup>, Power M.<sup>[3]</sup>, McGlone F.<sup>[4]</sup>, Bigelow A.<sup>[3]</sup>**

<sup>[1]</sup>Royal Military Academy, Department VIPER-LIFE, Vrije University ~ Brussels ~ Belgium, <sup>[2]</sup>Vrije University, Department Psychology ~ Brussels ~ Belgium, <sup>[3]</sup>Psychology Department, St. Francis Xavier University ~ Antigonish, Nova Scotia ~ Canada, <sup>[4]</sup>Liverpool JM University, Somatosensory & Affective Neuroscience Group ~ Liverpool ~ United Kingdom

The environment of the bonding infant is a multisensory life-world in which maternal touch and voice provide primordial experiences of human contact. The benefits of both skin-to-skin contact (SSC) and vocal interaction have been demonstrated in several ways and their interplay play a key-role in infant development. However, which micro-mechanisms subtend these reinforcing processes, remains a puzzle. Potential candidates are the working of C-tactile (CT) fibres on the level of touch and maternal-infant pitch-matched vocal interactions (i.e., tonal synchrony) on a vocal level. We will show the importance of both aspects in the building of physiological self-regulation and stress-resilience. We will entangle physiological, tactile and vocal underpinnings in the building of infants' stress-resilience challenged during, for instance, a still-face (SF) procedure. The results of this presentation are based on 1/ ECG/respiration measures and respiratory sinus arrhythmia (RSA) analysis indexing parasympathetic regulation in mothers and infants (8-12 weeks) during affective touch and listening experiments, 2/vocal pitch frequency analyses of maternal-infant (12 weeks) vocal interactions during a SF-procedure (SSC-group/control group). The results showed that both maternal touch ( $p=.020$ ) and pitch-aspects within mother-infant dialogues ( $p<.001$ ) impact infants' physiological self-regulation. Therefore, we hypothesize that, during a SF-procedure, the combination of both SSC and vocal matches in free-play may form prerequisites in the building of stress resilience during the SF-stage because of parasympathetic underpinnings. This presentation will give more insight in subtending physiological, vocal and tactile mechanisms crucial in the building of stress-resilience during the first months of their life.

S55.5

## **MOTHER-INFANT SKIN-TO-SKIN CONTACT: EFFECTS ON THE MOTHER, THE INFANT, AND THEIR RELATIONSHIP**

**Bigelow A.\*, Power M.**

*St. Francis Xavier University ~ Antigonish, Nova Scotia ~ Canada*

In mother-infant skin-to-skin contact (SSC), infants are placed between their mothers' breasts so that frontal contact of mother and infant is skin-to-skin. Benefits of SSC for newborns' neurophysical adjustment are well documented. Our study is one of the few to examine the effects of SSC to infants' social-cognitive development and mothers' behaviors beyond the newborn period. SSC and control group mothers (N=80) were recruited at two hospitals with similar demographics. Only SSC group mothers were asked to provide SSC for their infants, although both groups kept daily records of SSC they provided. At 1 week, 1 month, 2 months, and 3 months, data were collected on infant feeding (breastfeeding; bottle-feeding), postpartum depression (Edinburgh Postnatal Depression Scale), and infant engagement in mother-infant interaction (Still Face Task). A nine-year follow-up examined dyads' communication about emotion (Autobiographical Emotional Events Dialogue). SSC group mothers provided 5 hours/day of SSC in infants' first week and about 3 hours/day from weeks two to four; control group mothers did little/no SSC in infants' first month. At one week, the percentage of breastfeeding mothers was similar (SSC: 77%; control: 73%); fewer control group mothers were breastfeeding at each following visit, whereas the percentage of breastfeeding SSC group mothers remained unchanged. SSC group mothers had lower postpartum depression scores at one week and one month. At one month, SSC group infants were affectively discriminating between phases of the Still Face Task; a month before control group infants did so. At three months, SSC group infants were actively social bidding to their mothers in the still face phase. Nine years later, SSC dyads had greater reciprocity when communicating about emotion. SSC set the mother-infant relationship on a positive trajectory

### **Brief Oral Presentations BOP22 - TRAUMATIZED INFANTS**

BOP22.1

#### **SUPPORTING THE EMOTIONAL WELLBEING OF VULNERABLE AND TRAUMATISED INFANTS, YOUNG CHILDREN AND THEIR FAMILIES THROUGH THE PROMOTION OF INFANT MENTAL HEALTH KNOWLEDGE WITHIN THE WESTERN AUSTRALIAN CHILD PROTECTION SYSTEM**

**Salvo R.\*<sup>[1]</sup>, Priddis L.<sup>[1]</sup>, Matacz R.<sup>[1]</sup>, Lorrimar J.<sup>[2]</sup>, Samuels M.<sup>[2]</sup>**

*<sup>[1]</sup>Edith Cowen Univeristy ~ Perth ~ Australia, <sup>[2]</sup>Department of Communities - Child Protection and Family Support ~ Perth ~ Australia*

This paper will present the processes of collaboration; detailed components of the Infant Mental Health training package designed for child protection workers and describe its delivery which is now mandatory for all child protection workers recently employed by the Department and particularly for workers in the Intensive Family Support (IFS) team. In 2016 the Western Australian Department for Communities – Child Protection and Family Support (the Department) reviewed the program logic for Western Australia's Signs of Safety Child Protection Practice Framework and identified the need for culturally sensitive, relationship-focused child protection practice. Specifically, that staff required observational skills guided by a relational and development framework when assessing parent-child interactions in vulnerable, high risk, open child protection cases. Such skills are crucial in order to allow workers to promptly detect insensitive and/or disconnected parenting behaviours and to provide the necessary support to parents and young children to prevent further abuse and neglect and to promote nurturing and reparative parenting. A two-day training package was

developed that draws upon empirical evidence for the link between adverse childhood experiences – with consequent unresolved grief, loss and traumas - in parents and extremely insensitive and/or disconnected parental behaviours in the presence of limited parental reflective functioning. It focuses on the relational components of babies and young children’s emotional wellbeing.

#### BOP22.2

### **THE MICROANALYSIS OF INTERMODAL INTERACTIONS BETWEEN MOTHERS AND INFANT, IN THE TRAUMA TRANSMISSION MECHANISM**

**Dozio E.\*<sup>[1]</sup>, Feldman M.<sup>[2]</sup>, Bizouerne C.<sup>[1]</sup>, Moro M.R.<sup>[3]</sup>**

<sup>[1]</sup>*Action Contre la Faim ~ Paris ~ France*, <sup>[2]</sup>*Université Paris Descartes Sorbonne Paris Cité ~ Paris ~ France*, <sup>[3]</sup>*Maison des Adolescents, Cochin Hospital ~ Paris ~ France*

Within humanitarian contexts, the situations of extreme emergency such as armed conflict are characterized by individual and collective traumas. Infants are particularly affected as they are completely depending on the physical and psychic availability of their parents; their life is conditioned by parent’s mental health, especially when mother is traumatized. The objective of the study was to examine the mother to infant direct transmission of trauma in order to identify the processes involved. This can allow the development of adapted early clinical interventions for mother-infant dyads. We examined the process of mother to infant trauma transmission through the observation of intermodal interactions in studying the specificities of interactions during and after the mother trauma evocation. 24 mothers-infant dyadic interactions were videotaped in humanitarian contexts (Central Africa, Chad, Cameroon) and coded through a specific grid for the microanalysis of different modalities of communication, for both mother and the infant: touch, visual and vocal. In addition, the impact of traumatic event, the level of depression and anxiety and cultural protector factors are investigated in order to have a holistic understanding of the trauma transmission mechanism. The analysis of data highlighted that traumatic events affect mother availability to interact with the infant. Differences in interaction during and after the traumatic narration suggests that the trauma transmission process strongly involves different modalities beyond verbal as infants were in a preverbal phase, unable to understand the real meaning of the narration. The results of this research are capital for the better knowledge of direct factors and content of trauma transmission in infants. The microanalysis of interaction showed the fundamental role of intermodal exchanges between mother and infant in the trauma

#### BOP22.3

### **TRAUMA-INFORMED PRACTICE: A LONG-TERM, MULTI-FACETED, RELATIONAL APPROACH**

**Gwynne K.\***

*Dalwood Spilstead Service ~ Sydney ~ Australia*

The Dalwood Spilstead Service has refined a model of care which integrates the primary evidence-based interventions for vulnerable families, within a comprehensive trauma-informed approach. The Spilstead Model (SM) combines parent support, home visiting, and parent-child attachment interventions with multi-disciplinary centre and home-based early childhood education and development programs, in an environment of family-centred and strength-based practice. This unique holistic program which is able to be truly flexible and responsive to the family’s needs provides all services for both parents and children from the one team, optimising engagement and containment for families while ensuring maximum co-ordination and consistency of service delivery. Founded on attachment theory and the Neuro-sequential Model of Therapeutics (NMT) case planning framework, the approach is underpinned by team cohesion designed to create a platform of consistent, co-regulating relational experiences from which families can build capacity and self-

determination. A NSW independent evaluation in 2010 identified superior results under this model in family engagement; retention rates and family goal achievement plus cost effectiveness. Further research including a 10 year longitudinal study involving 23 families reported large Effect Size changes (0.88 – 1.46) in all measures of both family and child functioning ( $p < 0.001$ ). 71% of children presenting on entry with delayed development, were found to be within normal limits on post testing. These results were found to have been sustained 10 years later with 76% found to be functioning within normative ranges on teenage measures.

BOP22.4

#### **THE INTERACTION OF CAREGIVER TRAUMA EXPERIENCE AND INFANT TEMPERAMENTAL NEGATIVITY IN PREDICTING ATTACHMENT DISORGANIZATION**

**Figge C.\*<sup>[1]</sup>, Martinez--Torteya C.<sup>[1]</sup>, Huth--Bocks A.<sup>[2]</sup>**

<sup>[1]</sup>DePaul University ~ Chicago, IL ~ United States of America, <sup>[2]</sup>Eastern Michigan University ~ Ypsilanti, MI ~ United States of America

Extant literature indicates caregiver trauma experiences and child temperamental characteristics impact dyadic attachment styles. Of particular interest is caregiver- and child-level predictors of attachment disorganization, a predictor of a range of maladaptive outcomes, including externalizing behaviors. However, the interrelationship of caregiver trauma and infant temperament in predicting attachment disorganization remains understudied. We aimed to assess the interaction of caregiver lifetime trauma and infant temperamental negativity in predicting the degree of attachment disorganization. Findings will illuminate specific targets for intervention for dyads presenting with high levels of attachment disorganization. Participants were 92 primarily ethnic minority and low income mother-infant dyads (52% boys) recruited from Chicago, IL, USA. Maternal lifetime trauma was obtained via self-report, indicating the frequency of a range of potentially traumatic events. Child temperamental negativity was assessed via maternal-report. Degree of attachment disorganization was coded on a continuous scale from the Strange Situation Procedure. Due to significant correlations with study variables, infant gender was included as a covariate. Caregivers self-reported a range of 0-20 potentially traumatic events ( $M = 7.3$ ,  $SE = 4.6$ ). Moderation analyses using the PROCESS SPSS macro revealed the association between maternal lifetime trauma and degree of disorganized attachment is moderated by infant temperamental negativity ( $B = .11$ ,  $SE = .05$ ,  $p < .05$ ,  $CI = [.0149 - .2067]$ ). The association between lifetime trauma and degree of attachment disorganization is significant at mid and high levels of infant negative temperament, but nonsignificant at low levels of infant negative temperament. Findings highlight the importance of targeting caregiver trauma experience and temperamental difficulty management strategies to curtail the maladaptive trajectory of early disorganized attachment. The role of maternal trauma and posttraumatic stress in impacting dyadic interaction patterns will be discussed, and outcome studies for attachment-based interventions will be reviewed.

BOP22.5

#### **FEASIBILITY OF THE DYADIC PROLONGED EXPOSURE PROTOCOL FOR TODDLERS AND PRESCHOOLERS WITH PTSD**

**Rachamim L.\*<sup>[1]</sup>, Mirochnik I.<sup>[2]</sup>, Shalom J.G.<sup>[3]</sup>**

<sup>[1]</sup>Interdisciplinary center, Hezliya ~ Herzliya ~ Israel, <sup>[2]</sup>The Child and Preschool Psychiatric Unit Ziv Medical Center ~ Zefat ~ Israel, <sup>[3]</sup>University of Haifa ~ Haifa ~ Israel

Preschoolers, toddlers as well as their caregivers may display post-traumatic stress disorder (PTSD) due to serious injury, war and terror, domestic and road traffic accidents, burns or invasive medical procedures. The relational aspects of adjustment are salient in this age group because of their great

dependence on caregivers (Scheeringa & Zeanah, 2005). Research has documented a significant association between parental mental health, maternal avoidance symptoms, parental functioning and child adjustment to stressful life events (e.g., Laor, Wolmer, Mayes, Golomb, Silverberg, & Weizman 1996; Scheeringa & Zeanah, 2001). Thus, effective treatments in this age group should incorporate child-caregiver dyad. We present the feasibility of Dyadic Prolonged Exposure (DPE) protocol with two to five-year-olds (n=15) whose PTSD symptoms were caused by various traumatic events. Participants were toddlers and preschoolers whose parents were seeking treatment at the post-trauma clinic for toddlers in the Donald J. Cohen & Irving B. Harris Resilience Center for Trauma and Disaster Intervention by the Association for Children at Risk. Following psychiatric assessment of caregivers and children using the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-5; Zero to Three, 2016), and trauma interview (Scheeringa, & Haslett, 2010), toddlers and caregivers participated in a 15-weeks Prolonged Exposure therapy that was adapted to preschoolers and toddlers' developmental capabilities, as well as to the reciprocal influences between child's and parent's posttraumatic stress symptoms. Post intervention psychiatric assessment indicated that all toddlers and caregivers had lost their PTSD diagnosis. These results were maintained at 3,6 and 12 months follow up. The current study provides evidence for the feasibility and efficacy of the Dyadic PE protocol in toddlers, preschoolers and their caregivers.

BOP22.6

#### **MENTALIZING FOR THE YOUNG CHILD IN PARENTING MEDIATION**

**Howieson J.\*<sup>[1]</sup>, Priddis L.<sup>[2]</sup>**

<sup>[1]</sup>University of Western Australia ~ Perth ~ Australia, <sup>[2]</sup>Edith Cowan University ~ Perth ~ Australia

This presentation will explore the concept of 'mentalizing for the child' in parenting mediation. Many studies have shown the success of family mediation in terms of settling separating parents' disputes. Yet, there is little research on the process of family mediation and even less on the outcomes for the children involved, including young children. This presentation will discuss research that shows that by taking a mentalizing approach, mediators can increase the meaningful and productive interaction between separating parents, and in turn, their good decision-making. The presentation will discuss recent research developments that will focus on the process aspects of family mediation and on the longer-term outcomes for children whose parents have experienced family mediation. Considerable efforts have been made to increase the 'voice of the child' in mediation, including using child-inclusive and child-focused mediation processes. And there is considerable research that shows that these efforts are by and large successful. However, for younger children and infants being actively involved in the mediation process is not possible. In this presentation, we will discuss techniques that mediators can use to encourage parents to mentalize for their children (of all ages) and to encourage the parents to make decisions that will work in their children's, including their younger children's, best interests. We will also outline a research regime that will evaluate the efficacy of these techniques, and whether they lead to any significant change in outcomes for the family—and especially for the children.

#### **Workshop WS46 - LOVE, DEATH, POETRY AND THE BABY - LITERATURE AND THERAPEUTICS**

**Goodfellow B.\***

*Deakin University & The Freudian School of Melbourne ~ Melbourne ~ Australia*

To consider the propositions that great literature is the collected wisdom of 1000 generations; that the "talking cures" are acts of poesis, that is: creation, making each of us then students of poetry.

Just how are we to work with the sorrows, fantasies and ideals that are the fabric into which the presenting problem is woven? Families present with anguish and despair that can be difficult to bear, but once borne may be transformed. Beginning with the Roman poet Ovid, the Italian Dante and the German Romantic Rilke this workshop will explore how literature can sustain and guide us in the metamorphoses we are beckoned to deliver: from suffering, through tragedy toward beauty and emancipation. A vignette of a young mother from a painful background with a two year old girl with critical feeding problems will begin the discussion as three passages from these writers are examined. Reflections and interpretations from the audience will be considered as an introduction to how themes of mourning and the relinquishment of the ideals of motherhood and infancy can help us join a parent and child's suffering without succumbing to it; how we can help to rewrite something of the experience of the very young child that goes beyond merely alleviating a symptom. We will consider too the perspective that the classics are the collected wisdom of 1000 generations of human experience from which we can take comfort and guidance in our own lives and so too in our work.

### **Workshop WS02 - STAYING PRESENT WITH THE BABY: STRENGTHENING CIRCLES OF HOLDING IN IMH COMMUNITY AGENCIES AND TRAINING**

**Lesniak H.\*, Hathaway S., Ogilvie G.**

*Starfish Family Services ~ Livonia ~ United States of America*

This workshop will focus on a training program by a community agency to support the learning needs of graduate students enrolled in a university-based Infant Mental Health (IMH) clinical training program. It will build upon the workshop by Barron, Stacks, and Wilson who will highlight the importance of a university-community partnership to new clinicians' development. This second workshop will describe specific strategies utilized at a community agency to support new clinicians, build a holding environment and strengthen their emotion regulation. Together, these workshops will demonstrate how collaboration between a clinical university program and a community agency promoted a seamless learning experience for students. Hillary Lesniak, from the agency staff training program, will discuss (a) how the community agency training program teaches concrete clinical expectations alongside the fulfillment of policy/procedure training requirements and (b) how opportunities to observe several experienced clinicians and be exposed to multiple treatment modalities support the pacing of student learning while promoting a sense of community with other professionals. Program procedures and strategies will be reviewed. Susanna Hathaway, an agency coordinator, will discuss how the student-supervisor relationship relates to the relationship between the student and the client families, and how both individual and group supervision opportunities are critical in offering experiential learning regarding relationship building and enhancing reflective functioning. Gillian Ogilvie, an agency manager, will discuss the parallel process that reflective supervision offers to supervisors and how reflective group supervision enables supervisors to explore their own emotions about clinical material and their supervisory experience.

### **Workshop WS53 - EXPANDING CIRCLES OF HOLDING TO INCLUDE THE UNIVERSITY SETTING: STRENGTHENING INFANT MENTAL HEALTH STUDENT CLINICAL AND REFLECTIVE COMPETENCIES IN THE CLASSROOM**

**Barron C.\*, Stacks A., Wilson K.**

*MI-AIMH ~ Detroit ~ United States of America*

The aim of this workshop is to describe a university-based Infant Mental Health (IMH) clinical training program's collaborative approach to address the learning needs of IMH students in order to best prepare them for the IMH workforce. Features of our university-community partnership include reflective practices in the classroom, documentation of professional growth across

competencies essential to IMH intervention, and reciprocal relationships between university faculty and agency staff. This workshop provides the foundation for a second proposed workshop describing how community agencies nurture and support IMH students. Taken together, a successful connection between classroom and community is described. An agency supervisor will present a case example highlighting the holding environment that supported an IMH student turned new clinician to manage her emotional response during a frightening experience when providing home-based services. The university-agency partnership set the stage for this new clinician to demonstrate the ability to protect herself while remaining mindful of the baby's and family's experience. A university faculty will discuss: how university and community partners worked to operationalize and measure clinical competencies; students' baseline skills across competencies, and how maintaining a holding environment in the classroom can target clinical competencies and promote reflective skills. Evidence of student growth across the program will be presented. A university instructor will discuss the use of reflective supervision strategies in the classroom. Experiences from an 8-month infant observation and clinical internship are used to identify and challenge biases, reflect upon emotional responses, and use these to understand the baby and developing relationship.

## 15:15-16:45 Plenary Interface

### Plenary Interface PI1 ~ PRENATAL STRESS AND PLACENTA FUNCTION: RESEARCH AND THE CLINIC

#### **Prenatal Stress and the Placenta**

Frances Champagne, PhD

*Columbia University ~ New York ~ USA*

Exposure to prenatal stress can have a lasting impact on neurodevelopmental and behavioral outcomes. Stress-associated alterations in DNA methylation globally and within the regulatory region of target genes may account for these long-term effects and may occur within the developing brain and the placenta to shape neurobehavioral outcomes. In this talk, I will highlight basic research using a rodent model of chronic variable stress (CVS) exposure and analyses of the impact of perceived psychosocial stress (PSS) in human mothers to explore the epigenetic effects of prenatal stress in both the brain and placenta. Collectively, these data indicate that while there are sex-specific and tissue-specific effects of prenatal stress, there is a generalized dysregulation of enzymes involved in both de novo and maintenance DNA methylation patterns that can account for long-term epigenetic and neurobehavioral outcomes. The implications of these findings for identifying risk biomarkers in the placenta will be discussed.

#### **Prenatal stress and placenta function: clinical view**

Birgit Arabin, MD, PhD

*Clara Angela Foundation ~ Witten and Berlin ~ Germany*

Low BW has been shown to be associated with “hostility”, e.g. a rival cynic personality with mistrust and negative affections in adult life, which again is combined with cardiovascular disease. It was shown in studies about the Dutch Hunger Winter that mothers who conceived during the famine and hunger was continued during the first trimester were at increased risk that their children later had schizophrenia, depression, or inadequate stress responsiveness Both (poor) fetal growth and antenatal maternal emotional well-being or psychosocial stress predict the risk for later psychopathology. Gestational age and BW explained only 1% of additional variance in child emotional/behavioral difficulties when maternal mental health and socioeconomic status variables were considered! Nevertheless, the effects of maternal care or socioeconomic status are greater among children with LBW compared with normal birth weight offspring. Taken together, these findings may form the basis for integrative models of fetal neurodevelopment and early interventions. Nurturing care in early life is essential to enable children to become citizens with adequate creative intellectual and emotional skills. Within the past decade numerous epidemiological and case-control studies show neurodevelopmental disorders in offspring exposed to maternal stress during pregnancy: The outcome of infants from 5 to 18 months of age that were exposed to maternal psychosocial stress implied that the main outcome is at the cognitive and temperamental levels. High levels of pregnancy-specific anxiety and maternal trait anxiety during pregnancy may persist after the delivery predicting higher levels of parenting stress and leading to negative perceptions of parenting-related issues. This can program life-time trajectories of the infant, which in interaction with genetic liabilities or even with poor fetal growth and early-life challenges, will determine the ultimate health. Early adversity and nurturing care is linked with brain development and brain function throughout the life course and the placenta is one of the mediators during pregnancy. It is estimated that 250 million children (43%) younger than 5 years are at risk of not reaching their developmental potential. There is therefore an urgent need to consider nutrition,

responsive caregiving, and early learning for children to develop the intellectual skills, creativity, and wellbeing required to become healthy and happy adults.

## 17:15-18:45 General Sessions

### Symposium S32 - THE INTERPLAY OF MULTIPLE FACTORS IN THE EARLY DEVELOPMENT OF CHILD'S AFFECT AND BEHAVIORAL REGULATION: MATERNAL AND INFANT PROTECTIVE AND RISK CHARACTERISTICS

Vismara L.\*<sup>[2]</sup>, Speranza A.M.<sup>[1]</sup>

<sup>[1]</sup>*Department of Dynamic and Clinical Psychology, "Sapienza" University of Rome ~ Rome ~ Italy,*

<sup>[2]</sup>*Department of Educational Science, Psychology, Philosophy ~ ~ Italy*

According to a developmental psychopathology perspective, multiple factors, including parenting behaviors, parental mental representations, caregivers' mental health, and child characteristics, are well-known precursors of children's emotional development and family's wellness. The present symposium intends to deepen the understanding of the complex interactions among some of such multiple factors throughout the child's first year of life. More specifically, Figueiredo B., Pinto T.M., Pacheco A. & Field T. examine the mediating role of fetal heart rate variability (FHR) on prenatal depression and neonatal neurobehavioral maturity evaluated in the Neonatal Behavioral Assessment Scale (NBAS). Reck C., Tietz A. & Müller M. analyze whether postpartum DSM-IV anxiety disorder is associated to altered patterns of infant (M = 4.1 months) as well as maternal engagement in a Face-to-Face-Still-Face interaction. Riva Crugnola C., Ferro V., Ierardi E., Parodi C., Trovato A. & Tambelli R. study the impact of paternal depression and anxiety, in addition to maternal affective symptoms, on the infant-mother relationship, as assessed by means of the Care-Index at 3 months of the infant. Vismara L., Cristina S., Lucarelli L., Rollè L., Prino L.E., Brustia P., Trovato A.M. & Tambelli R. evaluate at three time points - from pregnancy to 18 months of the child - the relations among mothers' mental health (depression, anxiety and parenting stress), attachment representations and child's affective regulation assessed through the Strange Situation Procedure. Results from all included studies suggest that both maternal and paternal psychological qualities have an impact on caregiver-infant interaction, child's affect regulation and neurobehavioral maturity. Therefore, interventions should consider the contribution of both parental and infants' characteristics to promote family and child's wellbeing. Anna Maria Speranza, an expert in perinatal, will discuss these presentations.

S32.2

#### PRENATAL DEPRESSION ADVERSE EFFECTS ON FETAL NEUROBEHAVIORAL MATURITY AND IMPAIRED DEVELOPMENTAL TRAJECTORIES

Figueiredo B.\*<sup>[1]</sup>, Pinto T.M.<sup>[1]</sup>, Pacheco A.<sup>[1]</sup>, Field T.<sup>[2]</sup>

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Prenatal depression has been associated with both delayed fetal neurobehavioral maturity and delayed neonatal neurobehavioral maturity, but in separate studies. Prenatal depression adverse effect on FHR variability could be an underlying mechanism leading to the poorer developmental outcomes of infants born to prenatally depressed women. This study analyzed the mediating role of fetal heart rate variability (FHR) on prenatal depression and neonatal neurobehavioral maturity. A sample of 104 pregnant women was recruited and divided into two groups according to their Edinburgh Postnatal Depression Scale (EPDS) scores (depressed/non-depressed). FHR variability in response to speech stimuli was assessed at term (between 37 and 39 weeks gestation). The neonates were then assessed on the Neonatal Behavioral Assessment Scale (NBAS) during the first 5 days after birth. The fetuses of non-depressed pregnant women showed higher HR variability than the fetuses of depressed pregnant women in response to speech stimuli, and later as neonates they performed more optimally on the NBAS (on autonomic stability and total scores). FHR variability

mediated the relationship between the mother's prenatal depression and the neonate's NBAS performance. Prenatal depression effects on neonatal behavior may be partially explained by its adverse effects on fetal neurobehavioral maturity. This study shows the negative impact of prenatal depression on fetal and neonatal neurobehavioral maturity. Further, FHR variability was a mediator of the relationship between prenatal depression and less optimal neonatal neurobehavioral maturity. These data are particularly important given that decreased HR variability precedes the development of a number of abnormal conditions. Conversely, higher HR variability has been linked to the control of attention, emotion, behavior, and cognition, to higher self-regulation, and to more stable and positive moods. FHR variability is a promising measure for accessing fetal neurobehavioral conditions.

S32.3

### **THE IMPACT OF MATERNAL ANXIETY DISORDER ON MOTHER-INFANT INTERACTION IN THE POSTPARTUM PERIOD**

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Maternal anxiety strongly effects maternal caregiving behaviors. This study investigated whether postpartum anxiety disorder is associated to altered patterns of infant as well as maternal engagement in a Face-to-Face-Still-Face interaction (FFSF). 39 women with postpartum DSM-IV anxiety disorder and 48 healthy mothers were videotaped during a FFSF with their infant (M= 4.1 months). Infants of the clinical group showed significantly less positive engagement during the play episode than infants of controls. This result depended on infant sex: male controls demonstrated more positive interaction than males of anxious mothers. There was no such effect for female infants who engaged significantly less positively during the play episode than males and did not change their positive engagement during the FFSF. These findings imply pronounced interactive positivity and early vulnerability to maternal anxiety symptoms in male infants. Only the infants of the controls showed the still-face effect. They also protested significantly more during the still-face, while the clinical infants' protest increased significantly during the reunion. Women of both groups did not differ in interaction. Maternal intrusiveness was associated to infant protest in the course of the FFSF. Results suggest that mother-infant intervention should consider affect regulation and infant sex specific characteristics in anxious mother-infant dyads.

S32.4

### **ASSOCIATIONS BETWEEN PATERNAL AND MATERNAL DEPRESSION AND ANXIETY: EFFECTS ON MOTHER AND INFANT INTERACTION AT THREE MONTHS**

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During the perinatal period there is a slightly lower frequency of psychopathological disorders in fathers than in mothers (Baldoni et al., 2010). Various studies have shown that paternal perinatal depression and anxiety are often associated with maternal depression and anxiety (Matthey et al., 2000) and that these disorders influence a child's socio-emotional development (Goodman et al., 1999). No study has explored the impact of these paternal disorders on the infant-mother relationship. The aims of the study are to evaluate the relationship between maternal and paternal

depression and anxiety in the postnatal period and to examine the possible association between maternal and paternal depression and anxiety and mother-infant interaction. 70 mothers and 70 fathers were recruited at ASL2 Savonese and at ASL RM1/RM4 Roma (PRIN 2010/2011 20107JZAF4\_003). Maternal and paternal depression was evaluated with EPDS (Cox et al., 1987) and maternal and paternal anxiety with STAI-Y (Spielberger et al., 1983); mother-infant interaction was coded using the Care-Index (Crittenden, 1998) at infant 3 months. Results showed that maternal depression was related to maternal state anxiety ( $p=.000$ ) and trait anxiety ( $p=.000$ ); paternal depression was related to paternal state ( $p=.000$ ) and trait ( $p=.000$ ) anxiety. Moreover, paternal depression was correlated to maternal trait anxiety ( $p=.047$ ); paternal state anxiety was correlated to maternal state ( $p=.006$ ) and trait ( $p=.001$ ) anxiety. No significant association was found between paternal and maternal depression. Multiple regression analysis, in a smaller sample, showed that paternal depression and paternal trait anxiety negatively affect maternal sensitivity style and cooperative infant style; maternal depression and state anxiety affect maternal controlling style. The findings highlight the association between anxiety and depression both in fathers and in mothers and the relationships between paternal and maternal anxiety and depression. They also show the early influence of a father's anxiety and depression on mother and infant styles of interaction.

S32.5

#### **THE RELATION BETWEEN PRE- AND POSTNATAL MATERNAL ANXIETY/DEPRESSION AND THE QUALITY OF MOTHER/CHILD ATTACHMENT: A PROSPECTIVE STUDY IN THE FIRST YEAR AFTER BIRTH**

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Maternal mental health plays a major role in promoting child and family's wellbeing. It is well known that maternal depression and anxiety symptoms, as well as parenting stress, influence the child's development (Feldam et al., 2009; Vismara et al., 2016; Williamson et al., 2013). The current study aimed to study the relations among mothers' mental health, namely reported depression, anxiety and parenting stress, maternal attachment representations and child's affective regulation. 122 mothers (mean age= 34,8; s.d.= 4.7) and their healthy children (59% boys, 41% girls), voluntarily enrolled from family healthcare services and neonatology units, were assessed at three time points - from pregnancy to 18 months of the child's age. At all time points, mothers completed the following self-reports: the Edinburgh Pre/Postnatal Depression Scale (EPDS; Benvenuti et al., 1999), the State- Trait Anxiety Inventory (STAI; Spielberger et al., 1983), and the Parenting Stress Index -SF (Abidin, 2006). At the seventh month of pregnancy, they were also evaluated by means of the Adult Attachment Interview (Main et al., 1984). Between 12 and 18 months of age, children's affect regulation was assessed through the Strange Situation Procedure (Ainsworth et al., 1978). Analyses showed significant correlations between mothers' and children's attachment and maternal reported depression, anxiety and parenting stress. Within a multifactorial perspective, these findings suggest that maternal mental health and psychological functioning are linked to the child's affective regulation abilities. Therefore, families at risk should be monitored and supported since pregnancy and throughout the perinatal period to enhance sensitive caregiving behaviors.

## **Symposium S35 - OFFSPRING OF PARENTS WITH COMPLEX MENTAL HEALTH DISORDERS: PERINATAL INDICATORS OF RISK AND RESILIENCE**

**Macbeth A.\***

*University of Edinburgh ~ Edinburgh ~ United Kingdom*

Objectives: Children of parents diagnosed with complex mental health problems including schizophrenia, bipolar disorder and depression, are at increased risk of developing mental health problems compared to the general population. Multifactorial models of risk have been proposed for explaining transmission of risk from parent to offspring, hypothesizing that mental disorders are heterogeneous conditions arising from additive and interactional effects of multiple genetic and environmental risk and resilience factors, operating at different phases of development. However, there is little knowledge on very early environmental transmission mechanisms and developmental outcomes in high risk infants. Methods: The symposium presents data from recent studies of these high-risk groups. These include population level data-linkage of routine mental health and maternity records, observational studies of neonatal outcomes, and longitudinal data from the WARM study, following high-risk women and controls from antenatal assessment to postnatal 4-month follow-up. Results: MacBeth will present findings confirming the observation of reduced fertility in women with schizophrenia, and demonstrating population level associations between maternal psychosis and increased risk of abortion, lower birth weight and adverse neonatal outcomes. Harder will present baseline characterization of the WARM cohort, which the two following presentations will also showcase infant data from. Davidsen will report findings for comparisons between neonatal behavioral outcomes measured in offspring of parents with psychosis, compared to controls; and report associations between maternal psychopathology and neonatal outcomes using the NICU Network Neurobehavioral Scale. Nayberg will present findings on early motor and cognitive development at 4-months in infants born to high-risk mothers. Conclusions: These data help to address the lack of knowledge about very early risk developmental status of infant of parents with severe mental disorder. We highlight the impact of, and interaction between psychobiosocial risk and resilience factors for very early infant development. Implications for treatment planning and primary prevention will be discussed.

S35.2

### **GENERAL FERTILITY RATE AND PERINATAL OUTCOMES IN WOMEN WITH SCHIZOPHRENIA AND NON-AFFECTIVE PSYCHOSIS**

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Women diagnosed with non-affective psychosis (including schizophrenia) are at greater risk than the general population of adverse pregnancy outcomes including antenatal and delivery complications. We aimed to accurately estimate fertility rates and pregnancy-related health outcomes for these women and their babies. We used routinely collected data from North-east and West Scotland. We estimated fertility rates in these areas for all women with a lifetime diagnosis of non-affective psychosis and a pregnancy between 2005 and 2013. We compared these women ('exposed') with population controls ('non-exposed') matched on key variables with a 1:3 ratio. Data were available from all pregnancies in both sites between 1995 – 2013. Key outcomes were pregnancy care, labour and birth/neonatal outcomes. We found that women with a diagnosis of non-affective psychosis, aged 15 - 44 had significantly lower general fertility rates than the general population. These results remained the same when we added year of pregnancy as a covariate.

When we compared 'exposed' to 'non-exposed' we found that women with a non-affective psychosis diagnosis were older, had a higher number of pregnancies in the study period, were more likely to smoke, and were more likely to be on psychotropic medication. They were also more likely to have had a history of adverse pregnancy-related events. There were no differences between 'exposed' and 'non-exposed' with regard to experience of labour, but babies born to women with schizophrenia had a number of poorer neonatal outcomes. This study demonstrates women with a schizophrenia diagnosis have lower fertility rates than the general population and have a history of adverse pregnancy-related events including miscarriage and abortion. They are also more likely to have smaller babies and require specialised hospital care. These women present with both complex mental and physical health needs in pregnancy.

S35.3

### **WARM STUDY: BASELINE CHARACTERIZATION OF A PERINATAL MENTAL HEALTH HIGH-RISK COHORT**

**Harder S.\***

*University of Copenhagen ~ Copenhagen ~ Denmark*

Children of parents diagnosed with complex mental health problems including schizophrenia spectrum disorders, bipolar disorder and depression, are at increased risk of developing mental health problems compared to the general population. Little is known regarding the early developmental trajectories of high-risk infants and in particular, the balance of risk and protective factors expressed in the quality of early caregiver-interaction. The WARM study has been established to evaluate factors in the parents, the infant, the social environment and their interaction over time in terms of evolution of very early indicators of developmental risk and resilience focusing on infant attachment, stress sensitivity and cognitive-motor development. Participants are pregnant women with a lifetime diagnosis of schizophrenia, bipolar disorder, major depressive disorder and a non-psychiatric control groups, their infant from birth and their partners. The families are followed up at infant 1, 4, 16 and 52 weeks of age with a focus on caregiver representation, attachment organization, caregiver-infant interaction, stress sensitivity and cognitive-motor development. Design and preliminary data from the ongoing study will be presented including flow-chart and sample characteristics at baseline. This establish a background for the two following abstracts, which present infant data from the WARM study. To date N= 85 mothers and their infants have been included in the study. Initial analyses indicate that pregnant women with severe mental disorders are more often single parents, have higher levels of stress and more childhood trauma experiences. It is possible to recruit a sample of very vulnerable mothers with severe mental disorder, their infants and partners, and retain them in a longitudinal study up to infant 1 year of age. Several maternal risk factors for child developmental outcome were identified. This can guide development of preventive interventions towards these families.

S35.4

### **EARLY RISK SIGNS IN NEONATES OF MOTHERS WITH SEVERE MENTAL ILLNESS: THE WARM-STUDY**

**Daidsen K.\***

*University of Southern Denmark ~ Odense ~ Denmark*

Offspring of parents with schizophrenia and other severe mental illnesses (SMI) are at increased risk of developing psychiatric disorders. Adverse outcomes in early childhood are found in several studies, and neonates of mothers with SMI also exhibit more neurobehavioral deviations than infants of non-psychiatric control women (Blennow 91, Jones et al., 1998, Field, 2004, Hans et al., 2005). These potential early signs of risk development may impact the developing mother-infant

relationship, and constitute targets for early preventive intervention. In the present study, we wish to investigate neurodevelopmental status of neonates born to mothers with SMI. We hypothesise that infants of mothers with SMI will have more non-optimal scores of neurodevelopment than infants of non-psychiatric control mothers. Pregnant women with schizophrenia, bipolar disorder and major depression are recruited during the 2nd or 3rd trimester. Neurodevelopmental status of newborn infants 1-7 days old is assessed with the Nicu Network Neurobehavioral Scale (NNNS (Tronick, 2004)). Preliminary data on neurodevelopmental status at birth will be presented for the current sample of mothers with SMI (n=53), and implications for preventive interventions will be discussed. Data from the study will contribute to our knowledge of early risk signs in infants born to mothers with SMI, and inform the development of preventive interventions for this high-risk group of infants and their caregivers.

S35.5

### **EARLY COGNITIVE AND MOTOR DEVELOPMENT IN OFFSPRING OF MOTHERS WITH PSYCHOTIC DISORDERS**

**Nayberg E.\***

*University of Copenhagen ~ Copenhagen ~ Denmark*

Evidence of cognitive impairments has been found in children who later develop schizophrenia as early as 4 years of age. A number of longitudinal high risk studies, furthermore, have found that the prevalence of stable, cognitive and neuromotor deficits is elevated for children at high genetic risk for schizophrenia. These findings indicate that impaired cognitive development is an important risk marker for schizophrenia. However, data on whether these developmental abnormalities constitute a specific risk marker for schizophrenia are at best inconclusive. Furthermore, whereas neuromotor deviations and pan-dysmaturation have been demonstrated retrospectively in infants at risk for later psychotic disorders, few prospective studies have examined very early childhood cognitive development in high risk offspring. Thus, more knowledge is needed regarding how early cognitive developmental risk markers can be identified. The aim of the study is to describe the very early cognitive and motor development in a sample of offspring of mothers diagnosed with lifetime psychotic disorder compared to a group of non-clinical controls and a group of mothers with other forms of severe psychopathology and to explore potential differences in developmental risk across diagnostic groups. The present study is a sub study of the WARM longitudinal study following a cohort (N=70) of women (non-affective psychotic disorders, bipolar disorder, current or recurrent moderate to severe depression and non-clinical controls,) and their infants, from pregnancy to infant age 4 months. Cognitive and motor development of the children will be assessed at age 4 months using the BSID-III scales. Maternal diagnosis is assessed during pregnancy using SCID DSM 5. Preliminary results on the characteristics of the cognitive and motor functioning of these children will be presented. Group differences in performance at 4 months will be discussed in the context of the existing literature on neuromotor deviation and pan-dysmaturation.

### **Symposium S38 - MECHANISMS OF GHOSTS IN THE NURSERY: EXAMINING BIOLOGICAL AND BEHAVIORAL PATHWAYS FOR THE INTERGENERATIONAL TRANSMISSION OF TRAUMA**

**Gray S.\***

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While the intergenerational transmission of trauma has been long observed in clinical and descriptive studies, only recently has research examined mechanistic pathways that underlie transmission of risk across generations. Looking across physiological, biological, and behavioral systems, in cohorts from three countries, these papers together present an emerging picture of

possible pathways by which mothers' experiences of trauma result in heightened risk for her offspring. Paper 1 links mothers' exposure to Adverse Childhood Experiences (ACEs) to infants' developmental outcomes at 12 months via antepartum risk in pregnancy and infant health at birth. In paper 2, mothers' ACEs exerted impacts on both infants' and preschoolers' parasympathetic physiological activity during dyadic interaction, in patterns consistent with heightened mental health risk. In paper 3, mothers' experiences of childhood maltreatment, as well as perinatal violence, were associated with infants' cortisol patterns, with disorganized attachment appearing to play a potent role among offspring of maltreated mothers. Finally, in paper 4, among mothers, severity of posttraumatic stress related to intimate partner violence was associated with difficulties appraising negative affect, in turn linked to maternal controlling behavior and toddler oppositional defiant behavior – and among toddlers, mothers' exposure to intimate partner violence was linked to divergent EEG patterns associated with affect appraisal. Together, these papers point to pathways – health risk, autonomic activity, dysregulated cortisol, affect appraisal – that connect mothers' experiences of adversity to children's outcomes. They also point to specific features of the parent-child relationship – harsh parenting, disorganized attachment, controlling maternal behavior – that might be targeted to prevent intergenerational transmission of risk. Clinical implications for the conceptualization and treatment of trauma-exposed dyads will be discussed, as will next steps for this body of research.

S38.2

#### **TRANSMISSION OF MATERNAL ADVERSE CHILDHOOD EXPERIENCES TO INFANT DEVELOPMENTAL OUTCOMES: FINDINGS FROM THE ALL OUR FAMILIES COHORT, CANADA**

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Exposure to Adverse Childhood Experiences (ACEs) in mothers including abuse, neglect, and household dysfunction, has been associated with maladaptive infant health and socioemotional developments and a small body of research has started to examine the mechanisms by which this association is transmitted, including infant birth weight (McDonnell & Valentino, 2016; Madigan et al., 2017). The current study examines mechanisms by which maternal adverse childhood experiences (ACEs) predict the early development of their offspring, specifically via maternal antepartum health and psychosocial risk in pregnancy. Participants were 1,994 and their infant who were recruited in pregnancy as part of a prospective longitudinal cohort from 2008 to 2011. Pregnant women completed self-report questionnaires in pregnancy related to psychosocial risk and a questionnaire about hostile behaviour when their infant was 4-months of age. A health care professional assessed the mother's cumulative antepartum health risk in pregnancy and cumulative information about infant health risk at birth was obtained. Mothers completed child development questionnaires when their infants was 12-months of age. Path analysis revealed that the association between maternal ACEs and infant development outcomes at 12 months operated through antepartum risk in pregnancy and infant health risk at birth. Maternal psychosocial risk in pregnancy also predicted infant development outcomes at 12 months via maternal hostile behavior when the infant was 4 months of age. These patterns were not explained by maternal age, child age, child sex, or maternal psychosocial risk in the postpartum period. Maternal health and psychosocial well-being in pregnancy may be key targets for intervention to mitigate the transmission of risk from maternal adversity to their offspring's development.

S38.3

### **INTERGENERATIONAL EFFECTS OF MATERNAL ADVERSE CHILDHOOD EXPERIENCES ON CHILDREN'S AUTONOMIC STRESS PHYSIOLOGY: EVIDENCE ACROSS AGE GROUPS**

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Alterations to stress response systems are hypothesized mechanistic pathways by which early adversity is linked to later health outcomes – including across generations, as mothers' experiences of stress shape offspring's emergent systems. Respiratory sinus arrhythmia (RSA), a biomarker of parasympathetic activity and self-regulation, is associated with life course mental and physical health outcomes. In Study 1, mothers (n = 167) reported on their ACEs and prenatal stress during pregnancy. Infant RSA was assessed at 4 months during a dyadic stressor, the Still Face Paradigm. In Study 2, mothers (n = 61) of preschoolers (age 3-5) retrospectively reported on their ACEs. RSA was assessed at baseline and during a dyadic play challenge, and mothers reported on children's behavior problems with the Child Behavior Checklist. In Study 1, independent contributions of prenatal stress and maternal ACEs to infant RSA were observed. High maternal ACEs was associated with lower infant RSA activity, whereas prenatal stress was associated with failure to recover following the stressor. In Study 2, mothers' high ACEs was associated with child behavior problems as well as preschoolers' lifetime exposure to violence. Additionally, parallel to infancy findings, high maternal ACEs was associated with lower preschooler RSA during the dyadic interaction, considering relevant covariates, including mothers' RSA and preschoolers' violence exposure. Children's parasympathetic activity, a biomarker of self-regulation associated with mental health outcomes, appears impacted by mothers' life course experiences of stress in patterns consistent with heightened risk. Findings emphasize considering children's emergent regulatory capacities in dyadic context and underscore that stress-reducing interventions for pregnant women and mothers with histories of early adversity may lead to improved mental health risk across generations.

S38.4

### **DIFFERENTIAL EFFECTS OF MATERNAL CHILDHOOD AND ADULT INTERPERSONAL VICTIMIZATION ON INFANT CORTISOL REGULATION: EXPLORING ATTACHMENT DISORGANIZATION AS A MEDIATOR**

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Maternal victimization can alter early offspring stress response systems, increasing risk for physical and psychosocial problems. Theoretically, mother-child attachment is a key mechanism for the intergenerational transmission of risk, but its mediating role remains unexplored. Participants were 101 ethnic minority, low income mother-infant dyads (51% boys) recruited from an urban community. Infant saliva was collected after free-play and 10-, 20-, 30-, and 40-minutes after the Strange Situation Procedure. Area under the Curve Ground (AUCG) and Area under the Curve Increase (AUCI) were calculated to capture total cortisol output and reactivity. Most (80%) women self-reported CM or perinatal IPV experiences. The maternal CM group (69%) had lower AUCG than infants of non-maltreated women (B = 3.60, p = .01; M = 9.08 and M = 11.64). In contrast, infants of mothers who experienced severe physical, emotional, or sexual IPV during pregnancy (36%) had higher AUCI than the non-IPV group (B = -3.21, p = .01; M = .35 and M = 3.52), but there were no

differences related to postpartum IPV. Disorganized infants (20%) had lower AUCG than non-disorganized ones ( $B = 4.14$ ,  $p = .02$ ;  $M = 11.19$  and  $M = 7.58$ ). In mediation analyses, CM predicted Disorganized status ( $b = .948$ ,  $p = .01$ ) and Disorganization predicted lower AUCG ( $b = -2.00$ ,  $p = .03$ ), with the indirect effect approaching significance ( $b = -1.9$ ,  $p = .07$ ). Different types of maternal victimization may exert unique influences on infant stress system regulation. Results replicate previous reports that maternal CM and IPV exposure are associated with offspring cortisol regulation, and suggest attachment disorganization may help explain this link.

S38.5

**MATERNAL INTERPERSONAL VIOLENCE-RELATED PSYCHOPATHOLOGY, DIFFICULTIES IN NEGATIVE AFFECT APPRAISAL, AND THEIR RELATIONSHIP TO PARENT-CHILD BEHAVIOR AND EEG CORRELATES: A LONGITUDINAL STUDY**

**Schechter D.\*, Perizzolo V., Berchio C., Vital M., Manini A., Torrisi R., Arnautovic E., Schneeberger M., Puro Gomez C., Carpinteiro V., Chappuis M., Ansermet F., Rusconi Serpa S.**

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Clinical observations have shown that mothers who suffer from interpersonal violence-related PTSD (IPV-PTSD) experience difficulty in distinguishing negative affects, particularly during displays of child helplessness (Schechter & Rusconi-Serpa, 2013). We tested the hypothesis that IPV-PTSD mothers as assessed for psychopathology and quality of interactive behavior when their children were ages 12-42 months would present difficulties in distinguishing fearful and angry affect. Longitudinal follow-up of their children permitted us to test the hypothesis that their children would show similar difficulties at school-age and that these difficulties would be associated with child externalizing behaviors. Data was thus far analyzed for 32 mothers (16 IPV-PTSD mothers and 16 non-PTSD controls) and their children (6-10 years old) using an Emotional Face Matching Task (EFMT, McNamara & al., 2013), child diagnostic interviews and high-density electroencephalography (HD-EEG) recording. Maternal IPV-PTSD severity was associated with increased maternal errors appraising angry and fearful faces, which in turn was associated with increased maternal controlling behavior. Results confirmed that maternal confusion on the EFMT was associated with child oppositional-defiant disorder (ODD). Increased confusion in identifying anger and fear among IPV-PTSD mothers' children was specifically associated with maternal dissociative symptoms but not controlling behavior, which also did not predict child ODD. Children of IPV-PTSD vs non-PTSD mothers differed with respect to HD-EEG components associated with affect appraisal (P1 and N170). Results support that maternal IPV-related psychopathology is associated both with maternal and child difficulty in accurate appraisal of negative affect. For IPV-PTSD mothers this may lead to defensive, controlling behavior with their toddlers; and for their children, to disruptive behavior, particularly in the presence of maternal dissociation. Early relationship-based intervention that targets maternal affect appraisal and mentalization through clinician-assisted videofeedback exposure is being studied as a means to interrupt intergenerational transmission of IPV and related psychopathology.

**Symposium S41 - FATHER-CHILD RELATIONSHIPS: INTERACTION, CLOSENESS AND ATTACHMENT**

**Ahnert L.\*<sup>[1]</sup>, Teufel L.<sup>[1]</sup>, Volling B.<sup>[2]</sup>**

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The present symposium will bring research together which has been investigating some of the particularities of the father-child relationship and its consequences. The first paper (Piskernik & Ahnert / University of Vienna, Austria) deals with the question whether the traditional Strange

Situation Procedure developed for mother-child dyads are able to reliably assess father-child attachments, that is, to describe children's attachment behaviours as being close to a father in situations of irritation and need. The second paper (Teufl et al. / University of Vienna, Austria) then explores closeness in father- and stepfather-child relationships and tests an evolutionary consideration whereupon psychological investments (such as providing closeness) in a stepchild might rather be a mating effort than a real interest in the child. Consequently, closeness in stepfather-child relationships should be high if the stepchild's mother appears as an attractive partner despite the step father's attitude towards fatherhood. The third paper (Brisch et al. / University of Munich, Germany) investigates fathers' adverse childhood experiences and how the negative influences on ongoing father-child interactions can be buffered by attachment-based interventions which have been proven to be successful only for mothers with childhood adversities, so far. The fourth paper (Klein et al. / University of Leipzig, Germany) finally focusses on long-lasting influences of fathers' depressive symptoms on children's later internalizing behaviours. This appears particularly important for boys, and has been overseen in past research on intergenerational transmission of internalizing symptoms. The symposium will be discussed by Volling / University of Michigan, USA.

S41.2

#### **HOW RELIABLY DOES THE TRADITIONAL STRANGE SITUATION PROCEDURE CAPTURE FATHER-CHILD ATTACHMENTS?**

**Piskernik B.\* , Ahnert L.**

*University of Vienna ~ Vienna ~ Austria*

When Ainsworth and her colleagues (Ainsworth et al., 1978) created the Strange Situation Procedure (SSP) with a sequence of eight episodes, they focussed on two reunions (episodes 5 and 8) and found relevant indicators (i.e., proximity seeking, contact maintaining, avoidance and resistance) to describe attachment quality during these episodes with a categorical ABC system. Later on, they validated the system with mother-child dyads. With the increasing interest in father-child relationships, however, the question is raised whether the ABC system would also be useful for father-child dyads. The present study will test whether the application of the ABC system to mother-child dyads follows the same rules to describe attachment quality for father-child dyads. The study carried out the SSP with n=97 mother-child and n=172 SSP father-child dyads. Six coders applied the ABC system after passing the usual ABC training. We first inspected the ABC categories including the underlying indicators of the mother-child attachments. A machine learning C5.0 algorithm (Quinlan, 2013) was to disclose a decision tree in order to detect the most relevant indicators. Later on, the decision tree should test the compatibility (1) with the traditional ABC system for mother-child dyads, but moreover (2) with the traditional ABC system for the father-child dyads. For the mother-child attachments, the algorithm C5.0 suggested a decision tree which highlighted child's proximity seeking, contact maintaining, avoidance and resistance in episode 8, and child's resistance in episode 5. This algorithm classified the mother-child attachments with an accuracy of .92 (AUC=.96) when compared to the traditional ABC system. Based on the same algorithm, father-child attachments yielded an accuracy of .95 (AUC=.98). The present study provides evidence that the traditional ABC system of the SSP is applicable to father-child in the same way as it is to mother-child attachments.

S41.3

#### **IS BLOOD REALLY THICKER THAN WATER? VARIATIONS OF CLOSENESS IN FATHER- AND STEPFATHER-CHILD RELATIONSHIPS**

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Past research provided evidence that children living with stepfathers tend to have different social-emotional problems to children living with their biological fathers. These problems might be moderated by the quality of the (step)father-child relationship. The underlying mechanisms affecting the stepfather-child relationship are still unclear. Perspectives of evolutionary psychology consider that investments in a stepchild might rather be a mating effort than a real interest in the child. Consequently, closeness in stepfather-child relationships should be high if the stepchild's mother appears to be an attractive partner, despite the stepfather's attitude towards fatherhood. The study explores (1) if closeness in stepfather-child relationships differs in first and second marital relationships without and with further biological children, and (2) whether the closeness relates to the attractiveness of the stepchild's mother and/or the stepfather's attitude towards fatherhood. N = 210 Austrian, German and Swiss stepfathers reported in an online survey how close they feel to each of their children (no matter of first or second marital relationship). Additionally, N = 50 Austrian and German stepfathers and their families took part in a field study. Observers visited the families, carried out the Family System Test (FAST) in order to assess closeness of the fathers towards their (step)children and left fathers with questionnaires on mating value (MV), and parenting challenges and competencies (PSI). Stepfathers' closeness did not differ in stepfathers (of first or second marital partnership) with and without a biological child. However closeness was in general lower if the fathers lived in a second marital relationship. In addition, the more stepfathers see themselves as a competent father and perceive the partner as attractive, the closer they feel to the stepchild. Closeness of stepfathers towards their stepchild are rather influenced by marital partnership history and fatherhood attitudes than biological considerations.

S41.4

#### **CAN ATTACHMENT-BASED INTERVENTION BUFFER THE NEGATIVE INFLUENCE OF FATHERS' ADVERSE CHILDHOOD EXPERIENCES ON FATHER-CHILD INTERACTION?**

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Attachment-based intervention programs in transition to parenthood have been predominantly oriented to mothers; it is only recently that focus has also shifted to fathers (-to-be) in early attachment intervention practice and research. SAFE® (Secure Attachment Formation for Educators) is an attachment-focused, group-based prevention program that explicitly addresses both parents. Parents are encouraged to reflect on their own attachment experiences. Furthermore, SAFE® includes video-based sensitivity training and feedback. The program started during pregnancy and was conducted throughout the child's first year of life. The aim is to evaluate the effectiveness of the SAFE® program on the formation of an emotionally- available father-child interaction with focus on the impact of difficult childhood experiences of fathers. A non-clinical sample of fathers was examined in a randomized control study. Data on difficult childhood experiences (TAQ; van der Kolk, 1997) were obtained prenatally, father-child interaction quality data (EAS, Biringen, 2008) at approx. four and nine months postnatally and when the child was 7 years old. (1) More than one-third of fathers in the sample report emotional abuse during childhood in both groups. (2) Four months after birth, father-child dyads from the SAFE® group show significantly higher scores on the Emotional Availability Scales (Biringen, 2008) than father-child-dyads in the control group. (3) During interaction at approx. nine months postpartum a negative effect of traumatic symptoms on emotional availability was found in the control group but not in the intervention group, thus confirming a positive moderating effect of the program. (4) Preliminary results on the data of father-

child-interaction quality of the follow-up at 7 years of age will be presented. The indicated buffering effect of attachment-based prevention on new fathers will be discussed in the context of transmission of negative childhood experience into the next generation.

S41.5

#### **LIKE FATHER LIKE SON? GENDER-SPECIFIC INTERGENERATIONAL TRANSMISSION OF INTERNALIZING SYMPTOMS**

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Despite the well-established link between parental depressive symptoms and children's internalizing symptoms, studies investigating the role of fathers and dividing transmission processes into gender-specific components remain scarce. Therefore, the present study examined gender-specific transmission processes between parents and children over the course of early school age, a key stage where gender-specific roles are increasingly adopted. Specifically, the study focused on bidirectional effects between fathers and sons, both concurrently and longitudinally. Based on the notion of same-sex transmission, we hypothesized stronger associations between same-sex parent-offspring dyads than in opposite-sex dyads. Participants were 272 children (49.6% girls). During recruitment, children were screened and oversampled for internalizing symptoms. Parents completed questionnaires twice during early-school age (Mean AgeTime1 = 7.4; SD = 2.9; Mean AgeTime 2 = 8.5; SD = 3.3). Mothers and fathers separately reported on their own depressive symptoms and their children's internalizing symptoms. Latent multiple-group analyses indicated gender-independent stability as well as gender-specific relations between parental and child outcomes. Maternal depressive symptoms were concurrently associated with symptoms of girls and boys, while paternal symptoms were concurrently associated only with symptoms of boys, but not of girls. Moreover, the associations between children and the same-sex parent became more relevant over time, suggesting a growing identification with the same-sex model, particularly for boys. Using a rigorous longitudinal design, we found differential transmission processes between fathers and sons and fathers and daughters, while the symptom transmission between mothers and their children seems to be more gender-unspecific. This implies that clinical practice should be more attentive to potential gender-specific influences within the family when applying psychotherapeutic approaches that address the family as a whole. Especially for boys, the paternal involvement seems to be of particular importance.

#### **Symposium S45 - TRIADIC FAMILY INTERACTION: CHILEAN STUDIES IN FAMILIES WITH INFANT, PRESCHOOLER AND ADOLESCENTS**

S45.1

#### **TRIADIC FAMILY INTERACTION: CHILEAN STUDIES IN FAMILIES WITH INFANT, PRESCHOOLER AND ADOLESCENTS**

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The mother-father-infant triad is a unit with its own structure and characteristics, in which the participation of a third person modifies the dyadic dynamic, generating greater interactional complexity and socio-emotional diversity (McHale & Fivaz-Depeursinge, 1999). Cooperative triadic interactions, in a climate of warmth between parents, are child-friendly experiences that promote healthy social development (Leidy, Schofield, & Parke, 2013; Raikes & Thompson, 2006; Teubert & Pinquart, 2010). Triadic family cohesion, reciprocal relationships with the mother, and involvement

and social commitment in the relationship with the father are predictors of social skills in the child (Feldman & Masalha, 2010). When children engage in chronic dysfunctional family interactions or recurrent parental conflicts, they develop maladaptive behaviors in the face of conflict management, a failure to develop adequate regulatory mechanisms, and difficulties in peer relationships (Cummings & Davies, 2010; McHale, 2007). However, maintaining positive interactions with one parent promotes learning in the child that contributes to reducing stress and facilitating their self-regulatory mechanisms, thus also improving dysfunctional interactions with the other parent (Fivaz-Depeursingue & Favez, 2006). Studies in the mother-father-child or adolescent triad have demonstrated their relevance, but few studies have been conducted in Latin-American countries. This symposium presents some researches in triads with infant, children and adolescents being done in Chile. The first presentation addressed results in families with preschoolers, and considered the relation between attachment and triadic interactions. The second and the third studies addressed triadic interaction quality in families with infants, considering the effect of a video-feedback intervention in one of them and the parental reflexive function in the other. The last study focused in the relation between family triadic interaction quality and satisfaction with life in adolescents that attended a mental health center.

S45.2

#### **A TRIADIC VIDEO-FEEDBACK INTERVENTION ORIENTED TO MOTHER-FATHER-CHILD WITH SOCIO-EMOTIONAL PROBLEMS**

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The quality of dyadic and triadic family interactions during early childhood significantly influences social-emotional development and childhood mental health (Berry et al., 2016). Video feedback is a valuable psychotherapeutic tool for intervention in the early family (Facchini, Martin, & Downing, 2016; Hoivik et al., 2015; Groeneveld, Vermeer, van Ijzendoorn, & Linting, 2016; Steele et al., 2014). A quasi experimental study with pre and post assessments was carried out. A brief intervention using video-feedback, aimed at mother-infant-father triads with difficulties in social-emotional development, was developed. Eighty triads (experimental group=40, control group=40), composed of heterosexual couples between 20 and 43 years of age for mothers, between 22 and 54 years of age for fathers, and between one and three years of age for children, participated. Instruments: Lausanne Triadology Play, LTP; (Fivaz-Depeursingue & Corboz-Warnery, 1999), CARE-Index (Crittenden, 2004), Age and Stage Questionnaire, ASQ-SE and ASQ-3, Squires, Bricker, & Twombly, 2002). The results show a significant increase in the quality of triadic interactions (Lausanne Triadology Play, LTP) and co-parenting as well as parental sensitivity (CARE-Index) and sensitivity in the mothers who were the object of the intervention. The fathers significantly reduced their nonresponsive behavior and the mothers reduced their controlling behavior. The children improve the socioemotional (Age and Stage Questionnaire, ASQ-SE) and psychomotor development (Ages and Stage Questionnaire, ASQ-3) in some areas after of video-feedback intervention. The clinical implication of this results will be discussed.

S45.3

#### **AN ANALYSIS OF THE PARENTAL REFLECTIVE FUNCTION, THE QUALITY OF TRIADIC INTERACTION AND ITS INFLUENCE ON EARLY SOCIAL-EMOTIONAL DEVELOPMENT**

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During early childhood, the immediate family is the basic relationship system and the most influential one in which the child develops (Bronfenbrenner, 1987), where the mother-father-child triad plays a fundamental role in childhood development (Fivaz-Depeursingue, & Corboz-Warnery, 1999). On the other hand, a good enough parental reflective function (RF) is considered as a protective factor in early parenting (Stacks et al, 2014), assuming a relevant role for attachment development during early childhood (Fonagy, et al., 1991; Ensink et al., 2016). Method: A non-experimental, transversal and correlational study was developed. 50 families were evaluated, comprising the mother and the father in a current relationship with at least one child between 12 to 36 months of age. The variables included are: sociodemographic background, triadic interaction (LTP, Fivaz-Depeursingue & Corboz-Warnery, 1999), parental reflective function (PDI-S, Aber et al., 1985, assessed by the RF Scales, Fonagy et al, 1998) and social-emotional childhood development (ASQ SE, Squires, Bricker, & Twombly, 2002). Couple relationship satisfaction (RAS, Hendrick, 1988) and depressive symptoms in parents (BDI-I, Beck et al., 1961) are included as control variables. The results revealed a significant effect of the mother reflective functioning on the triadic interaction, explaining the 21% of the variance. Also, the triadic interaction was a significant variable on the child's social-emotional difficulties, explaining the 20% of the variance. However, contrary as it was hypothesized, mother's and father's reflective functioning was not significantly variable to explain the child's socio-emotional difficulties. The clinical implications of this findings will be discussed.

S45.4

#### **ADOLESCENT LIFE SATISFACTION AND ITS RELATION WITH TRIADIC INTERACTIONS AND MENTAL HEALTH**

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Life satisfaction is a measure of subjective well-being and health (Diener et al, 1999), which includes positive factors and not only relative to symptoms or risk behaviors adolescents. Low LS levels have been shown to have a predictive character of internalizing psychopathology in adolescents (Huebner, Funk, Gilman, 2000). Relational aspects, especially within the family context, constitute one of the variables associated with adolescent LS (Gohm, Oishi, Darlington, & Diener, 1998; Rask, Astedt-Kurki, & Laippala, 2003). While the triadic interaction has been studied predominantly regarding the early human development (Fivaz-Depeursingue, & Corboz-Warnery, 1999), the question of what is the place and importance of triadics interactions in the period of adolescence arises. Sample: 15 triads conformed by outpatients adolescents between 13 to 16 years and two main care figures. Instruments: The Satisfaction with Life Scale-Child (SWLS-C) (Gadermann, Schonert-Reichl, & Zumbo, 2010; Alvarez, Briceño, Alvarez, Abufhele & Delgado, 2017), the Strengths and Difficulties Questionnaire (SDQ) (Brown, Capella, & Antivilo, 2014; Rivera, 2013; Sánchez, 2016), Clinical Inventory for Adolescents (MACI) (Vinet & Fornis i Santacana, 2009), survey related to personal beliefs, preferences, friendships, family and others, Lausanne Triadology Play (LTP, Fivaz-Depeursingue & Corboz-Warnery, 1999) and Family Apgar (Smilkstein, 1978; Maddaleno, Horwitz, Jara, Florenzano, & Salazar, 1987). This research is ongoing. Adolescents mainly of biparental family, middle class, mostly female and attend to public educational system, one-third with school repetition. The reason for initial consultation in the psychiatric unit was diverse, mainly mood symptoms and suicidal spectrum. The relation between quality triadic interaction and LS in outpatients adolescents are discussed.

S45.5

## **BEYOND THE DYAD: THE RELATIONSHIP BETWEEN PRESCHOOLERS' ATTACHMENT REPRESENTATIONS AND FAMILY TRIADIC INTERACTIONS**

**Perez Cortes F.S.\*<sup>[1]</sup>, Moessner M.<sup>[2]</sup>, Santelices P.<sup>[3]</sup>**

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During the preschool period, a child advances developmentally, and the growing complexity of his or her environment generates a qualitative change in affective relations (Bowlby, 1969; Crittenden, 2004; Thompson, 2000). Therefore, adjustments in parenting skills are necessary to provide children with the psychological tools needed to explore and negotiate their social environment (Barnett, Kidwell, & Leung, 1998). Thus, it stands to reason that family interactional patterns may be reflected in children's socioemotional development and in their construction of mental representations of attachment relationships. This study examines the relationship between triadic family interactions and preschoolers' attachment representations, or internal working models (IWMs), from a qualitative and dimensional perspective. Individual, relational, and sociocultural variables were evaluated with a battery of instruments (Beck Depression Inventory, Parenting Stress Index SF, Attachment Story Completion Task, Lausanne Trilogue Play) using two different samples from Chile and Germany. The results showed that triadic family interactions were linked to preschoolers' attachment security levels in both groups, indicating the reliability of the proposed model. This research poses an original approach to the study of attachment representations during preschool years, going beyond a dyadic mother-child relational model and addressing the question of how triadic mother-father-child models relate to them.

## **Symposium S46 - HELPING FATHERS TO HELP THEIR BABIES**

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The World Health Organization and MenCare, the organizer of a global campaign to promote fatherhood, have recently brought attention to the considerable impact that fathers can have on the overall development of children, on their physical and mental health, as well as on that of mothers, around the world. MenCare's report, entitled *State of the World's Fathers*, pointed out the too-frequent absence, in public policies and research, of measures to support paternal involvement. This observation was followed by an invitation to change perceptions and the reality of men with respect to fatherhood, and to take the necessary social, economic, and political measures to make these changes possible. Various initiatives in Canada and Australia have brought paternal involvement to the fore over recent years, attempting to raise awareness, support, and bring together clinicians and researchers on issues related to fatherhood. That said, it is still difficult to set up family services and programs that support paternal involvement; the work of adapting practices is left entirely to practitioners and managers, who report they are poorly equipped to do so. As a result, fathers are disconnected from services to support new families in developing their involvement with their child and frequently experience poor communication in their encounters with family practitioners. In such a context, it is difficult for men to ask for and receive help. **Aims and Methods:** This symposium will present four initiatives and means of reaching out and helping fathers, either through offering direct intervention, training health practitioners, or using helpline and SMS. **Results.** These projects were implemented and evaluated in Canada and Australia, by interdisciplinary teams of researchers and clinicians (nursing, psychology, social work, media, psychiatry and medicine) over a course of 2-5 years. **Discussion.** The process of reaching out to help

fathers in alternative ways and the implications for the work procedures of family practitioners will be discussed.

S46.2

**THE FATHER FRIENDLY INITIATIVE: EVALUATING THE EFFECTS ON HEALTH PROFESSIONALS OF AN INTERDISCIPLINARY PROGRAM SUPPORTING INVOLVED FATHERHOOD WITHIN FAMILIES**

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*Université du Québec en Outaouais ~ Gatineau, Quebec ~ Canada*

For the past 40 years, scholars have been studying the development of the father's role in the family, particularly in regards to fathers' involvement. It is well known that fathers' involvement benefits children's cognitive and social development and contributes to both parents' well-being. Furthermore, fathers who are involved with their children right after birth tend to stay involved later on in life. Perceived parental efficacy and fathers' mental health both contribute to fathers' involvement in the first year of the child's life. Recent research has shown that social and professional support during this period can be also protective factors for father involvement. The Father Friendly Initiative within the Family (FFIF) program was developed in 2010 to empower health professionals to support fathers' involvement, detect fathers' mental health problems, and ultimately prevent child abuse and neglect. It was implemented in three regions of Quebec (Canada) from 2012-2017. This presentation will briefly describe the program and results of the evaluation of FFIF's effects from 2012 to 2017. Effects on health and social professionals, organizations and parents were gathered. For the purpose of this presentation, we will focus on effects on the practitioners. Pre (N: 297) and post intervention (N: 156) questionnaires were filled in by health and social professionals measuring beliefs, self- efficacy and father inclusive practices. The project answers a real need in the field, and its activities have generated a vast interest. Health and social professionals are adopting father-friendly attitudes, beliefs, and behaviours after participating in this innovative program. The discussion will explore implications for father-inclusive family practices as well as for family research, education, and policy development in support of fathers' involvement.

S46.3

**EXTENDING FATHERING INTERVENTIONS INTO HEALTH SERVICES: REACHING IN WHILE REACHING OUT WITH MOBILE TECHNOLOGY**

**May C., St Georges J., Fletcher R.\***

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Technological advances are rapidly changing the way that services can engage with hard-to-reach groups such as fathers. Phone-based intervention is particularly appealing in the area of paternal intervention because of the challenges associated with achieving father involvement in face-to-face programs, the difficulty of shifting the focus of time-poor service delivery toward fathering, and the scarcity of clinicians who can effectively deliver father or partnership focused services. However, a key risk is that these interventions operate in parallel or isolation rather than in concert with essential family and child services. This may result in ineffectual promotion of the intervention by clinicians. This presentation will provide examples of how intervention viability risk is addressed in Australian implementations of two mobile-health interventions. Methods: Two programs, SMS4Dads and SMS4Mums& Dads were delivered during 2013-2017 (N=> 2000). The programs were designed and tested with an expert panel of clinicians and participants were recruited online and through services such as Child & Family Health Nursing (CHFN), Antenatal Education, Neonatal Intensive Care and Ultrasound services. Staff attended education sessions explaining the procedures for recruiting fathers to the study. Most participants were recruited through antenatal clinics and

CFHN services while ultrasound clinics and NICU had the lowest rates of recruitment. We found that the risk of operating in isolation from the health service was counteracted by the concept of the SMS program as a 'complementary tool'. This approach consisted of 1) engaging services in the early stages of program development, 2) consistent messaging to promote interventions, 3) involving clinicians and practitioners in research and publication, and 4) practitioners being users of the intervention. The development of a 'complementary tool' for clinicians is a multidimensional process, and requires that program development and delivery is intertwined with the activities of those who deliver routine perinatal services.

S46.4

**PRESENT FATHERS, SUCCESSFUL CHILDREN WORKSHOPS: SUPPORTING FATHERS IN IMPROVING THEIR RELATIONSHIP WITH THEIR CHILDREN AND THEIR NETWORK**

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Although it is recognized that paternal engagement contributes to child development in multiple ways, there are few services for fathers and very few stakeholders who support fathers' engagement. The project *Pères présents, enfants gagnants* (PPEG – present fathers, successful children) involves a series of ten workshops for fathers and stepfathers wishing to improve their relationship with their child. 1) Describe the *Pères présents, enfants gagnants* project, the workshops, and their objectives, the theory of action, activities and facilitation principles; 2) Present the results of the evaluation of the satisfaction of participating fathers; 3) Discuss what they perceive as the effects of their participation in the workshops. The PPEG workshops are implemented in one region of Quebec (Canada). From 2014 to 2017, nine cohorts (80 fathers) have participated in PPEG workshops. The project is evaluated through an anonymous questionnaire on participants' workshop experience. Analysis shows that fathers participating in the PPEG workshops are very satisfied with their experience. The main observations regarding their assessment of the workshop facilitation, content, and group dynamics will be presented. The changes perceived by fathers following their workshop participation will also be discussed. The results of the evaluation of these fathers' experiences call into question the best practices for working with fathers that are suggested in the literature. This reassessment will be discussed in light of contextual factors that may explain the success of the PPEG workshops.

S46.5

**MALE CALLERS TO AN AUSTRALIAN PERINATAL DEPRESSION AND ANXIETY HELP LINE - UNDERSTANDING ISSUES AND CONCERNS IN THE PERINATAL PERIOD**

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In the transition to parenthood up to 20% of men will be partnered with a mother suffering a mood disorder and one in ten will report symptoms of depression. Father's reluctance to seek help combined with his isolation from perinatal services mean that little is known about the needs and concerns of this group. Deidentified Service data records from 129 male callers (462 calls) to The Perinatal Anxiety and Distress Australia (PANDA) National Helpline were provided to researchers for review. Reasons for calling, and the frequency of callers' emotional, physical and relationship issues were assessed and qualitative data included in the records were analysed thematically. The main reason recorded for contacting the PANDA service was support. Many callers were recorded to be feeling overwhelmed, anxious and irritable, experiencing a range of physical symptoms and

relationship concerns. The thematic analysis revealed that men were concerned about their partner's mental health, and were seeking advice on how to respond to their partners' mood instability, violence, or psychosis. The fathers were also concerned for their partner's relationship with the baby and with themselves. The fathering role and work-life balance were also important concerns. The analysis was limited to records made by counsellors from conversations with callers. However, the agitation, confusion, exhaustion and distress of male callers (fathers) described in the service records of PANDA strongly suggest that the early detection and support of distressed fathers would improve outcomes for mothers, fathers and their infants.

### **Symposium S49 - COULD MOTHERESE, AN INSTINCTIVE EMOTIONAL PROSODY THAT SUPPORTS MOTHER-INFANT INTERACTION, ALSO MEDIATE MOTHER-INFANT TRANSMISSION OF DISORDER?**

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Motherese prosody have been shown to have immediate effects on infants (improving engagement) as well as long-term effects on social and cognitive development, including self-regulation, language acquisition, and learning (Saint-Georges 2013). Thus, it is crucial to understand what factors influence the production of this prosody. The French team of ISIR-UPMC will present study with an algorithm performing an automatic analyse of prosody supports the idea that motherese prosody could be cross-cultural whatever the language, suggesting it belongs to a natural instinctive process (Saint-Georges, submitted). The Bresilian team will present the result of study with pregnant women using both a classical psycholinguistic approach and automatic analyse of prosody reveals that motherese is present before birth, and motherese ratio seems to increase with gestational age. The differential influence of life events, the announce of a maternal risk, or a foetal risk, on this motherese ratio is being explored and discussed. The Danish team will present how maternal depression can alter motherese and the consequences in micro-analyses of interaction? A study on depressed mothers with their 4-months old infants is exploring if these mothers shows alteration of motherese and speech turn-taking quality (STT) in interaction with their infant. Conversely, the second French team will present when infants have been diagnosed with a West syndrome, whereas infant movement synchrony and the quality of the vocal synchrony (STT) is altered in infants who will develop autism, the motherese is not altered, as if mothers voluntary used it to engage with their child (Ouss). Conclusion: Presence of prenatal motherese and of cross-languages motherese characteristics together suggest that motherese could be an instinctive phenomenon. However mothers could use it to engage with their infant is spite of his difficulties. We are trying to precise how life events, maternal anxiety and depression could modulate this universal prosody and thus have short-term and long-term effects on infant's psychological development. Motherese thus could mediate a form of mother-child disorder transmission.

S49.2

#### **PRENATAL MOTHERESE**

**Parlato De Oliveira E. <sup>[1]</sup>, Viaux--Savelon S. <sup>[2]</sup>, Saint--Georges C. <sup>[2]</sup>, Dommergues M. <sup>[3]</sup>, Cohen D. <sup>[2]</sup>**

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Motherese, is a specific form of Infant Directed Speech (IDS), used by parents to speak to their infants (Mehler et Dupoux, 1990) before he/she is able to express verbally. IDS has affective

properties, expresses the parental involvement, is also a marker of the parent infant interaction quality and contributes to regulate caregiver-infant interaction (Cohen et al., 2013). Psycholinguistic characteristics of this IDS can now be detected with automatic analysis. (Parlato, St Georges, Cohen, Soumis). Clinical reports suggest that motherese is used by mothers during pregnancy and that fetuses react to this prosody (Granier-Deferre, 2004). Our goal was to determine if pregnant women used motherese prosody while speaking to their unborn baby and if emotional or obstetrical status impact prenatal motherese use. We conducted an observational study based on interviews and voice records of pregnant women recruited in a University Hospital in Paris with gestational age from 26 to 38 weeks. 145 women were eligible, 35 participated in the study, 26 audiorecords were exploitable. Methods: we collected obstetrical, social and demographic data and pregnancy outcome, anxiety and depression status (Covy and Raskin Scales) and life events (Sensations During Pregnancy and Life Event Questionnaire). Each participant was left alone with an audio recorder with recommendation to feel free to speak to her fetus. The recording was stopped after 3 minutes. Audio recordings were analyzed by two methods: (i) classical psycholinguistic analyses (ii) objective algorithm analyses. Mothers declare to speak to their fetuses in 89%. Motherese can be detected in prenatal period with the both methods, especially after the first perceptions of fetus movements. We discuss the modulation of quantity of prenatal motherese regarding prenatal obstetrical stress. Motherese can be detected during pregnancy and is an interesting marker of parental involvement and future quality of parent-child interaction.

S49.3

#### **WHEN INFANTS SPEAK WITH A DEPRESSED MOTHER: RELATIONS BETWEEN POSTPARTUM DEPRESSION, INFANT-DIRECTED SPEECH AND SPEECH TURN TAKING**

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Postpartum depression (PPD) is a depressive episode with onset after birth affecting up to 19% of women (O'Hara & McCabe, 2013). Previous studies have found PPD to affect caregiving behaviors, such as infant directed speech (IDS) and speech turn taking (STT), due to depressed mothers speaking less frequently, being slower to respond to their infant's behaviors, and using less affective features, when they speak (Saint-Georges et al., 2013). However, previous studies have also found sociodemographic factors to buffer the adverse effects of PPD on caregiving behaviors (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). The present study examines the relationships between PPD, IDS and STT in a well-resourced Danish sample with mothers with and without PPD. First, we hypothesize PPD mothers to produce less IDS and STT compared to nonclinical mothers. Second, we hypothesize IDS to facilitate STT, that is we expect infants to be more likely to respond contingent after and IDS compared to a non-IDS vocalization. However, we expect PPD to moderate this relation, in line with a previous study finding infants to be less sensitive to IDS after a Still-Face episode (Weisman et al., 2016), we expect infants of PPD mothers to be less sensitive to IDS compared to infants of nonclinical mothers. The present study comprises vocal data from interactions between 25 PPD and 53 nonclinical mothers and their 4-month-old infants. First, data was semi-automatically coded for mother and infant vocalizations. Presently, data is automatically analyzed using social signal processing in order to extract IDS and STT. Data is currently being analyzed. The study contributes to understanding the impact of PPD in early mother-infant interactions. Further, the study aims at informing clinical practice by specifying interactional difficulties in PPD, hereby offering ideas for which behaviors to target in interventions.

S49.4

#### **THE UNIVERSALITY OF MOTHERESE PROSODIC CHARACTERISTICS**

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Motherese, also known as infant-directed speech (IDS) refers to the spontaneous way in which mothers, fathers, and caregivers speak with infants and young children. IDS has been studied extensively across a number of interactive situations and contexts, especially by researchers interested in understanding language acquisition. IDS also has affective properties and contributes to regulate caregiver-infant interaction (Cohen et al., 2013). Thus, IDS is part of an interactive loop that may play an important role in infants' cognitive and social development (Saint-Georges et al., 2013). Despite many positive arguments (Falk, 2009), the evolutionary significance of motherese and its universality has been challenged by some authors. A way to contribute to this open debate is to perform cross-cultural studies using automatic social signal processing (SSP). SSP uses computational and multidisciplinary approaches to investigate social interaction (Vinciarelli et al., 2009). Our speech corpus consists of audio-recorded vocalizations from parents during natural interactions with their infant aged 4-18 months. It formed 6 databases including five languages: English, French, Hebrew (two databases: mothers/fathers), Italian, and Brazilian Portuguese. Our motherese-classifier, based on machine learning methods, uses acoustic characteristics of speech and SVM classifiers. It can distinguish emotional sequences of motherese from normal speech (Mahdhaoui et al, 2011). We studied the databases both in uni-language condition (motherese-classifier trained in one language and testing the same language) and cross-over condition (motherese-classifier trained in one language and testing another language). Uni-language condition produced moderate to excellent classification results, all significantly different from chance (all  $p < 1 \times 10^{-10}$ ). Cross-over condition produced mild to good classification results, all results being also significantly different from chance (all  $p < 1 \times 10^{-10}$ ). Automated classification of motherese was feasible for all languages and locutors (father vs. mother). In cross-over conditions, our study supports the hypothesis of universality of motherese across languages.

S49.5

#### **VOCAL AND HAND MOVEMENT SYNCHRONY AT 9 MONTHS IN AT RISK INFANTS WITH EARLY EPILEPSY AS A PREDICTOR OF AUTISM SPECTRUM DISORDER**

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Mother infant synchrony refers to the spontaneous way mothers and infants interact in a temporal coordination, and is considered as a social signal per se. Better mother-child synchrony is associated with a more positive child outcome. The use of integrative approaches combining clinical observation and engineering techniques may improve the quality of synchrony analysis. Our aim was to apply synchrony analysis of early infant mother interaction in two major cues of interaction: vocal, including motherese, and bodily cues, among at-risk dyads for Autism Spectrum Disorder (ASD). We hypothesized that some forms of dys-synchrony We prospectively follow-up 32 babies with West syndrome (WS), an early epilepsy with 25 to 30% of ASD in the evolution, and 19 controls. They were recorded during a 3 min standardized mother-infant interaction at 9 months. Outcome

(ASD and development) of babies with WS was assessed at 3 years (clinical examination, ADI, CARS, Brunet Lezine, WPPSI). We applied speech turn taking (vocalization, pause, silences, overlap, ratio of partners response...), affective prosody (motherese) and hand movement automatic analysis (Ouss et al., 2017) from the videos of infant-mother interactions. We coded the videos with the Coding Interactive Behavior (CIB, Feldman, 1998). At 3 years, 12 infants out of 32 are finally diagnosed with ASD. First results show that the mothers of infants that will develop autism don't differ from other mothers in the amount of vocalization or motherese, but differ in overlap of vocalization with the infant. We found also that hand movements trajectory differed in children with WS compared to the controls. However, we still need to look for infants specificities in child's vocalization and hand movement see whether their coordination at 9 months predict or not later ASD outcome of WS. The identification and coordination of early interactive cues (vocal synchrony, infants' hand movements) in mother-infant interactions seems to be a good candidate to discriminate later outcome of at risk babies.

## **Symposium S52 - THE USEFULNESS OF USING PARENTAL EMBODIED MENTALIZING (PEM) WITH CLINICAL POPULATIONS**

**Mc Devitt--Shai D.\***

*Academic College Tel Aviv Yaffo ~ Tel Aviv ~ Israel*

### The Usefulness of Using Parental Embodied Mentalizing (PEM) with Clinical Populations

Parental Embodied Mentalizing (PEM) is an approach and method focusing on implicit nonverbal parental mentalizing processes, and refers to a parent's ability to understand a baby's mental states as conveyed through body movement (Shai & Belsky, 2011, 2016; Shai & Fonagy, 2014). Research supports PEM's reliability and validity in terms of its association with parenting practices and experiences, as well as its prediction of children's emotional, cognitive, and social wellbeing (Shai & Belsky, 2011, 2016; Shai, Dollberg, & Szepeswol, 2017). Assessing PEM involves examining full-body parent-infant interactions through the observation of video recordings with sound turned off. Aims: This symposium will focus on using PEM within the clinical domain, may it be assessing clinical interventions or examining individual differences between a clinical and a nonclinical population. Method and materials. Three studies, using varied methodologies and interventions, made use of the PEM coding system to examine intervention usefulness and to unravel unique characteristics of implicit nonverbal parent-infant patterns in a clinical population. The first study, consisted of 90 mothers, examined whether depressed mothers evidence unique movement patterns and embodied mentalizing capacities when interacting with their infants compared with non-clinical mothers. The second study used PEM to test the effectiveness of a parent-infant psychotherapy intervention compared with a control group, as well as associations between PEM and other parental capacities. The third study examined the usefulness of Circle of Security Parenting (COS-P) intervention program consisted of 28 mothers and infants. Results and conclusions. These studies demonstrate the suitability of using PEM when studying either the unique characteristics of clinical populations such as parental depression, or when examining the effectiveness of different parent-infant interventions.

### S52.2

#### **PARENTAL EMBODIED MENTALIZING IN MOTHERS WITH AND WITHOUT POSTPARTUM DEPRESSION**

**Garset--Larsen S.\*<sup>[1]</sup>, Cordes K.<sup>[1]</sup>, Vaever M.<sup>[1]</sup>, Mc Devitt--Shai D.<sup>[2]</sup>, Spencer R.<sup>[3]</sup>, Kjøppe S.<sup>[1]</sup>**

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Parental Embodied Mentalizing (PEM) is the parents' ability to understand the infant's kinaesthetically manifested mental states and adjusts his/her own kinaesthetic accordingly. PEM focuses on moment-to-moment whole-body expressions in parent-child interactions. It has been suggested that depression can have a major influence on the individual's embodied sense of self. Thus, when a mother experiences a depressive episode after birth (Postpartum depression, PPD) this might affect the way she behaves on an embodied level in regard to her child. As the mother-infant interaction is mainly characterized by nonverbal communication, maternal PPD might disturb the (nonverbal) communicative exchanges between a mother and her child. However, little is known on how mothers with and without PPD mentalize the infant on an embodied level. The aim of the present study was to investigate whether mothers with and without depression in the postpartum period differ in regard to their PEM abilities, using a newly validated measurement instrument. We used the PEM Measure to compare 29 mother-infant dyads with mothers meeting criteria for PPD and 56 non-clinical dyads. PEM was coded on ten-minute long face-to-face interactions at four-months postpartum. The data is currently analysed and the results are still being formulated. These will be presented at the symposium and their empirical and clinical implications will be discussed.

S52.3

#### **A NEW SHIFT? EMBODIED MENTALIZING IN PARENT-INFANT PSYCHOTHERAPY**

**Spencer R.**<sup>[1]</sup>, **Fonagy P.**<sup>[2]</sup>, **Mc Devitt--Shai D.**<sup>[3]</sup>, **Nolte T.**<sup>[2]</sup>, **Terlecki M.**<sup>[1]</sup>, **Yannis F.**<sup>[1]</sup>, **Baradon T.**<sup>[2]</sup>, **Sleed M.**<sup>[2]</sup>

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Parental Embodied Mentalizing (PEM) operationalizes parental mentalizing in terms of implicit, nonverbal behaviour between the parent and infant. The current study is a secondary analysis of longitudinal data from a randomised controlled trial of psychoanalytic parent-infant psychotherapy (PIP) (Fonagy, Sleed & Baradon, 2016). The purpose of this study was to investigate: 1) Whether PIP is more effective at increasing PEM compared to treatment as usual (TAU); 2) What are the associations between PEM and mother and infant outcomes? PEM was coded on mother and infants (<12 months) that had been randomly allocated to PIP (n = 34) or TAU (n = 31). Dyads were assessed prior to randomization (T1) and 6-month (T2) and 12-month follow-ups (T3). Outcomes measures included; maternal psychopathology, measured with Centre for Epidemiological Studies Depression Scale (Radloff, 1977); maternal representations assessed with Reflective Functioning (Slade, Bernbach, Grienberger, Levy, & Locker, 2004) and Assessment of Representational Risk (Sleed, 2013) and; parent-infant interactions measured by Emotional Availability Scales (Biringen, Robinson, & Emde, 1993), and Coding Interaction Behaviour (Feldman, 1998). PEM significantly improved over time ( $p < .001$ ) but there was no significant effect of group (PIP vs. TAU) or group\*time interaction. In both groups, PEM was found to significantly negatively correlate with maternal depression and narcissistic parental representations, and significantly positively correlate with parent-infant interactions, including emotional availability, dyadic attunement and positive engagement. There were no significant correlations between PEM and parental RF. These findings indicate that PEM develops over time and is associated with the quality of parenting behaviours, as well as being affected by maternal depression. Clinical interventions could benefit from including implicit embodied processes when working therapeutically with children and their families.

S52.4

### **INCREASE IN PARENTAL EMBODIED MENTALIZING (PEM) FOLLOWING A CIRCLE OF SECURITY – PARENTING (COS-P) INTERVENTION FOR MIDDLE CLASS MOTHERS: A PILOT CONTROLLED, QUASI-EXPERIMENTAL INTERVENTIONAL STUDY**

**Gaugaard K.<sup>[1]</sup>, De Lo´pez K.J.<sup>[1]</sup>, Mc Devitt--Shai D.\*<sup>[2]</sup>**

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Feelings of pressure stemming from the demand of being a perfect mother is an increasing problem among highly educated middle class mothers in the Nordic countries (Gunnarsdottir, Petzold, & Povlsen, 2014), and studies show that the parents' feelings of stress and anxiety about their children and their parenting can lead to negative parent-child relation and child behaviour in preschool (Anthony & Anthony, 2005; Carter & Porges, 2011). Circle of Security Parenting (COS-P)(Hoffman, Marvin, Cooper, & Powell, 2006), an attachment-based intervention, is aimed at enhancing the quality of the parent-child relationship as well as parents' mentalizing of their children. The aim was to investigate whether participating in COS-P improves the mothers' embodied mentalizing abilities (PEM) more than receiving care as usual (CAU). A controlled quasi-experimental design was used to investigate the effect of the COS-P intervention. 28 middle class mothers and their infants (M=8.5 months) were referred from health visitors and assigned to an 8-week COS-P intervention or to Care as Usual (CAU) control group. PEM was measured both before and after the intervention/CAU. Results of a paired-samples t-test indicated a statistically significant difference between PEM pre-and post test for the COS-P group (pre: M = 3.9; SD = 1.1, post: M = 6.2; SD = 0.7,  $t(11) = -9$ ;  $p < 0.01$ , and a non-significant difference for the CAU group (pre: M = 3.9; SD = 0.7, post: M = 3.9; SD = 0.7). The results indicate that participation in COS-P can improve the mothers' bodily mentalization measured by PEM. Future studies with larger randomized samples will be useful to confirm the present findings, as well as to investigate in more detail other sub measures in PEM.

### **Symposium S53 - ASSESSING PARENTAL REFLECTIVE FUNCTIONING IN DIFFERENT SETTINGS USING A NEW SHORT INTERVIEW PROTOCOL**

**Sieverson C.\***

*Universidad Católica de Chile ~ Santiago ~ Chile*

Slade (2005) coined RF in the context of parenting, and refers to Parental Reflective Functioning (PRF) as a mediator of the relationship between adult and child's attachment, observing that categories from reflective functioning are associated to attachment security and different mentalization failures are associated to avoidance, anxiety and disorganized attachment patterns. Nevertheless, there is a group of studies that point that PRF influence over child's variables is not direct but it has a modulating effect in both infant and parent's variables. The only well-established measure of PRF, the Reflective Functioning Scale, is scored using the Adult Attachment Interview or the Parental Development Interview. Despite its known benefits, their use in studies are hindered by the fact that they can be cost prohibitive and time intensive. Given this, a new shorter interview that assesses PRF could be very beneficial. This symposium will present three different studies from the United States and Chile that uses the Five Minutes Speech Sample, coded for reflective functioning (FMSS-RF), a shorter interview developed by Tina Adkins and Peter Fonagy to assess PRF. The first presentation corresponds to the study where originally FMSS-RF was developed for a short-term psycho-educational intervention designed to increase the mentalizing skills of foster and adoptive parents; the second will present results of a sample of preschoolers' mothers evaluated with the interview, parental stress (PSI-S) and children's social emotional development (ASQ-SE). The third one will present an ongoing pilot using a randomized control trial with a sample size of 30

primary caregivers of children hospitalized at a public hospital in Chile. The Chilean presentations are the first Latin American experiences assessing PRF with this shorter interview.

S53.2

**THE DEVELOPMENT AND PRELIMINARY FINDINGS OF A NEW SHORT INTERVIEW PROTOCOL FOR ASSESSING PARENTAL REFLECTIVE FUNCTIONING: THE FIVE-MINUTE SPEECH SAMPLE CODED FOR REFLECTIVE FUNCTIONING**

**Adkins T.\*<sup>[1]</sup>, Fonagy P.<sup>[2]</sup>**

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**Aims of the Study.** This new interview protocol was developed specifically for the Family Minds intervention, a psycho-educational intervention designed to increase the mentalizing skills of foster parents (Adkins, Luyten & Fonagy, under review). One of the goals of the study was to develop and pilot the new Five Minute Speech Sample, coded for Reflective Functioning (FMSS-RF), and compare the results to the Parental Reflective Functioning Questionnaire (PRFQ). **Introduction.** Presently, the only well-established measure of reflective functioning (RF), the Reflective Functioning Scale, is scored using the Adult Attachment Interview or the Parental Development Interview. These measures have many advantages, such as being able to provide clinically rich data that is not available with questionnaires. Despite these benefits, their use in studies are hindered by the fact that they can be cost prohibitive and time intensive. Given this, a new shorter interview that assesses PRF could be very beneficial. **Methods.** For the FMSS-RF, parents were asked to speak for 5 minutes into a recorder, answering three questions designed to elicit parental reflective functioning. A total of 33 parents completed both measures at two time points, six weeks apart. **Results & Conclusions.** There was a significant difference between groups ( $F(3, 29) = .70, p = 0.015, d = 1.31$ ), with a significant increase in FMSS-RF scores only in the intervention group. These results mirrored the significant increase in PRFQ scores for the intervention group. This preliminary data suggests the FMSS-RF could be a promising new way to assess parental reflective functioning.

S53.3

**MODERATING ROLE OF PARENTAL REFLECTIVE FUNCTION BETWEEN PARENTAL STRESS AND SOCIAL-EMOTIONAL DEVELOPMENT IN PRESCHOOL CHILDREN**

**Sieverson C.\***

*Universidad Católica de Chile ~ Santiago ~ Chile*

To evaluate the influence of parental stress and PRF in social-emotional development in preschool children.

**Introduction:** Parental Reflective Function (PRF) has been highlighted last three decades as it helps support child's developmental transformations and fosters healthy development. Parental stress been described as one of factors that strongly influences on parenting abilities. While all parenting involves some amount of stress, there are levels of stress that could be harmful for the dyad, especially by decreasing parental abilities and influencing child's social-emotional development. **Methods:** 43 mothers of preschool children were assessed using the Reflective Functioning Scale in combination with a new interview measure, Five-Minute Speech Sample (FMSS-RF), parental stress (PSI-S) and children's social emotional development (ASQ-SE). Descriptive and correlational analyses were conducted and linear regression was estimated for moderated regression guided by hypothesis. The dependent variable was social-emotional development regressed by parental stress, parental reflective function, and their interaction term. **Results:** Parental stress was positive and significant predictor of the social-emotional development risk ( $b=.633, t(33)=3.598, p<.01$ ),

while PRF was not a significant predictor ( $b=3.031$ ,  $t(33)=1.2564$ ,  $p>.05$ ). More interestingly, there was a significant interaction effect between predictors ( $b=.283$ ,  $t(33)=2.379$ ,  $p<.05$ ). The overall model explained a 26.6% of the variance. Conclusions: Independently from PRF levels, all mothers may experience parental stress. This stress influences in a conditional way upon children's social-emotional development when it exists along with higher levels of PRF. PRF appears as a mechanism through which parenting abilities influence their children's social-emotional development.

S53.4

#### **VIDEO FEEDBACK INTERVENTION TO ENHANCE PARENTAL REFLECTIVE FUNCTION IN PRIMARY CAREGIVERS OF INPATIENT PSYCHIATRIC CHILDREN: A PILOT FEASIBILITY TRIAL**

**Leyton F.\***

*Universidad Católica de Chile ~ Santiago ~ Chile*

Objective: To implement a Video Feedback (VF) intervention to enhance PRF in primary caregivers of inpatient psychiatric children. Because there is no published research using VF with parents of children with severe psychopathology or in a hospitalized context, this is a pilot study, which is needed to provide evidence for a larger randomized control trial (RCT). Introduction: One of the challenges when a child is hospitalized is working with the family. Parental reflective function (PRF) could be especially important in coping with conflict and negative emotions in older children. Video assisted therapy has demonstrated to be a powerful tool in promoting change in parent-child relationships with few sessions. Method: An ongoing pilot using a RCT with a sample size of 30 primary caregivers of children hospitalized at a public hospital. The intervention consists of four modules; every module has both one video-recorded play session and one VF session (in a group setting) per week. Evaluation of the caregivers will include a FMSS-RF to assess PRF, the GHQ-12, and the OPD-SQ. Children will be given the SDQ and CGAS. After every VF session, a new FMSS-RF, GHQ-12 and CGAS will be administered. To determine effect size, the results will be analyzed using a multiple linear regression. Results and Conclusion: Preliminary results will be presented. This study is expected to demonstrate the feasibility of implementing evidence-based interventions in a public service context. Additionally, it is expected this study will find a suitable effect size to design a future RCT.

#### **Poster Workshop PW06 - DOMESTIC VIOLENCE AND ABUSE**

PW06.1

#### **'FOR BABY'S SAKE': BUILDING AN EVIDENCE-BASED EARLY INTERVENTION FOR PARENTS AND BABIES AT RISK**

**Fulton E.\*<sup>[1]</sup>, Rees J.<sup>[1]</sup>, Vertkin J.<sup>[2]</sup>, Gledhill H.<sup>[3]</sup>, Mcgetrick K.<sup>[4]</sup>, McIntyre A.<sup>[1]</sup>**

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To describe the journey of creation, implementation and evaluation of 'For Baby's Sake', an innovative intervention that supports expectant mothers and fathers as co-parents, from pregnancy until their baby is two, to bring an end to domestic abuse and create the best possible start in life for their baby. The Stefanou Foundation invested its philanthropic resources and worked with expert clinicians and multi-agency partners to create and deliver this integrated programme. It draws on different evidence bases related to domestic abuse, trauma, mental health, behaviour change, parenting, infant mental health, high risk safeguarding and partnership working. 'For Baby's

Sake' is driven particularly by evidence that exposure to domestic abuse in the first 1001 days of life is especially damaging for babies as they develop. This starts in the womb and continues after birth when domestic abuse can undermine parents' ability to provide the consistent, sensitive and responsive caregiving that babies and young children need. When the programme was launched (with the working title, 'Healthy Relationships: Healthy Baby') in April 2015 in two prototype sites, Westminster and Hertfordshire, it became the UK's first whole family change programme related to domestic abuse, starting in pregnancy and embedded in local systems and services. Feedback received so far from service users, and from those working in local services, and interim findings from the independent evaluation by King's College London, give promising signs of the changes taking place for the men and women engaged in 'For Baby's Sake' and for their babies and other children.

PW06.2

### **'FOR BABY'S SAKE': OPERATING A PROTOTYPE PROGRAMME TO END DOMESTIC ABUSE AND SUPPORT PARENT INFANT INTERACTION**

**Rees J.\*, Fulton E., McIntyre A.**

*The Stefanou Foundation ~ Welwyn Garden City, Hertfordshire ~ United Kingdom*

Domestic abuse is referenced in 75% of UK Child Protection Plans, making it the single biggest factor in children's social workers' caseloads. Exposure to domestic abuse from conception to age 2 is especially risky and can have a profound impact on long-term life chances. 'For Baby's Sake' is an early intervention for expectant parents, whether together as a couple or not, aiming to break cycles of domestic abuse and create the best possible start in life for their baby. It currently operates as two prototype projects, with an independent evaluation by Kings College London, in preparation for wider roll-out. Expectant mothers and fathers join 'For Baby's Sake' during pregnancy and may be supported until their baby reaches age 2. It is a structured, therapeutic programme which addresses parents' complex histories and current needs. 'For Baby's Sake' uses a unique, three-way approach with trained practitioners who support co-parents separately. It recognises that, to make long-lasting change, the needs, risks and motivations of both those experiencing and using domestic abuse must be addressed, in addition to the safeguarding and nurturing of the baby and any other children in the family. The programme harnesses each parent's motivation to change, especially the desire to be a good parent. Mothers and fathers are supported through interventions including Video Interaction Guidance to give their babies and children the care that leads to secure attachment and creates the conditions for lifelong resilience and fulfilment. This presentation will share lessons from delivering the prototype projects and insights into the parents participating in 'For Baby's Sake', notably the significance of their childhood trauma. The prototype phase shows promising signs of change for the men and women engaged in 'For Baby's Sake', and for their babies and other children, and has generated valuable transferrable lessons.

PW06.3

### **THE EVALUATION OF 'FOR BABY'S SAKE'**

**Trevillion K.\*<sup>[1]</sup>, Domoney J.<sup>[1]</sup>, Heslin M.<sup>[2]</sup>, Stanley N.<sup>[3]</sup>, Macmillan H.<sup>[4]</sup>, Ramchandani P.<sup>[5]</sup>, Bick D.<sup>[6]</sup>, Byford S.<sup>[2]</sup>, Howard L.M.<sup>[1]</sup>**

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Domestic violence and abuse (DVA) in pregnancy is a significant public health issue, with poor physical and mental health outcomes for children, women and men. King's College London are undertaking an independent evaluation of the prototype programme, 'For Baby's Sake'. This programme was developed by the Stefanou Foundation and is a whole family approach that addresses the cycles of DVA and seeks to improve mental health and parent child attachment. 'For Baby's Sake' works with expectant parents where there is DVA, and mothers and fathers receive intensive therapeutic support up until the child is two years of age. The evaluation aims to assess whether the prototype programme operates as anticipated, and whether there is preliminary evidence for improved outcomes for families. A mixed-method cohort study. A process evaluation is charting the operation of the programme, including fidelity to the programme manual, staff capacity and skills, and the characteristics of families referred to and engaged on the programme. Pre- and post-programme surveys and qualitative interviews are being conducted with 40 mothers and fathers, to assess changes in clinical, health and social care factors and experiences of the programme. Pre- and post-programme qualitative interviews are also being undertaken with programme staff and stakeholders to explore their views, expectations and experiences of the programme. This presentation will report on the process evaluation and early findings from the survey and qualitative interviews with parents, staff and stakeholders. 'For Baby's Sake' seeks to address the limitations of existing interventions by developing a whole-family approach that addresses the cycles of DVA (including the impact of parents' own childhood experiences of abuse) and seeks to improve mental health and parent-child attachment outcomes.

PW06.4

#### **BECOMING A FATHER IN THE CONTEXT OF DOMESTIC VIOLENCE: HOPES AND CHALLENGES**

**Domoney J.\*, Trevillion K.**

*Section of Women's Mental Health, Institute of Psychiatry, Psychology & Neuroscience, Kings College London ~ London ~ United Kingdom*

Domestic violence and abuse (DVA) in pregnancy is a significant public health issue, with poor physical and mental health outcomes for children, women and men. "For Baby's Sake" is a whole family approach that addresses the cycles of DVA and seeks to improve mental health and parent child attachment. Expectant co-parents with identified DVA (both mother and father, where the father is the main perpetrator) sign up to the programme during pregnancy and receive intensive therapeutic support throughout the perinatal period. Kings College London are evaluating the prototype programme which currently operates in two sites. Qualitative data on men's experience of becoming fathers in the context of undergoing the programme is essential to understanding the mechanisms of change and key components of the intervention, as well as contributing to the wider literature on motivators for and mechanisms of change in male perpetrators of DVA. Men who signed up to 'For Baby's Sake' and agreed to being contacted were invited to participate in the study between July 2017 and February 2018. Those who consented were interviewed by the researcher about their experience of becoming a father, including worries, challenges and how they managed change. All men were interviewed postnatally. The sample included both first time and experienced fathers. Interviews were audio recorded and transcribed verbatim. Data were analysed using thematic analysis. This presentation will report the results of the thematic analysis. Preliminary themes include managing change, negotiating relationships, and finding ways to connect. Understanding the experiences of new fathers who are seeking help to change abusive behaviours

and improve their relationships is important in order to target interventions effectively and engage hard to reach groups.

### **Symposium S95 - MEASURING PROCESS IN HOME VISITING INTERVENTIONS: MULTIPLE LENSES**

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Much of the research on home visiting services to families of infants and young children focuses on the evidence for its effectiveness, testing outcomes among parents and children who receive home visits compared with those who do not. This experimental approach is essential, but explains little about why or how home visiting works, the processes that are involved, or why home visiting is more effective for some families than others within the same evidence-based programs. Despite decades of calls for examining the processes—what actually happens during home visits to individual families, few studies have measured or reported what home visitors and families actually do during home visits. The purpose of this symposium is to describe three observational measures of home visiting and discuss how they can be used to understand variations in home visitation across families. These three observational home visiting measures focus on particular aspects of interactions, strategies, practices, and engagement by home visitors and/or parents and children during home visits. Presenters will describe each measure's purpose, its psychometric properties, and what it reveals about home visiting process. These measures differ in their methodological approach to measurement and the aspects of the home visiting process that they measure. They also differ on the home visitation program contexts in which they have been developed and tested. Nevertheless, each offers a unique lens for viewing home visiting process. From multiple perspectives, these measures reflect rich detail about what happens between home visitors and families. Each measure has the potential to expand our understanding of what makes home visiting effective and also offer guidance to home visitation programs seeking to increase their quality or impact. The discussant will consider the implications and utility of these measures for home visiting research and implementation.

S95.2

### **MEASURING COMMUNICATION STYLES AND PARTNERSHIP FORMATION IN EARLY CHILDHOOD HOME VISITING**

**Korfmacher J.\*<sup>[1]</sup>, Duggan A.<sup>[2]</sup>, Filene J.<sup>[3]</sup>**

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Relationship-based, one-on-one interventions such as early childhood home visiting depend upon a strong working partnership between provider and family that can respond to individualized needs of the family and child. How home visitors communicate with families and respond to their cues and concerns is a central but relatively unstudied task.

- To examine communication styles between home visitors and participating caregivers.
- To link communication styles to program features and supports.
- To examine consistency in style by home visitors across time and families.

53 home visitors from programs in seven states in the United States representing different program models participated in the study. Home visitors filled out a background questionnaire before interacting with a “standardized mother” in two different mock home visits designed to pull for engagement in topics of depression and maternal stress. Home visitors then video recorded themselves with two families in their caseload in two different home visits spaced approximately

two weeks apart (four videos total per home visitor). Parents and home visitors each filled out surveys on their working alliance. In addition, program directors completed a survey about program operations and training/support for their staff. 193 videos representing 106 families were completed. Videos were coded both for home visiting content and for communication between home visitor and mother, using an adaptation of the RIAS (Roter Interaction Analysis System). Initial results suggest the challenges home visitors have balancing how to both address mother concerns and cover expected program-based curriculum. Initial findings suggest that the standardized mother/mock home visit scenarios are thought-provoking and evocative analogs of real home visits. Future work entails implementing this technique in a peer-based learning experience to enhance home visitor communication skills.

S95.3

### **MEASURING THE QUALITY OF HOME VISITING PRACTICES AND FAMILY ENGAGEMENT**

**Roggman L.\*<sup>[1]</sup>, Olson T.<sup>[1]</sup>, Innocenti M.<sup>[1]</sup>, Cook G.<sup>[2]</sup>**

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Home visitation programs support infant mental health and development by working with families in their homes, to provide information, guidance, and feedback for parents as they care for and support their children's healthy early development. The content and activities in a home visit may be guided by a curriculum or program protocol, but across programs, home visitors use similar strategies to effectively engage families in ways that lead to positive outcomes. Home visitor practices and family engagement reflects the quality of a home visit. The aim of this presentation is to describe the latest version of the Home Visit Rating Scales, an observational measure of home visit quality reflected in home visitor practices and family engagement in the home visiting process. The scales are comprised of field-based descriptors of interactions, practices, strategies, and responses that are informed by the research literature and tested in relation to other indicators of home visiting quality and to positive program outcomes. The latest revision shows similar psychometric validity. Independently scored data allow exploration of patterns among aspects of home visit quality. When home visitor practices are higher quality, families are more engaged. Families are also more engaged when home visits are more focused on child development. When home visitors are more responsive, family enrollment is longer. When both practices and family engagement are higher, program outcomes on parenting and child development are stronger. For example, parents are twice as likely to have average or above scores on the HOME (odds ratio=2.25\*), and children are almost 3 times as likely to be at age level or higher in vocabulary at age 3, (odds ratio=2.87\*\*). This observational measure offers a resource for tracking home visit quality to guide home visitor professional development and continuous quality improvement in home visiting programs.

S95.4

### **THE INTERSECTION OF PROCESS AND QUALITY DURING HOME VISITS**

**Peterson C.\*, Hughes--Belding K.**

*Iowa State University ~ Ames, IA ~ United States of America*

Home visiting programs, designed to promote child health and development, prevent child maltreatment, and promote family well-being, have expanded across the U.S. and around the world. Evaluations of home visiting program models have revealed positive outcomes across multiple areas of family functioning and child development, but despite calls to "open the black box", specific features of intervention services received by individual families have been examined rarely. Due to

its resource intensive nature, only a few studies have used observation of home visiting to examine specific interactional strategies. We will compare and contrast the data yielded by two observational measures of home visiting to examine the intersection of home visit process and quality. Two observational measures were used to code 150 home visits delivered under the auspices of the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) programs. All participating agencies enroll children, prenatally through age 3, who are from ethnically, economically and culturally diverse families. The Home Visit Rating Scales-Adapted & Extended (HOVRS A+ v2; Roggman, Cook, Jump, Innocenti, Christiansen, Boyce, Aikens, Boller, Paulsell, & Hallgren, 2010) yields a global rating of quality (rated 1 to 7), and ratings on four home visitor subscales (Home Visitor Responsiveness to Family, Home Visitor Relationship with Family, Home Visitor Facilitation of Parent-Child Interaction, Home Visitor Non-Intrusiveness and Collaboration). The Home Visit Observation Form (HVOF; McBride & Peterson, 1996) is an interval coding system which yields descriptive data in five categories: (1) individuals present, (2) primary interactors, (3) interaction content, (4) nature of the home visitor's behavior, and (5) maternal engagement. Quality ratings were consistently higher when home visit activities focused on engaging the parent and child in triadic interactions and content focused on child development. Results suggest implications for improving program delivery and supporting home visitor professional development.

### **Video Presentations V12 - URL&TODD - A PREVENTIVE ONLINE CARTOON ANIMATION INTERVENTION FOR PARENTS OF PRESCHOOL CHILDREN WITH EMOTION REGULATIONS PROBLEMS**

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The aim of the video presentation is to show the participants the online preventive parenting intervention Url&Todd. The video starts with an introduction about emotion regulation and the aim of the intervention Url&Todd. Then the five modules of Url&Uk are presented with examples of the cartoon animations (translated from Dutch to English). At the end there is a short overview of the effect study that is conducted on Url&Todd. Module one is about how children learn to regulate their emotions. Parents are taught that emotions come and go. Module two explains the function of emotions and about 'the window of tolerance' and when children are out their window (fight, flight freeze response). How parents can regulate their child by a soft voice, gentle touch and slow breathing. Module three is about how cognition and emotion work together. Module four talks about the difference between the upper and lower part of the brain. The "upstairs brain" is responsible for logical thinking and reasoning. The "downstairs brain" houses our emotions and urges. Module five tells about how emotions are contagious. It underlines the importance of the own emotion regulation and stress management of the parent.

### **Brief Oral Presentations BOP15 - HOME VISITING PROGRAMS**

BOP15.1

**VOORZORG (Dutch home visitation program)**

**Mejdoubi J.<sup>[1]</sup>, Van Den Heijkant S.<sup>[1]</sup>, Hirasing R.<sup>[1]</sup>, Crijnen A.<sup>[1]</sup>, Tielenius Kruythoff P.\*<sup>[2]</sup>**

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We translated and adapted the Nurse Family Partnership (NFP) program, developed by David Olds (US), in the Dutch version called VoorZorg. This is an early intervention targeting potentially high

risk young women, from early pregnancy until the child becomes two years old. VoorZorg consists of an intensive schedule of home visits by a specially trained youth healthcare nurse. The program is preventive and complementary on regular youth healthcare. A randomized controlled trial was conducted in 460 eligible women with several risk factors for child abuse. The intervention group (I; n=237) received the program while the control group (C; n=223) received usual care, during pregnancy until the child's second birthday. Scientific research shows that VoorZorg creates opportunities for mothers and children and promotes health: 1. 98% of the mothers have four or more risk factors: 76% single, 74% poverty, 68% violence in the past and/or present, 19% depression and 25% substance abuse. 2. Smoking is reduced (number of women and number of cigarettes) during the pregnancy (40% vs. 48%) and after pregnancy (49% vs. 62%) AND they don't smoke near the baby. 3. Significantly more breastfeeding (14%) at 6 months, usual care group (6%). 4. Domestic violence has declined both during pregnancy and two years later (psychological and physical violence). 5. Child abuse reports were significantly less in the VoorZorg group (11%); usual care (19%). VoorZorg appears to be able to actually improve the lives and situation of high risk mothers and their children in many areas. It's breaking the intergenerational transmission of home violence and child abuse and supports positive parenting. Specially for young women not able to organise participation themselves. By reducing health problems, health related costs throughout the lifespan are reduced. In a study on the cost effectiveness of VoorZorg, it was concluded that VoorZorg was indeed cost-effective due to the preventive effect.

BOP15.2

#### **RETENTION AND ENGAGEMENT OF FAMILIES IN HOME VISITING SERVICES: EXPLORING SERVICES FOR FAMILIES WITH CONFLICT, CHAOS, AND ECONOMIC NEED**

**Mckelvey L. \*, Fitzgerald S., Burnett C., Swindle T., Whiteside--Mansell L.**

*University of Arkansas for Medical Sciences ~ Little Rock ~ United States of America*

Successful replication of home visiting programs depends on several key factors. These key factors include monitoring participant engagement and attrition, assessing family and program characteristics associated with attrition and engagement, and developing strategies to reduce attrition and improve engagement. Studies report families with higher socioeconomic risks are more likely to disengage from services. The purpose of the study is to examine the associations between economic need, observed home chaos, and family conflict (IVs) and retention and engagement (DVs) in a sample of families (N=1272) enrolled in home visiting programs (Healthy Families America, n=582, Parents as Teachers, n=690) in one state in the United States. Parents averaged 23 years of age (SD=6). Nearly half of the families were White (48%; 26% Black, 22% Hispanic, 5% other). The Family Map Inventories identified family risks at enrollment with. Program staff recorded the percentage of time of each home visit focused on specific content: child-focused, parent/family (case management)-focused, parent-child-focused, and staff-family relationship-building. Mixed multiple regression analyses examined the main effects of risks, home visiting content, and the two-way interaction of depression screening and content while controlling for the fixed effects of model, and demographics, and the random effect of home visitor. Significant interaction terms were probed in simple slope analyses. Results show the amount of time that home visitors spent supporting parent-child interaction moderated the relationship between program retention at 6 and 12 months and economic need (B=.1, p=.000; B=.06, p=.000), home chaos (B=.11, p=.002; B=.06, p=.000), and family conflict (B=.11, p=.002; B=.15, p=.000). For each moderation, retention in the program was higher when home visitors reported increased time spent supporting the parent-child relationship. Findings suggest that parents who enter home visiting services screening positive for family risks are more likely to remain in services when home visitors spend more time in visits focused on supporting the parent-child relationship.

BOP15.3

**ASSESSING THE IMPACT OF RAPID SUBSEQUENT CHILDBEARING AND A FAMILY NURSE-LED HOME INTERVENTION ON YOUNG MOTHERS' SPEECH TO THEIR TODDLERS.**

**Paine A.L.\*, Channon S., Waters C., Cannings--John R., Lugg--Widger F., Campbell K., Robling M.**  
*Cardiff University ~ Cardiff ~ United Kingdom*

Rapid repeat pregnancies are associated with higher rates of adverse outcomes for both mother and child (Conde-Agudelo et al., 2007; 2012), and are common amongst adolescent mothers (Raneri & Wiemann, 2007). Given the additional psychological, physical and economic issues related to short birth intervals (Gürel & Gürel, 2000; Thorpe et al., 2003), adverse outcomes resulting from rapid subsequent childbearing are likely to impact on features of mother-child interactions (Baydar et al., 1999), including mothers' references to internal states (i.e., feelings, desires and cognitions, see Paine, 2017). To further investigate antecedents and consequences of young mothers' rapid subsequent childbearing, we further explored data from the Building Blocks randomised controlled trial investigating the impact of a specialist home visiting programme, the Family Nurse Partnership (FNP) in England (Robling et al., 2016). In the trial, 823 women were randomly assigned to FNP and 822 to usual care, with data collected in late pregnancy and at 6, 12, 18 and 24 months postpartum. The present sub-study comprises a subsample of mothers who were video-recorded for 3 minutes during free play with their firstborn child at the 24-month assessment (n = 476). Maternal speech was transcribed and coded for references to internal states using an established coding scheme (Paine, 2017; Roberts et al., 2013). We will describe 1) maternal perinatal (e.g., psychopathology) and environmental (e.g., social support) factors that predict rapid subsequent childbearing in a high-risk sample, 2) the impact of the FNP on mother's references to their children's internal states, and 3) differences in internal state language use between mothers who experienced a rapid subsequent birth of a second child and those who did not. The present study will contribute to understanding of the consequences of rapid subsequent childbearing for young mothers' references to their children's internal states.

BOP15.4

**UNDERSTANDING USUAL CARE AS A KEY CHALLENGE WHEN EVALUATING NOVEL EARLY INTERVENTIONS**

**Robling M.\*, Sanders J., Channon S., Cannings--John R.**  
*Cardiff University ~ Cardiff ~ United Kingdom*

The Family Nurse Partnership (FNP) is an early preventative intervention in the UK for teenagers expecting their first child, adapted from the US Nurse Family Partnership. Our trial compared usually provided health and social care alone to usual care with the addition of FNP. We found little short-term benefit, unlike earlier US trials. However, programme benefit can only be understood with a clear picture of normal service provision, which may be complex, variable and often not well described. Two survey waves of local stakeholders at 18 trial sites identified local services across initially six and subsequently 12 domains (eg, health visiting, midwifery) including public and third sector providers. Data on service use by trial participants from recruitment in early pregnancy until final follow-up were obtained via maternal report and routine medical records. 161 services were identified from public, private and third sector providers offering direct care, support or guidance. Services could vary by site, and service boundaries could be flexible. A key service in 14 sites was a specialist teenage midwife potentially accessible to control participants. Average use of key public services by FNP and Control women respectively were: community midwives 10.4 vs 10.7 visits, specialist public health nurses 8.6 vs 16.3 visits. Women in the FNP arm also had an average of 39

visits from specialist FNP nurses. Women in the FNP arm received a high level of specialist support compared to the control arm, but a broad range of supportive services was available to all. This can reduce the incremental benefit that may be derived from FNP. The range of potentially accessible services may be very different to those available in other settings where FNP has been trialled and greater benefits reported.

BOP15.5

### **IMPLEMENTING A STANDARDISED MODEL OF INFANT MENTAL HEALTH HOME VISITING IN A LOW-INCOME IRISH COMMUNITY AS A MECHANISM FOR SUPPORTING EARLY RELATIONSHIP DEVELOPMENT IN A VULNERABLE PRE-BIRTH TO AGE THREE POPULATION**

**Curtin M.\*<sup>[1]</sup>, Maguire C.<sup>[2]</sup>, Buckley L.<sup>[2]</sup>, Harford K.<sup>[2]</sup>**

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Home visiting is an integral component of IMH services. International guidelines have been developed to inform the possible content, structure and training requirements of IMH home visiting programmes but have often lacked specificity regarding the key components required to effect change. The aim of this study was to explore the delivery mechanism of the Michigan Association for Infant Mental Health (MI-AIMH) Home Visiting Programme in an area of high deprivation for a vulnerable pre-birth to age three population and their caregivers; examining the process, content, structure, frequency, intensity and outcomes of the home visiting programme. The IMH home visiting team recorded each visit on a pre-programmed proforma, supervised by a researcher. Data on demographic characteristics and the specific components, including duration, content, intensity and outcome of the visit were analysed. Between January and June 2017 a total of 217 home visits were conducted with 57 families. The mean number of visits per family was 5 (range 0 to 18). In four cases telephone support alone sufficed. The majority of visits (64%) lasted between 31 and 60 minutes. Each visit offered a range of supports, the most frequent being developmental support (76% of visits), followed by emotional support (73%). Intensity levels varied from 23% low, 46% medium and 31% high. The majority of families (60%) required support from more than one member of the interdisciplinary IMH team. Infant-parent psychotherapy, required at 3% of visits, was provided exclusively by the IMH specialist. 39% of cases required referral an outside agency. IMH home visiting is new in Ireland. Delivery of the MI-AIMH home visiting has facilitated opportunities to explore the specificity of home visiting components required to scaffold early relationship development. Additionally, it provided insights into the nature of scaffolding required by the practitioners who deliver it.

BOP15.6

### **IMPACT OF A HOME-VISITING PROGRAM ON MATERNAL DISRUPTIVE BEHAVIOR AND THE THE ROLE OF RISK FACTORS**

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The ways parents cope with stressful circumstances, such as poverty and ill health, influence their children's experience of stressful environments (Moore & Vandivere, 2000). Some researchers suggest that parents in low-income contexts with multiple unmet needs are more likely to use inconsistent, unpredictable and severe discipline due to the multi-stress contexts they live in (Elder et al., 1985; Larzelere and Patterson, 1990; Harris and Marmer, 1996; Ghate et al., forthcoming). The present paper explores the effect of intervention and the association between mothers' psychosocial vulnerability factors and their communication with their child in the CAPEDP-Attachment study. The CAPEDP project is a randomized-controlled trial evaluating the impact of a manualized home-visiting program on child mental health and its major determinants, with 440 young first-time mothers presenting at least one other psychosocial vulnerability factor: 1) having completed less than 12 years of schooling, 2) intending to bring up their child without the child's father being present and 3) having low income. Within the CAPEDP project, a complementary sub-study, CAPEDP-Attachment (CAPEDP-A), set out to evaluate the impact of the CAPEDP intervention on attachment. Mothers in the intervention group showed less disruptive communication than those in the control group (effect size = 2.3). Maternal disruptive behavior was predicted by "free health care", "give born prematurely" (both assessed at inclusion) and associated with "household income <840€", and "less emotional support", both assessed at infants 12 months. The positive intervention outcome was even more evident (effect size = 3.23) when the model was adjusted for these for variables. Although many studies have explored the relationship between socioeconomic vulnerability and parenting difficulties, CAPEDP-A is to our knowledge the first to specifically address the link between socioeconomic vulnerability and maternal disrupted behavior as assessed by the AMBIANCE scale in the Strange Situation. Results underline the fact that intervention programs targeting infant attachment quality should privilege an integrated approach that takes into account the socioeconomic contexts in which maternal communication difficulties are taking place.

BOP15.7

### **A PILOT EARLY INTERVENTION PROGRAM TO MITIGATE THE IMPACT OF ADVERSE CHILDHOOD EXPERIENCES (ACES)**

**Goh W.H.\*, Parasurum R., Goh V., Ong L.X., Chay O.M.**

*KK Women's and Children's Hospital ~ Singapore ~ Singapore*

The Kids Integrated Development Services 0-3 program ( KIDS0-3) is a pilot that recruited pregnant women and infants up to 1 week old from families with income <650 PCI. These families are grouped into low, moderate and high-risk tiers. Home visiting services rendered by professionals include, facilitating mother craft and antenatal care, breast feeding and nutrition, parent-child interaction, as well as maternal mental health screening and child development assessments using standard tools. Services are rendered during pregnancy until the child reaches 3 years' old.

Results: 210 pregnant women were recruited. The mean birth weights from intake at 1st, 2nd,3rd trimester and after birth are 3.13Kg, 2.9Kg, 3.02Kg and 2.77Kg respectively. Of the 72 children who reached 20 months old and were assessed using Ages and Stages developmental screening, more than 90% achieved normal development in motor and problem solving skills. 8 children (11%) have a significant delay in communication and 3(4%)had significant delay personal social skills. 100% of the 73 families that completed the Family Outcome Survey indicated that they have the understanding & are able to help their child develop and grow. 15(7%) were referred to Child Protection Conclusion: Multidisciplinary community early intervention program is important in promoting child health and developmental. It played an important role in the prevention of child abuse.

## Brief Oral Presentations BOP17 - PARENTAL MENTAL ILLNESS AND INFANT MENTAL HEALTH

BOP17.1

### **THE MEDIATING INFLUENCES OF BORDERLINE PERSONALITY FEATURES, ENVIRONMENTAL RISK AND QUALITY OF CAREGIVING ON INFANT OUTCOMES IN MOTHERS WITH CHILDHOOD TRAUMA** **Hatzis D., Dawe S.\***

*Griffith University ~ Brisbane ~ Australia*

Early childhood trauma have been associated with a range of adverse outcomes that include poor emotional regulation, mental health issues and compromised parenting. These risk factors in turn, are associated with an accumulation of psychosocial risk factors across adulthood, including poor education attainment, financial disadvantage and ongoing exposure to trauma. For some mothers, these impact on the capacity to provide sensitive and nurturing caregiving. Not surprisingly, infants raised by mothers who have experienced childhood trauma, show a range of difficulties developing in early childhood across cognitive, social and psychological domains. While these associations have been well documented, there has been relatively little systematic investigation of the potential pathways linking exposure to maternal childhood trauma and children's outcomes. This study's aim was to investigate the potential factors influencing the association between maternal childhood trauma and infant outcome. 125 mothers and infants (12-42 months) were assessed using standardised measures, a child development screener and a mother-infant videotaped interaction. Using PROCESS (Model 6), we found borderline personality features, environmental risk and maternal caregiving quality were serial mediators between maternal childhood trauma and infants outcome. Notably, there was no direct pathway between maternal childhood trauma and infant outcome when entering the mediating variables into the model. These findings add to a growing body of literature that demonstrates that while maternal childhood trauma is a risk factor for poor infant outcome, the presence of dysregulated affect (measured using a scale of borderline personality disorder symptoms), and ongoing environment adversity are associated with poor quality caregiving. This suggests that in order to improve children's outcome in the context of maternal childhood trauma, treatment and family support programs need a dual focus on (i) maternal emotional regulation and support to reduce environmental adversity and (ii) therapeutic work that supports the enhancement of sensitive and nurturing caregiving.

BOP17.2

### **ASSESSMENT OF REPRESENTATIONAL RISK IN PARENTS WITH PERSONALITY DIFFICULTIES** **Lall G.\*, Slead M.**

*University College London, Anna Freud Centre ~ London ~ United Kingdom*

Parental representations play a role in the formation of internal working models of attachment relationships, often studied using the Parent Development Interview (PDI; Slade, Aber, Berger, Bresgi & Kaplan, 2010). The Assessment of Representational Risk (ARR; Slead, 2013) is a multidimensional system of coding the PDI to study representational risks in relation to attachment relationships. Given that the instrument is relatively new, there is need for further research in order to explore its validity in high-risk parents. The objective of the study was to evaluate the psychometric properties of the ARR in parents with personality difficulties, specifically,

- Is there a concurrent relationship between the ARR and (a) parental reflective functioning (RF; Slade, 2005) and (b) infant attachment classification?
- Is the ARR, sensitive to treatment change?

The sample is comprised of parents (N= 22) with personality difficulties, referred to the Early Years Parenting Unit, London. They undergo intervention for 18 months and have children under five, on

the edge of care. PDI's were collected at baseline and 6 months after intervention, and coded on RF and ARR (Sleed, Isosavi & Wain, 2017). The infant attachment classification was determined according to the Strange Situation Procedure (Ainsworth, Blehar, Waters & Wall, 1978). In order to assess sensitivity to treatment change, the ARR scores were evaluated against change in scores of maternal sensitivity on the Coding Interactive Behaviour scales (CIB; Feldman, 1998). Data coding and analysis is currently underway. It is hypothesized that the ARR will show concurrent validity against RF and infant attachment classification with higher scores risk scores corresponding with lower RF and presence of a disorganized attachment style. It is also hypothesized that the ARR would be sensitive to treatment change. This study is anticipated to help in establishing the psychometric properties of ARR for parents with personality difficulties.

BOP17.3

### **THE CONCEPT OF "AUTISM" IN PARENTHOOD AND IN THE CLINIC. AN EMPIRICAL INVESTIGATION**

**Jacobs D.\*<sup>[1]</sup>, Dierickx K.<sup>[1]</sup>, Steyaert J.<sup>[2]</sup>, Hens K.<sup>[3]</sup>**

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The autism concept is characterized by change and heterogeneity throughout history (Verhoeff, 2013) and throughout cultures (Kim, 2012). Moreover, it is unclear whether the research findings on ASD (autism spectrum disorder) are translated into meaningful information for the clinic and for parents (and their children). We aim at investigating the experiences of an ASD diagnosis of parents, and the experiences of clinicians in using an ASD diagnosis. The final goal is to come to a bioethical synthesis, grounded in the results of this empirical investigation, and in our systematic literature review on the topic. In an empirical study, we investigate how the autism concept is understood and experienced by parents and physicians. Parents who ask an ASD diagnostic assessment for their child are interviewed at three different moments (Saldaña, 2003). Physicians working with children with (a presumption of) ASD are interviewed once. I will present the results of the Interpretative Phenomenological Analysis (IPA) of the clinician and parent interviews (Smith, 2009). A preliminary bioethical discussion based on these empirical results argues that the most common research view on ASD appears to be different from the interviewed physicians' view. Such a discussion also purports that the interviewed physicians and parents experience several advantages connected to a diagnosis of ASD. These advantages appear to be closely linked to the way our society is organized in distributing mental services, and to the way people in our society view and estimate children and parents. Thus, it is not only "evidence-based medicine" that guides physicians when dealing with ASD. Moreover, the experienced advantages of a diagnosis are culturally embedded, and when also possible disadvantages are considered, the question arises whether giving a categorical diagnosis of a medical disease is the most favorable way to deal with autism-like behaviors and worries, both for clinicians and for parents and children.

BOP17.4

### **PARENTAL REFLECTIVE FUNCTION AND QUALITY OF MOTHER-INFANT INTERACTION IN MOTHERS WITH POST-PARTUM PSYCHOSIS - A SOUTH AFRICAN SAMPLE**

**Voges J.\*<sup>[1]</sup>, Berg A.<sup>[2]</sup>, Niehaus D.<sup>[1]</sup>**

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Mothers experiencing psychotic symptoms during and after pregnancy are considered particularly vulnerable to developing attachment difficulties with their infants, often requiring separation from

or losing care of their infants. Besides the effects of physical separation, attachment difficulties may arise from other maternal factors, such as a lack of reflective capacity or negative symptoms affecting the warmth with which she interacts with her child. The mother's ability to reflect on herself and her illness and how this affects the experience of and interaction with their infant is an understudied area. This study aims to examine the parental reflective capacity of mothers who have experienced peri- and post-partum psychosis. In addition, the quality of mother-infant interaction will be observed and described. The study follows a descriptive, observational design. Mothers were recruited if they experienced psychotic symptoms during pregnancy or within 6 months postpartum. Demographic information and psychiatric history was collected. Parental reflective function was assessed by the Parent Development Interview and the quality of mother-infant interaction in an unstructured play interaction was coded with the Coding Interactive Behaviour. Five participants, ranging in age from 27 to 44, each with at least one older child and who were all admitted to psychiatric facilities during pregnancy or in the early post-partum period were recruited. Diagnoses ranged from SIPD to Schizoaffective disorder. Parental reflective functioning varied greatly but tended to be low, with difficulties noted in recognizing infant mental states. Play interactions were mostly parent-led, with a high frequency of parental negative affect, intrusiveness, and infant negative emotionality. Mothers with post-partum psychosis experience mentalizing difficulties which may contribute to limitations in sensitivity and attunement. Exploration of reflective capacity and quality of mother-infant interaction in this cohort of mothers may help identify particular deficits that contribute to parenting difficulties associated with this vulnerable population group.

BOP17.5

#### **WHERE IS MY MOTHER? FLATNESS OF AFFECT AND ENLIVENING THE INTERACTION BETWEEN INFANTS AND PARENTS WITH SCHIZOPHRENIC ILLNESS**

**Bolger L.\***

*Austin Health, pimhi ~ Melbourne ~ Australia*

From the still face experiment we know the stressful effect of the 'still face' upon an infant. Infants of parents with Schizophrenia are often faced with a parent with blunted or flat affect demonstrating little or no animation in facial expression or vocal inflection. At the Perinatal and Infant Mental Health Programme, pimhi, we work therapeutically with parents and infants to improve the quality of the interaction. When the parent is able to offer a warmer affect to the infant this enlivens the infant who seeks more connection, and the beginning of repair occurs. The presentation will describe some therapeutic work with parents and infants, illustrated with some video.

BOP17.6

#### **PARENTS UNDER PRESSURE: RCT OF AN EARLY INTERVENTION FOR SUBSTANCE DEPENDENT PARENTS**

**Barlow J.\*<sup>[1]</sup>, Sembi S.<sup>[2]</sup>, Dawe S.<sup>[3]</sup>, Harnett P.<sup>[5]</sup>, Cotmore R.<sup>[4]</sup>, Rayns G.<sup>[4]</sup>**

*<sup>[1]</sup>Professor of Evidence-based Intervention and Policy Evaluation ~ Oxford ~ United Kingdom, <sup>[2]</sup>University of Warwick ~ Warwick ~ United Kingdom, <sup>[3]</sup>Griffiths University ~ Australia ~ United Kingdom, <sup>[4]</sup>NSPCC ~ London ~ United Kingdom, <sup>[5]</sup>University of Queensland ~ ~ Australia*

Many babies are born to drug-dependent parents, and dependence on psychoactive drugs during the postnatal period is associated with high rates of child maltreatment, with around a quarter of these children being subject to a child protection plan. The study comprised a multi centre RCT that was conducted in seven family centres across the UK, and targeted substance dependent primary caregivers of children less than 2.5 years of age. Participants received either the 20-week PuP

programme (n=48) or treatment as usual (n=52). The primary outcome was child abuse potential measured using the brief Child Abuse Potential Inventory, in addition to range of objective measures of abuse status. Secondary outcomes included parental mental health and emotional regulation, parenting stress, substance use, and infant/toddler socio-emotional adjustment scale. A total of 100 primary caregivers were randomized with follow-up of 85% post-intervention and 75% at 6 months. The average number of PuP sessions received was 13. At 6-month follow-up there was a trend toward improvement in child abuse potential (ES: 0.46;  $p < 0.06$ ), with reliable change (Recovery/improvement) in 30.6% of the PuP group compared with 10.3% of TAU ( $p < 0.02$ ) and deterioration in 3% compared with 18%. At 6-month follow-up the TAU group showed a deterioration in risk, with a significant group by time effective favouring PuP ( $p < 0.03$ ). Parent report social care data and parental functioning will also be reported. PuP appears to be an effective method of reducing the risk of child abuse in substance dependent parents of young children.

BOP17.7

### **INVESTIGATING THE USE OF THE 'ATTUNE AND STIMULATE' CHECKLIST ON A SOUTH AFRICAN SAMPLE OF MOTHER-CHILD DYADS**

**Hoffman N.\*<sup>[1]</sup>, Sterkenburg P.<sup>[2]</sup>**

<sup>[1]</sup>University of Cape Town ~ Cape Town ~ South Africa, <sup>[2]</sup>Vrije Universiteit ~ Amsterdam ~ The Netherlands

The quality of early mother-child interaction can influence child emotional, social and cognitive developmental. Consistent responses to a child's signals in a manner that is optimally attuned to the infant's experience serve as protective factors for child developmental outcomes. This study aims to determine the potential of the 'Attune and Stimulate' (A&S) checklist in a group of South African mother-child dyads living in low socio-economic circumstances. The A&S checklist is developed at the Vrije Universiteit in Amsterdam for caregivers of persons with severe intellectual disabilities. In this study we will examine 1) whether this checklist is suitable for observation of mother-child interaction of normal developing children, 2) which adaptations are needed, and 3) whether A&S has clinical application potential in South African government funded health care clinics. Mother-child interaction video recordings of South African dyads living in low socio-economic circumstances will be analyzed using the A&S. Dyads will be grouped according to 1) maternal exposure to childhood trauma, 2) maternal depression and 3) maternal exposure to intimate partner violence. 15 videos per group will be analyzed to determine potential and adaptations. The usability of the checklist in daily practice will be checked. The adaptations needed will be reported as well as the potential for use in the three groups. The possible use of the A&S checklist in South African government funded health care clinics will be reported. This study shows the importance of stimulating mother-child interaction of South African dyads living in low socio-economic circumstances, who often do not have access to expanded health care networks. Instruments that can be administered by all levels of health care professionals are needed.

### **Workshop WS36 - ANTENATAL MENTALISATION IN AN ABORIGINAL COMMUNITY: REFLECTION AND YARNING IMPROVING PARENTAL ENGAGEMENT WITH BABY AND EARLY YEARS SERVICES**

**Crouch K.\***

*MDAS ~ Mildura ~ Australia*

There are 2 aims to this presentation. The first is to share the qualitative results of several clinical case trials of an antenatal mentalization program 'Wondering From the Womb' that was created and delivered within an Aboriginal Community Controlled Organisation (ACCO). The second is to provide an experiential review of the antenatal mentalization technique so that participants have a

lived perspective of what is currently being trialed for enhancing cultural safety and bonding for Aboriginal parents in the antenatal period. An overview of the challenges of intergenerational trauma facing vulnerable indigenous families will be provided followed by a presentation of how a community-led intervention, designed and delivered within an Aboriginal Community Controlled Organisation, emerged as a response to healing aboriginal family systems. This program combines the curiosity of an unborn child with the rich metaphor and story-telling traditions of local Aboriginal Community to produce 9 'wonders' written as-if from within the womb. The clinical application of this antenatal mentalization program 'Wondering From The Womb' will be described. Qualitative data from several cases will be presented along with the practice changes experienced by the participating psychologist and midwife. Two narratives from the program will be shared, with participants invited to experience the program for themselves and consider how sensorimotor and cognitive dynamics can shift when the voice of an unborn child is used to inspire reflection and the reprocessing of ideas about baby and antenatal health care. The importance of honoring the wisdom of First Nations People is emphasized throughout.

### **Workshop WS37 - DEVELOPMENT OF THE REFLECTIVE PARENTING PROGRAM FOR BEDOUIN PARENTS IN THE NEGEV**

**Atzaba--Poria N.\*<sup>[1]</sup>, Nov--Golomb T.<sup>[2]</sup>, Shneor S.<sup>[2]</sup>, Meiri G.<sup>[2]</sup>**

*<sup>[1]</sup>Ben-Gurion University of the Negev ~ Beer-Sheva ~ Israel, <sup>[2]</sup>Soroka Medica Center ~ Beer-Sheva ~ Israel*

Parental reflective functioning (PRF) is the manifestation of reflective functioning in the context of parenting. PRF refers to parents' abilities to treat and regard their children as independent psychological agents and to reflect on their parenting behaviors and their children's mental states. The Reflective Parenting Program (RPP) is a 12-meeting workshop designed to enhance parents' abilities to understand their children and to develop efficient coping skills with daily situations, such as difficult child-behavior, conflict, and separation. An important question that needs to be studied is whether PRF is a universal concept that is also seen among parents from more collectivist societies, such as the Bedouin culture. In this workshop, we will discuss the meaning of PRF in the Bedouin culture and the cultural-specific ways to adapt the RPP to this culture. The Bedouins of the Negev are a unique minority group living in southern Israel. They live in a tribal structure according to Islamic tradition; the families are patriarchal, generally with multiple children; and polygamous marriages occur in many families. Based on in-depth interviews and a parenting group that we conducted with professionals from the Bedouin population, we will present the process of incorporating the program into the Bedouin culture, and discuss important issues that need to be considered when adapting a parenting intervention from one culture to another. A special emphasis will be given to two key questions: What creates connections between parents and children in the Bedouin society? Can Western therapeutic thinking be adapted to more collectivistic/Eastern cultures?

### **Workshop WS42 - TRAUMA & ATTACHMENT FOCUSED INTERVENTIONS WITH YOUNG CHILDREN AND THEIR BIOLOGICAL PARENTS IN THE PROCESS OF ADOPTION – THE CHALLENGE AND THE OPPORTUNITY**

**Hoffnung Assouline A.\*<sup>[1]</sup>, Knei--Paz C.<sup>[2]</sup>**

*<sup>[1]</sup>School of Social Work- Ashkelon Academic College ~ Ashkelon ~ Israel, <sup>[2]</sup>Tel Aviv University School of Social Work ~ Tel Aviv ~ Israel*

There is general assumption that it is impossible to promote a beneficial connection between the child and the biological parents in the process of adoption, and that it might endanger the child in

light of parental failure. In this lecture, we argue that these meetings can positively contribute to the healthy development of the child and to the success of the adoption process. In order to reach these goals, we propose to use trauma and attachment focused clinical interventions, based on the CPP (Child Parent Psychotherapy) model developed by Prof. Alicia Lieberman and Prof Patricia Van - Horn. The authors of this presentation have initiated and consulted a training program based on this model. It is designed specifically for biological parents and their children who are in the adoption process. The goals of the intervention: 1. Creating a safe clinical setting for parent and child; 2. Facilitating moments of playfulness and joy between parent and child 3. Explaining and giving meaning to the events that led to the separation 4. Promoting benevolence of the biological parent towards the child 5. Mediating the transition of the child between attachment figures. We will present clinical examples of interventions with the infant and the biological parents that show the efficacy of implementing these goals and explore the challenges when conducting such complex interventions.

### **Workshop WS43 - ENLISTING CAREGIVERS IN CBT WITH YOUNG CHILDREN WITH PTSD: SUPPORTING THE RELATIONSHIP TO HELP FOSTER CHILDREN RECOVER FROM TRAUMA**

**Murphy D.\*, Kelley A.**

*Tulane University School of Medicine ~ New Orleans ~ United States of America*

We will present the Preschool PTSD Treatment (PPT; Scheeringa, Cohen, & Amaya-Jackson 2002; Scheeringa, 2015) model, a 12-session cognitive-behavioral therapy (CBT) for young children with PTSD, as we apply it in our work with foster children, ages three to six years. Specifically, we will illustrate the integration of dyadic intervention principles within CBT to enhance the relationship between foster children and their caregivers in order to facilitate the recovery of children with PTSD. It is essential that the young child have a supportive and reliable caregiver before they are able to recover from PTSD. The caregiver must fully understand the need to create a sense of psychological safety in order for the child to “tell his story.” This consideration is particularly significant when the child has been placed in out-of-home care due to maltreatment. Several studies have shown the effectiveness of CBT for treating trauma related problems in children as young as three to six years (Cohen & Mannarino, 1996; Deblinger, Stauffer, & Steer, 2001; Scheeringa, Weems, Cohen, Amaya-Jackson & Guthrie, 2011). This presentation provides a brief overview of PPT, followed by a discussion of how we use dyadic intervention principles to support caregivers acquiring appreciation for their children’s experiences and assist them as they work through their trauma narratives. Session videos will be used to illustrate the application of dyadic principles within the PPT model. Treatment outcomes, clinical considerations and potential benefits of using PPT with young children with PTSD in foster care will be discussed.

### **Brief Oral Presentations BOP20 - INFANTS AND FAMILIES DISLOCATED IN THE WORLD**

BOP20.1

#### **YOUNG CHILDREN RETURNING FROM IRAK AND SYRIA : A CHALLENGE FOR CLINICIANS AND FOR SOCIETY**

**Baubet T.\*<sup>[1]</sup>, Mapelli A.<sup>[2]</sup>, Baleyte J.<sup>[3]</sup>, Speranza M.<sup>[4]</sup>, Di Chiara M.<sup>[3]</sup>, Sawaya M.<sup>[4]</sup>, De Pontual L.<sup>[5]</sup>, Rezzoug D.<sup>[1]</sup>**

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During 2017 summer, french health authorities were asked to set up a clinical network for children returning from irakian and syrian war zone. This children were supposed to have been living in DAESH families. We built a network of clinical center with 3 main centers around Paris, and a national network, with in each center : a psychiatrist, a psychologist and a paediatrician. Usually, fathers are dead or disappeared. Mother is incarcerated. And social service agents have to take care. We saw about 20 young children. Mostly very disorganized, with also PTSD, and attachment disorders. Cooperation with different institutions (social welfare, justice) make some ethical dilemmas appear. One of the difficulties is to work with children alone, and a scarce anamnesis. Social workers feel mainly bad with these children, and we also ran a program to sustain this front-line workers with the child. What to do with these children is a very challenging question. We have some ideas, but we hope WAIMH congress will be a good moment to exchange around this question that concerns us all...

BOP20.2

### **FOLLOW UP OF A TUNISIAN MENTAL HEALTH AND PERINATALITY PROGRAM**

**Halayem S.\*<sup>[1]</sup>, Ouenniche H.<sup>[2]</sup>, Dorra B.<sup>[1]</sup>, Hamza M.<sup>[1]</sup>, Mohamed C.<sup>[3]</sup>, Sondes D.<sup>[3]</sup>, Ahlem B.<sup>[1]</sup>, Ramzi O.<sup>[4]</sup>**

<sup>[1]</sup>Faculty of Medicine of Tunis ~ Tunis ~ Tunisia, <sup>[2]</sup>ONFP ~ Tunis ~ Tunisia, <sup>[3]</sup>DSSB ~ Tunis ~ Tunisia, <sup>[4]</sup>WHO ~ Tunis ~ Tunisia

Describe a work undertaken in two maternal and child health centers of the unfavored neighborhood of Tunis, Tunisia from October 2016 in order to promote women's mental health during pregnancy and childbirth, promote early childhood mental health up to five years and prevent mental disorders. This work was planned in association with the Scientific Committee of the Perinatal and Development University Degree of the Faculty of Medicine of Tunis, the Tunisian Ministry of Health, the Tunisian National Office of Family and Population and the WHO. The planned actions were to organize workshops on psychological counseling to be integrated during perinatal consultations; write a guidebook for the benefit of the front-line workers (midwives, general practitioners, pediatricians) for the screening, care and orientation of prenatal and postnatal mental health disorders, and psychosocial risk factors; development of a booklet for parents taking into account Tunisian cultural aspects. On-site evaluation of the monitoring consisted in bimonthly visits to the centers and qualitative and quantitative evaluation of the feedback of the first-line workers. The preliminary results found a good adhesion of the participants in the trainings in the management of the mental health. At the practice level, mental health screening and counseling has been improved, but in a heterogeneous way. These results will be discussed and a modification of the intervention strategy will be proposed.

BOP20.3

### **PARENTHOOD AND CHILDHOOD IN TRANSCULTURAL SITUATIONS**

**Impagliazzo S.\*<sup>[1]</sup>, Martelli M.<sup>[2]</sup>, Piana S.<sup>[1]</sup>, Zaccanti B.<sup>[1]</sup>, Chiodo S.<sup>[1]</sup>**

<sup>[1]</sup>Azienda USL di Bologna-UOC Neuropsichiatria Infanzia e Adolescenza ~ Bologna ~ Italy, <sup>[2]</sup>Associazione Italiana Salute Mentale Infantile-Referente Diritti ~ Roma ~ Italy

The growth of migration flows in Europe requires the employment of new clinical practices of mental health services in order to address children's and their families' needs. This study describes the clinical characteristics of 95 pre-school age children (average age=33 months) born from migrant families who were treated at the Clinical Centre for Early Childhood, Child and Adolescent Neuropsychiatric Unit of Azienda USL of Bologna. The study specifically investigates: parents-child relationship pattern, clinical diagnosis and social-economic integration. During assessment

researchers used specific tools to evaluate child's development, parents-child relationship (PIR-GAS, DC:0-3R), parents mood state (POMS; BDI-II), protective factors and stressors (Axis IV, DC:0-3R). Transcultural and social factors were also evaluated, such as family's migration history, reasons to immigrate to another country, travel arrangements, parents' level of education, current working and living conditions and the presence of a social network in the new social context where they are currently living. Furthermore, the study analyses family's acculturation and linguistic and extra linguistic skills. As previously highlighted in other studies, the results of this work show that in the 78% of children there is no evidence of psychopathologies while a relational disorder was identified in 30% of the children. Furthermore we remark that 58% of mothers observed throughout the study show depression. Children evaluated in this research showed difficulties in building a sense of identity, even if in early age. A possible explanation involves their difficult position between two different cultures: the one of the host country and the one, frequently denied, of their country of origin. The present data and the experience derived from our clinical job with migrant families confirm the need to renovate the clinical practices and to adjust the current approaches. In particular, it would be necessary for all the professionals to get a transcultural training and to develop multidisciplinary interventions connected with the community services.

BOP20.4

#### **CONCEPTUALISING CROSS-CULTURAL DIFFERENCES IN EARLY CAREGIVING: COMPARATIVE LEVELS OF INSTRUCTION AND MIND-MINDEDNESS IN UK AND INDIAN SAMPLES**

**Bozicevic L.\*<sup>[1]</sup>, Omirou A.<sup>[2]</sup>, Holla C.<sup>[3]</sup>, Sharp H.<sup>[1]</sup>, Chandra P.<sup>[3]</sup>, Hill J.<sup>[2]</sup>**

*<sup>[1]</sup>University of Liverpool ~ Liverpool ~ United Kingdom, <sup>[2]</sup>University of Reading ~ Reading ~ United Kingdom, <sup>[3]</sup>National Institute of Mental Health and Neurosciences ~ Bangalore ~ India*

Parental practices have a great impact on various aspects of child emotional and social development and they are in turn influenced by cultural attitudes. We examined the influence of culture on early caregiving practices, introducing new scales to assess them. Videos of 100 mother-infant dyads, 50 from UK and 50 from India, interacting during play when the infants were six months of age were recorded. Maternal speech was transcribed, modified to ensure blindness of coders, and coded for mind-mindedness and instructions as well as verbal control, positive and negative comments. Through a generalized linear modelling framework, cultural differences in parental practices were found: UK mothers express more mind-minded comments in their interactions ( $p=.006$ ) and use more mild control ( $p<.001$ ); Indian mothers give more instructions in their interactions ( $p<.001$ ), use more strong control ( $p<.001$ ) and make more positive comments toward their children ( $p<.001$ ). Exploring in the whole sample the relationship between different caregiving practices, considering the novelty of the scales introduced, positive and negative associations will be discussed ( $p<.001$ ). Cultural differences in parental practices that appear to reflect cultural beliefs about child rearing practices were found and the new scales created contributed to highlight these group differences. Further research with a wider sample allowing the analysis of subcategories of parental practices should be conducted. Additionally, the influence of culture and caregiving practices on child developmental outcomes should be explored.

BOP20.5

#### **PSYCHOSOCIAL INTERVENTION FOR MOTHERS AND BABIES IN A HUMANITARIAN CONTEXT. A MODEL TO LIMIT AND REDUCE PERINATAL DEPRESSION AND HIS IMPACT ON CHILDCARE PRACTICES**

**Dozio E.\*, Bizouerne C.**

*Action Contre la Faim ~ Paris ~ France*

In Central Africa, repeated conflicts, conditions of extreme instability and poverty, as well as the weight of cultural beliefs, make maternity a very vulnerable period. Mother and child are affected by these factors influencing the mother's psychological wellbeing, her parenting skills and therefore the child good development. The project implemented by Action Contre la Faim aimed to prevent the perinatal depression, to reinforce the mother wellbeing and the adoption of good child care practices, through a psychosocial intervention for pregnant women, young mothers and their infants. Pregnant women and women with infants were welcomed in safe spaces and they participated to psychosocial activities in a weekly basis. The protocol, of intervention was focused on strengthening parental skills, psychomotor development for babies and emotional wellbeing for both women and babies. For those women identified as at risk of perinatal depression (measured through the EPDS) a specific intervention based on the WHO model "thinking healthy" was proposed. The level of psychological distress and the quality of breastfeeding (as good child care practice) have been measured at the admission at the end of the intervention. 112 Pregnant women 320 mothers with their babies participated to the project. Women and infants frequented the space for an average of 16 times in a period of four weeks. At the end of the intervention the participants increased significantly their wellbeing (measured with the WHO-5 scale) and they reduced the EPDS score. Lactating women improved their breastfeeding skills, showing a significant reduction of difficulties observed through the BREAST scale (WHO). Pregnant women, mothers and their babies showed a real improvement in parent-child bonding and psychosocial wellbeing. These results were really encouraging about the efficacy of proposed psychosocial approach in reducing perinatal depression risk and in increasing the adoption of good child care practices.

BOP20.6

#### **TARACHINE MOTHERS' RADIATION LABORATORY AND CLINIC TO PROTECT THE CHILDREN OF FUKUSHIMA: MOBILIZING MOTHERS' INITIATIVE AND INTUITIVE PARENTING TO RECREATE A NEW NORMAL**

**Suzuki K.<sup>[1]</sup>, Watanabe H.\*<sup>[2]</sup>, Fujita M.<sup>[1]</sup>, Kurobe S.<sup>[1]</sup>**

*<sup>[1]</sup>Tarachine Mothers' Radiation Laboratory ~ Iwaki ~ Japan, <sup>[2]</sup>Life Development Center. Watanabe Clinic ~ Yokohama ~ Japan*

The Great East Japan Earthquake and Tsunami on March 11, 2011 with ensuing Fukushima Daiichi Nuclear Power Plant (FDNPP) accident have devastated Fukushima and its vicinity. The lives of children and families were shattered by the radiation contamination and ensuing stigma. While the government minimized the damage and hushed civic discussion, the mothers of Iwaki, a fishing town close to the nuclear plant stood up and established Tarachine (meaning mother) Mothers' Radiation Lab Fukushima (MRLF). Their struggles and endeavor of the past six years to search the truth of radiation contamination and to recreate a sustainable environment for infants and children will be presented. Their struggles and endeavor of the past six years to search the truth of radiation contamination and to recreate a sustainable environment for infants and children will be presented. The process of the making of MRLF and accumulaton of data was reviewed from 2011 to 2017, through bimonthly conferences by the staff. They discussed about the needs of mothers with young children and the challenges of creating a scientifically based child-centered measurement center and clinic on their initiatives. MRLF established following five functions open to the community : 1) radiation measurement including gamma-ray (Cesium 137) and beta-ray (Strontium90) provided citizens with the fact of radiation contamination of their environment, 2) thyroid screening for children, 3) research of radiation level of the ecosystem included inland and sea of Fukushima clarified the ongoing effect of the FDNPS meltdown. 4) children's camps in Kume Island of Okinawa. Seven camps in the past six years significantly reduced participant children's radiation levels as revealed in the whole body counter. 5) Tarachine Clinic to provide physical and mental care for

children and parents concerned about life in a low-dose radiation environment. With all the data publicized on their web site, MRLF has created a transparent secure base for parents raising infants and young children in low-dose radiation region as the result of the FDNPP accident.

BOP20.7

### **DEVELOPMENT OF THE HEALTH OF THE NATION OUTCOME SCALES FOR INFANTS (HONOSI): IMPROVING INFANT MENTAL HEALTH SERVICES IN THE THIRD MILLENNIUM**

**Kowalenko N.\*<sup>[1]</sup>, Brann P.<sup>[2]</sup>, Culjak G.<sup>[3]</sup>, Dickson R.<sup>[4]</sup>**

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While mental health outcome measurement is routine in a few nations' mental health systems, it is not routine in infant mental health service delivery. Supported by the strategic review of the Australian Mental Health National Outcomes and Classification Collection (NOCC) in 2013 and the recognition of this gap, there has been ongoing work to provide routine mental health outcomes measurement for infants and pre-schoolers. Focussing on infants, an instrument for the 0-47 month age group, adapted from the HoNOSCA and the HoNOS family of instruments, has been developed and undergone the first round of pilot face validity testing. The aim of the current study is to present progress to date on the ongoing development of this instrument and some of the issues identified in face validity testing. The current study describes the methods, processes and challenges found in the face validity testing phase of development and describes the methods for having made modifications to the instrument after extensive systematic feedback from infant mental health clinicians. This presentation will discuss the findings from face validity testing, present themes identified, describe planned psychometric testing and consider strengths and weaknesses of the instrument. Developing a sound infant mental health outcome measure for the 0-47 month age group is challenging and time consuming, but will potentially provide an instrument for routine evaluation of infant mental health assessment and routine care in specialist infant mental health services.

### **Symposium S56 - RISK AND RESILIENCE FACTORS IN THE TRANSGENERATIONAL TRANSMISSION OF CHILDHOOD MALTREATMENT: FIRST RESULTS OF THE TRANS-GEN STUDY**

**Buchheim A.\*<sup>[1]</sup>, Ziegenhain U.<sup>[2]</sup>**

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Within an interdisciplinary consortium, TRANS-GEN investigates in a prospective approach the pathways leading to resilience or vulnerability in the transgenerational transmission of Childhood Maltreatment (CM) and examines psychological, biological and social factors that positively influence the association between maternal CM and the infant's stress reactivity at age 1 in a birth cohort recruited in the University maternity clinic Ulm. Mother-infant dyads were followed up at 3 months, and 12 months after birth. Main outcomes were the infants disorganized attachment and physiological stress reactivity. In the symposium first results of this interdisciplinary project will be presented. Ziegenhain et al. is focusing on stress reactivity and cognitive functioning in infants of mothers with CM (N=202 dyads). First results revealed a positive effect on children's cognitive performance in mothers with CM, who displayed sensitive behavior compared to insensitive mothers and showed more intense stress reactivity during the strange situation in the HPA axis (cortisol) in infants of mothers who behaved insensitive. Buchheim et al. were investigating the impact of maternal unresolved attachment representations on the interaction with their children in

the Strange Situation using AMBIANCE. First results with n = 129 mother-infant-dyads demonstrate that mothers with unresolved attachment showed more “role/boundary confusion” as well as “fearful/ disorientation” behavior with their infants compared to mothers with secure or insecure representations. Krause et al. is reporting on the results and methodological differences of CM of a dose-dependent reduction of oxytocin receptor in peripheral mononuclear blood cells of mothers, by assuming that CM is closely related to alterations in the oxytocin (OXT) system. Zimmermann et al. demonstrates the important role of informal and formal social support as factors of resilience in mothers with CM, by showing that mothers with CM reported less access to informal social support, which was associated with heightened maternal feelings of distress.

S56.2

### **STRESS REACTIVITY AND COGNITIVE FUNCTIONING IN INFANTS OF MOTHERS WITH A HISTORY OF CHILDHOOD**

**Ziegenhain U.\*<sup>[1]</sup>, Köhler--Dauner F.<sup>[1]</sup>, Dölitzsch C.<sup>[1]</sup>, Fegert J.<sup>[1]</sup>, Buchheim A.<sup>[2]</sup>**

<sup>[1]</sup>Dept. Child and Adolescent Psychiatry/Psychotherapy, University Hospital of Ulm ~ Ulm ~ Germany, <sup>[2]</sup>University of Innsbruck ~ Innsbruck ~ Austria

Infants of mothers with a history of child maltreatment (CM) are at an increased risk to develop dysregulated stress reactivity as well as socioemotional or cognitive problems. There are still only few studies investigating the potential link between maternal CM and child development. Sensitive parenting is supposed to play an important role in mediating the negative effects of maternal CM history. Moreover, it is supposed to buffer the effects of dysregulated stress reactivity, whereas insensitive parenting contributes to or increases dysregulated stress reactivity. In our interdisciplinary project TRANS-GEN (funded by the Federal Ministry of Education and Research, Germany) we longitudinally investigate the interplay of psychosocial and biological variables contributing to different pathways leading to resilience or vulnerability in the transgenerational transmission of CM. Infants and mothers were recruited at birth (women’s hospital, University Hospital Ulm). CM was assessed with the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1997). At 12 months of age both quality of maternal interactive behavior (AMBIANCE (Lyons-Ruth et al., 1999) and stress reactivity (HPA-axis, cortisol saliva sample of infant and mother) were assessed during the Ainsworth strange situation. The infant’s cognitive development was examined by the Bayley Scales of Infant Development II (Reuner et al., 2007) at 12 months of age. First results revealed a positive effect on children’s cognitive performance in mothers with a CM history who displayed sensitive behavior compared to insensitive mothers with a CM history; no differences were found in the interactive quality of mothers without a history of CM (N=202 dyads). Moreover, our data revealed more intense stress reactivity during the strange situation in the HPA axis (cortisol) in infants of mothers who behaved insensitive compared to sensitive mothers indicating a buffering effect of positive parenting. A better understanding of risk and vulnerability factors with respect to the role of maternal sensitivity on the infants stress reactivity as investigated in TRANS-GEN, will enable professionals to target and offer adequate services to mothers and children at risk.

S56.3

### **THE IMPACT OF UNRESOLVED ATTACHMENT REPRESENTATIONS OF MOTHERS WITH CHILDHOOD MALTREATMENT ON THE INTERACTION WITH THEIR CHILD: A QUALITATIVE ANALYSIS FOCUSING ON TRAUMATIC DYSREGULATION**

**Buchheim A.\*<sup>[1]</sup>, Doyen--Waldecker C.<sup>[2]</sup>, Köhler--Dauner F.<sup>[3]</sup>, Waller C.<sup>[2]</sup>, Gündel H.<sup>[2]</sup>, Fegert J.<sup>[3]</sup>, Ziegenhain U.<sup>[3]</sup>**

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Child maltreatment (CM) is considered as a risk factor for several disorders in adulthood. Maternal attachment representation is suggested as one moderating candidate for explaining the link between the history of CM and impaired caregiving. In the sub-project of TRANS-GEN the impact of maternal unresolved attachment trauma on the interaction with their child was investigated including a detailed qualitative analysis focusing on traumatic dysregulation in maternal narratives and behavior. 250 mother-infant-dyads were recruited at the Ulm University Hospital in the context of the large research consortium (TRANS-GEN). Mothers were administered the Adult Attachment Projective Picture System (AAP; George & West 2001, 2012) to assess attachment representations. Degree of traumatic dysregulation, internalized secure base, connectedness and synchrony was associated with interaction scales from the Strange Situation at 12 months of age, called AMBIANCE (Lyons-Ruth et al. 2009). Especially looking at representational scales like Synchrony, Agency and traumatic markers in the narratives in association to reciprocity in the mother-infant dyad are expected to reveal new insights for conceptualizing a model of risk and resilience factors in mothers with different degrees of traumatization. First results with  $n = 129$  mother-infant-dyads demonstrate that there is a significant relationship between maternal history of CM, maternal attachment representation and their caregiving behavior towards their own infant. Mothers which unresolved attachment representation showed more “role/boundary confusion” as well as “fearful/disorientation” behavior with their infants compared to mothers with secure or insecure representation. These results suggest that maternal attachment representations may play a key role as a risk or protective factor in the context of transmission of maltreatment to the next generation. These first impressions have to be verified in the large sample of  $n = 250$  mother-infants dyads and analyzed in more details like described above.

S56.4

#### **CHILDHOOD MALTREATMENT RESULTS IN A DOSE-DEPENDENT REDUCTION OF OXYTOCIN RECEPTOR IN PERIPHERAL MONONUCLEAR BLOOD CELLS OF MOTHERS**

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Childhood maltreatment (CM) is closely related to alterations in the oxytocin (OXT) system with, however, contradictory results based on OXT peptide hormone analyses. Therefore, we propose a new method that allows the oxytocin receptor (OXTR) determination in humans. We hypothesize that OXTR alterations in adulthood may better reflect CM experiences than peripheral OXT levels. Peripheral mononuclear blood cells (PBMCs) of 55 mothers 3 months after parturition were analyzed by using western blot and OXT plasma levels were determined by radioimmunoassay. The childhood trauma questionnaire (CTQ) was used to assess adverse childhood experiences. OXTR protein levels showed a significant negative correlation with the CTQ sum scores ( $R^2 = -.321$ ,  $p$ -value = .017), whereas OXT plasma levels were not related to CM ( $R^2 = -.153$ ,  $p$ -value = .269). These are the first results of semi-quantitative determination of the OXTR in human PBMCs. This technique allows the detection of OXTR system modulations in relation to CM experiences in a long-term way until adulthood. OXTR alterations may have important implications as a potential biological correlate of

CM which may explain the well-known CM-related adverse physical or mental health effects in adulthood

S56.5

### **THE ROLE OF INFORMAL AND FORMAL SOCIAL SUPPORT AS FACTORS OF RESILIENCE IN MOTHERS WITH A HISTORY OF CHILD MALTREATMENT AND THEIR CHILDREN**

**Zimmermann J.\*<sup>[1]</sup>, Köhler--Dauner F.<sup>[2]</sup>, Ziegenhain U.<sup>[2]</sup>, Fegert J.<sup>[2]</sup>, Kindler H.<sup>[1]</sup>**

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Mothers who have experienced maltreatment during their childhood (CM) are a risk group in terms of their own psychological wellbeing, their parenting behavior and their children's development. The TRANS-GEN project investigates pathways leading to resilience and vulnerability in the intergenerational transmission of CM, considering psychological, biological, and social factors. As aspects of the social system that might help mothers with a history of CM to positively adjust to parenthood, the mothers' ability to generate informal social support and the utilization of professional support services are analyzed. After parturition, mothers were screened for CM with the Childhood Trauma Questionnaire (CTQ). N=533 mothers with and without CM were included in the sample. Mother-child dyads were investigated twice: 3 months and 12 months postpartum. The level of maternal distress was estimated by a composite score of self-reported psychological symptoms, familial problems, and perceived stress. The quality of maternal behavior in interaction with the child was analyzed with the AMBIANCE. The infant's cognitive was assessed with the BAYLEY-II. Perceived social support was measured by the PSSQ and a self-developed interview was used to assess the utilization of professional services. Mothers with a CM history presented higher levels of distress in the postnatal period and more atypical interaction behavior. Despite an increased need for support, they had difficulties in accessing prevention services. Moreover, mothers with CM reported less access to informal social support, which was associated with heightened maternal feelings of distress. Nevertheless, social support had overall positive effects on children's cognitive development and buffered against negative consequences of maternal dysfunctional interaction behavior. A deeper knowledge about the needs for and access to informal and formal social support in mothers with a history of CM and better understanding of its role in the "transmission gap" of CM will help to improve the child protection system.

### **Brief Oral Presentations BOP23 - ADVERSE ANTENATAL IMPACT UPON THE BABY**

BOP23.1

#### **TREATING THE BRAIN IN FETAL ALCOHOL SPECTRUM DISORDERS**

**Wozniak J.\*<sup>[1]</sup>, Fuglestad A.<sup>[2]</sup>, Eckerle J.<sup>[1]</sup>, Fink B.<sup>[1]</sup>, Boys C.<sup>[1]</sup>, Kroupina M.<sup>[1]</sup>, Brearley A.<sup>[1]</sup>, Lee S.<sup>[1]</sup>, Zeisel S.<sup>[3]</sup>, Georgieff M.<sup>[1]</sup>**

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Fetal Alcohol Spectrum Disorder (FASD) is a common cause of neurodevelopmental delay worldwide, but there are no treatments targeting brain development in FASD. The aim of this work is to test a single-nutrient intervention for the optimization of brain development in children with FASD. Pre-clinical studies show that choline can attenuate or even reverse hippocampal abnormalities and cognitive deficits in rodents following prenatal ethanol exposure. Potential

mechanisms for choline's effects include production of cell membrane phospholipids for axonal growth and myelination, enhancement of acetylcholine, and epigenetic effects. We conducted the first double-blind randomized controlled trial examining choline treatment in 2 to 5 year olds with FASD (N=60). Children were randomized to 500mg choline or placebo daily for nine months. The primary outcome measures at 9 months were an elicited imitation memory paradigm and the Mullen Scales of Early Learning. Participants have now returned 2-4 years later for measures of intellectual functioning (Stanford-Binet), memory, and executive functioning. Choline supplementation proved to be highly feasible in 2-5 year olds, with participants receiving a dose on 88% of the days in the study. There were no serious adverse events. Initial results show positive memory gains on elicited imitation (Cohen's  $d = 0.54$ ), but primarily for 2-3 year olds and not 4-5 year olds. As expected, no significant effects were seen on global cognition at 9 months. Long-term follow-up results (2-4 years post study) suggest that choline is associated with greater improvement in working memory and non-verbal processing as measured by the Stanford Binet. This is the first set of studies employing a nutritional intervention for neurodevelopment in young children with FASD. Results suggest that choline supplementation is feasible and shows promise. Some aspects of cognitive change may be apparent early on, but other effects may only become evident after several years of follow-up.

BOP23.2

### **FETAL ALCOHOL SPECTRUM DISORDER (FASD) RESEARCH PROGRAM: EARLY LIFE ADVERSITY, OUTCOMES, AND SECONDARY INTERVENTION AND PREVENTION**

**Kulkarni C.<sup>[3]</sup>, Reynolds J.\*<sup>[1]</sup>, Packard B.<sup>[2]</sup>, Khambati N.<sup>[3]</sup>**

<sup>[1]</sup>Queen's University ~ Kingston ~ Canada, <sup>[2]</sup>Children's Aid Society, Toronto ~ Toronto ~ Canada,

<sup>[3]</sup>The Hospital for Sick Children, Infant Mental Health Promotion ~ Toronto ~ Canada

Few children in the foster care system, many of whom with confirmed prenatal alcohol exposure, are systematically screened for developmental concerns, despite the high prevalence of delays documented in the population. This is particularly concerning given that timely and early identification of delay is key to informing intervention and optimizing developmental outcomes for vulnerable populations. Accordingly, the Children's Aid Society Toronto (CAST) initiated a developmental screening and developmental support planning model for the at-risk children they serve, to detect delays and intervene during the critical period of development. Child Welfare Practitioners from CAST (n=26) were recruited to the study, following the completion of comprehensive training pertaining to infant mental health knowledge, and the implementation of the developmental screening and developmental support planning model. Practitioners were randomly assigned to one of two groups: 1) Intervention Arm, in which Practitioners administered the developmental screens and intervention, and 2) the Control Arm, where practitioners were limited to administering developmental screens with children in their care. In collaboration with foster parents, Practitioners completed the screening/planning cycle at three time points: Baseline, 90 days after baseline assessment, and another 90 days after the second assessment. Developmental outcomes were assessed over time. Preliminary analyses suggest that the use of standardized screening tools can identify developmental delays in at-risk children, and that DSPs can improve developmental outcomes. Study results provide the proof of principle for implementing the developmental screening and support plan model as part of the routine care of children in the welfare system.

BOP23.3

**THE “WALKING FIGURES”: AN OBSERVATIONAL TOOL FOR CHILD’S GROSS MOTOR DEVELOPMENT MONITORING. THE CASE OF MALNOURISHED CHILDREN IN CENTRAL AFRICA**

**Dozio E.\*, Bizouerne C.**

*Action Contre la Faim ~ Paris ~ France*

Assessing child gross motor development is useful to establish child’s gross motor development curve as well as possible motor development delays or troubles. This is even more important for children affected by Severe Acute Malnutrition as several studies show the impact of nutritional shortages on child development. The objective of this study was to test the tool called ‘Walking Figures’ in order to monitor the motor development in malnourished children, in an African context. The aim is to use this tool to identify children with possible delays and to provide them with appropriate interventions. The tool proposed to assess the motor development and progress in malnourished children, is a pictorial method validated by Wijnhoven et al. (2006) in different cultural settings. It is composed of 6 pictures showing an infant performing different movements corresponding to major gross motor development stages from sitting with support to running without losing balance. This tool has been used individually at the beginning and at the end of the nutritional treatment. The interviewer asked to the mother: “When regarding at these pictures, what is the stage reached by your child?”. The interviewer also wrote down his observation about the child development stage. 792 malnourished children aged from 3 to 36 months, have been observed by their mother and by the interviewer, in Central African nutritional centres. No difference has been observed between the two different observers. 98% of children regain the development stage reached before the malnutrition episode. 20% of children showed a significant improvement in their motor development after the treatment and 4,8 % of malnourished children presented a delay in motor development and may need of specific psychomotor stimulations. The “walking figures” is a useful tool that helps to assess child gross motor development, to establish the possible delays and in this case to provide tailored interventions.

BOP23.4

**THE ASSOCIATION OF MATERNAL PRE-PREGNANCY BMI WITH CHILDREN’S BEHAVIOUR AND EXECUTIVE FUNCTIONING**

**Menting M.\*, Van De Beek C., De Rooij S., Painter R., Vrijkotte T., Roseboom T.**

*AMC ~ Amsterdam ~ The Netherlands*

The incidence of maternal obesity is rising dramatically. Offspring of obese women are exposed to increased circulating nutrients, metabolic hormones and inflammation in utero which alter the offspring’s neuroendocrine regulation and brain development. This may have negative effects on offspring’s development. This study assessed whether ppBMI is associated with offspring’s behavioural problems and executive functioning at age 5. The Amsterdam Born Children and their Development (ABCD) study is a population-based prospective birth cohort study. We included 4094 mother-child pairs from whom information about ppBMI and one or more of the following three child outcomes was known: maternal reported Strengths and Difficulties Questionnaire (SDQ), teacher reported SDQ and the performance parameters inhibitory control and cognitive flexibility on a computerized executive functioning task (Response Organization Objects (ROO) of the Amsterdam Neuropsychological Tasks). Linear and logistic regressions were used to examine the association of ppBMI with child outcomes. A higher ppBMI was associated with a doubled increase in children’s behavioural problems even after adjustment for potential confounders (maternal age, maternal ethnicity, maternal education level, parity, maternal and paternal diagnosis of a mental health disorder, smoking and alcohol use during pregnancy, sex and age of the child). More

specifically, ppBMI was positively associated with children's conduct ( $p < .05$ ), hyperactive/inattentive ( $p < .01$ ), peer ( $p < .01$ ) and total behavioural problems ( $p < .001$ ) as reported by their mother and children's peer problems ( $p < .05$ ) as reported by their teacher. ppBMI was negatively associated with children's cognitive flexibility ( $p < .05$ ), but was not associated with inhibitory control. Cognitive flexibility did not mediate the association between ppBMI and children's behaviour. Maternal overweight and obesity before pregnancy is linked to an increase in children's behavioural problems and impaired executive functioning. Studies are needed to show whether pre-conception weight loss interventions reduce behavioural problems and improve executive functioning in future generations.

### **Workshop WS48 - FROM SILOS AND FRAGMENTATION TO MENTALIZATION AND RESILIENCE IN THE NICU**

**Chapman M.\*<sup>[1]</sup>, Steinberg Z.<sup>[2]</sup>**

*<sup>[1]</sup>Royal Children's Hospital ~ Melbourne ~ Australia, <sup>[2]</sup>Columbia University ~ New York ~ United States of America*

Neonatal intensive care units are not where parents expected to be when they start their pregnancy journey. For most, the world of NICU is previously unimagined. Although NICU's primary function is medical, creating a reflective and supportive environment is critical, yet often this remains elusive. This workshop will explore ways of working in NICU that creates spaces conducive for reflective functioning, allowing parents, and staff, to mentalize. It will look at different ways of clinically intervening in NICU, including working directly with infants, with infant-parent dyads, with parents individually, with parental couples, and with parent groups. It will also explore systemic interventions, include secondary consultations with NICU staff, regular teaching, and new applications of medical routines, such as dedicated Infant Mental Health ward rounds, and reflect on how these create a common language encompassing mentalizing, and a broader space for Infant Mental Health conversations. The workshop will be illustrated by long term clinical work undertaken in two medical/surgical NICU's, from the United States and Australia. By employing a dialogue between workshop facilitators, it will examine what works across both units, and reflect on what worked on one, but not the other. It will examine what cultural difference may be at work, whilst finding universal experiences that may apply across NICU's. It will be skill based, and aims to provoke discussion. It will also explore how mental health clinicians in NICU can be supported and thrive, and allow attendees to leave with new ways of working within this challenging environment.

### **Workshop WS49 - WHAT THE SICK BABY AND ITS PARENTS SHARE AND HOW TO MAXIMIZE IT FOR HELPING THEM? A SELF-PSYCHOLOGY PERSPECTIVE**

**Harel J.\*, Blumenfeld R.**

*haifa university, dep. of psychology ~ haifa ~ Israel*

To offer a view from self-psychology, specifically the motivational systems, to the understanding of the experience of the very sick baby and its parents. An example of dyadic therapy will be analyzed from this perspective. Participants will gain an additional tool to help the very sick baby. Five motivational systems are active in each person from the beginning of life: 1. the need for psychic regulation of physiological requirements, 2. the need for attachment and later affiliation, 3. the need for exploration and assertion, 4. the need to react aversively through antagonism and/or withdrawal and 5. The need for sensual enjoyment and later, sexual enjoyment, (Lichtenberg, 1989). Differences and similarities in the experience of parents and their very sick baby, with regard to these systems will be described. The Haifa Dyadic Therapy enables the therapist to reach very early experiences and memories of the baby and the parent, both present in each therapy session. The

embodied memories, and the past as well as the "here-and-now" experiences of the dyad are re-enacted, thus they can be contained and mentalized in the therapy process. The therapy of Baby Tom, born with severe developmental problems related to mother's illness during pregnancy will be presented. The symptoms and the therapy process will be analyzed according to the five motivational systems. The sick baby and the parents should be treated together focusing on their experience and their relationship. The sharing of experience and of difficulties in the therapy process comprises a vital change promoting factor.

#### **Workshop WS54 - DEVELOPING AN INFANT MENTAL HEALTH COMPETENCIES FRAMEWORK**

**Cannon D.\*<sup>[1]</sup>, Barlow J.<sup>[2]</sup>, Baradon T.<sup>[3]</sup>**

*<sup>[1]</sup>Mrs ~ Warwick Medical School England ~ United Kingdom, <sup>[2]</sup>Professor ~ Oxford England ~ United Kingdom, <sup>[3]</sup>Dr ~ London ~ United Kingdom*

The Infant Mental Health Competency Framework (IMHCF) has been developed for all staff working to support parent/s/caregivers to promote infant mental health (IMH), from pregnancy to the second year of life. It is designed to increase general awareness of IMH and to raise standards of practice and care, by supporting all staff to optimize their skill set. The aim of the IMHCF is to:

- a) Provide a set of freely available, evidence- and consensus-based competencies aimed at standardising and improving IMH practice
- b) To provide a registration mechanism by which individual practitioners can rate their practice;
- c) Assess the effectiveness of the IMHCF in improving training and practice.
- d) To inform training development.

Description of the Project: The first stage of the work is complete and a range of evidence and consensus based competencies have been developed over the seven domains, and three levels. Generally, the three levels distinguish between (1) general knowledge and skills, (2) advanced knowledge and skills, and (3) the knowledge and skills required to supervise and manage. The framework is now being piloted with IMH practitioners across the UK, and the results will shortly be available. The next stage of the work will involve developing a registration process, and establish the effectiveness of the framework in improving training and practice. Conclusions: Competencies for infant mental health work are now required to enable IMH workers to standardise and improve their practice. This framework provides an evidence and consensus based set of competencies that are freely available, to improve practice nationally and internationally.

#### **Workshop WS55 - BUILDING CAPACITY OF ALLIED PROFESSIONALS TO PROVIDE INFANT MENTAL HEALTH SUPPORTS**

**Finello K.\***

*WestEd Center for Prevention & Early Intervention ~ Los Angeles ~ United States of America*

This session will examine infant mental health strategies that are important to address to enhance the knowledge base of service providers from non-mental health disciplines. Early intervention and home visiting professionals frequently provide services to infants, toddlers, and families in communities with a dearth of mental health providers experienced in the delivery of services to children under age three. These providers are asked to address social and emotional needs, develop mechanisms to measure outcomes focused on these needs, and collaborate with other community professionals, despite limited training and background in infant mental health. This workshop will focus on mechanisms that are being used to enhance the skills of all early childhood providers with attention to boundaries in practice and collaborations needed for successful service delivery. Presentation will include sharing of information about types of approaches being taken to provide training to early childhood professionals who are not IMH specialists. This will include samples of

workshops, toolkits, webinars, conferences, on-line community of practice calls, supportive conference calls following trainings, and websites developed for shared information across sectors. Sharing of specific content, such as websites designed for communities of practice in early intervention, will support participant understanding of targeted strategies that have been effective in enhancing skills of all early childhood service providers. Audience participation will be encouraged to address how such work is occurring around the world to meet the needs of infants, toddlers, families, and communities and how we might improve our approaches.

**TUESDAY MAY 29, 2018**

**09:00-10:15 Plenary Lecture**

**Digital Media and the Dyad**

*Jenny Radesky (USA)*

Digital media have experienced their most rapid evolution over the past 10 years, with the introduction of mobile and interactive platforms that have drastically changed children and parents' relationships with media. Dr. Radesky's research uses a developmental lens to examine media use in families, with a particular emphasis on associations of media use with parent-child interaction dynamics, child temperament and self-regulation, and psychosocial stress. She will discuss parent mobile device use and how it effects parents' engagement with young children during family routines; parent emotional, attentional, and cognitive experiences of mobile device use during family time; associations of frequent parent mobile device use with reflective functioning and mentalization abilities; and relevance for clinical guidance and digital design. In addition, this talk will examine how characteristics of young children predict and modify their media use habits, such as preferences for highly gamified design, frequent use of mobile devices for calming purposes, and effects of digital attention management and distractions such as in-app advertisements. Dr. Radesky will also review results from several new studies showing how persuasive design makes it more difficult for parents to scaffold children in digital play experiences. Finally, opportunities for clinical intervention and advocacy around digital media across several different social contexts will be discussed.

**10:45-12:15 General Sessions**

**Symposium S57 - SUBVERSIVE IDEAS: THE ROLE OF SURPRISE IN THERAPEUTIC WORK WITH INFANTS AND PARENTS**

**Berg A.\***

*University of Cape Town ~ Cape Town ~ South Africa*

*Discussant: Seligman S.\**

*University of California ~ San Francisco ~ United States of America*

Being open to the unexpected is part of parent-infant psychotherapy. This symposium will discuss moments of surprise in various clinical contexts, from community settings to ill babies in intensive care units. If the openness of the infant is matched by openness in the therapist, a moment of meeting may take place.

S57.2

**WHAT THOUGHTS ARISE IN THE CLINICIAN'S (MY) MIND WHEN WE TALK ABOUT "SURPRISE" ARISING OUT OF PARENT INFANT WORK?**

**Guedeney A.\***

*University of Paris ~ Paris ~ France*

Surprise is the essence of effectiveness of an intervention. What we say doesn't have to be sophisticated to yield the effect of surprise. What is needed is to surprise the patient's defence mechanisms, to catch them au dépourvu (off-guard), which is precisely what the questions of the

Adult Attachment Interview (AAI) endeavour to achieve. Such an effect is generally gained by asking a simple question, but at the right time. This kind of intervention is generally not planned, and we don't usually even consciously recall having made the intervention. Long ago, one of the team members at l'Institut de Puériculture de Paris was alone answering the telephone on a Friday afternoon. This day, one young mother rang; the team knew her well and had been discussing her progress each week in team consultations because of her severe depression. The mother said she was going to kill herself that day. She asked if the duty clinician would take care of her children. The clinician was not surprised by the mother's wish to die, but was taken aback by the calm way in which she expressed this stated wish. She could not recall exactly what she said to the mother, but the clinician said something to the effect "maybe you don't plan to kill yourself, as you want your children to be cared for." Pressed with questions, she eventually realised that she may have said something like: "what do you usually do in such a case?" the mother felt safely contained by the surprising intervention.

S57.3

### **THE INFANT AS CO-THERAPIST – THE MOMENT OF SURPRISE AND WONDER**

**Berg A.\***

*University of Cape Town ~ Cape Town ~ South Africa*

Consultations with infants and their parents are often a once-off happening, as a linking or 'clicking' may take place that serves as an explanation for the child or parent's difficulties. Lebovici et al describe the therapeutic consultation as "actual choreography that unfolds in the presence of the clinician – the movements, gestures, and communications between the baby and parents". (P 173) The surprise lies in the infant's contribution to the dance. By focusing on the infant or toddler's initiatives and his/her spontaneous impulse, sense can be made of the parents' difficulties in the relationship with their child. Noticing the cues emanating from the baby and translating these to the caregiver may help to make links and to provide the basis for reflection. The moment in which the infant's act provides the sense-making link, is one of surprise and wonder. A clinical vignette from one of the first cases that was seen in the community clinic will illustrate how a toddler's surprising act provided a hypothesis that was to explain his difficulties and formed the basis for a culturally attuned approach to infant mental health.

S57.4

### **BABIES ENJOY SURPRISE: THE CREATIVE USE OF THE BABY'S EXPERIENCE OF THE UNEXPECTED**

**Thomson Salo F.\***

*Royal Women's Hospital ~ Melbourne ~ Australia*

Infants are surrounded by many people, and in a good-enough situation parents, siblings and extended family will play with the baby, often with games which include the element of surprise. This paper will discuss the therapist's use of surprise and the unexpected in infant parent psychotherapy, particularly with premature babies. Trevarthen, Reddy and colleagues have studied play and teasing in infant-parent relationships (Trevarthen 2005, Reddy 2015 Nakano 2007) to show that very young babies are able to learn the "rules" of play. Babies are able to break the rules themselves. Surprise for the baby which follows when an adult breaks the rules of the game can be a therapeutic moment for both infant and parent, and help build the therapeutic relationship. Parents, and the therapist can also experience surprise, which can be part of the recovery process within the clinical context. This presentation will be illustrated with some clinical vignettes.

S57.5

### **SURPRISE AND THE OPEN OPPORTUNITY**

**Nicolson S.\***

*Royal Women's Hospital ~ Melbourne ~ Austria*

This brief oral presentation will explore the 'openness' surrounding moments of surprise in infant-parent therapy, in terms of the concept, the literature and its potential. Some words are used very frequently and as clearly defined concepts in infant mental health to describe and explain the therapeutic process; others are used less often or more loosely. Surprise and openness perhaps fit in the latter category but clinically understanding, noticing, creating and harnessing them may be inherent in development. There is the well-described idea, for example, that moments of surprise create an open space for therapeutic change, or that the therapist is always on the look out for, or even orchestrating, a more open presence of the parent, to be there with more of themselves for and with the infant who is there with all of themselves, to enable not-knowing, surprise and discovery between them, and the possibility of a new way of being together. This therapeutic work sits well with the therapist's efforts to regulate affect and promote mentalisation. Video material will illustrate the infant's openness to surprise, subversive efforts of the therapist to orchestrate openness and surprise in the distressed dyad, and the open space generated by a moment of surprise that can be missed or squashed, or harnessed and its potential stretched, through a balancing act of supportive presence and restraint by the therapist.

S57.6

### **THE SHOCK OF SURPRISE: PSYCHOTHERAPEUTIC WORK WITH INFANTS AND PARENTS WHEN DISTURBING FEELINGS ARE UNCOVERED**

**Paul C.\***

*Royal Children's Hospital ~ Melbourne ~ Australia*

Becoming a parent is one of the more monumental life course transitions, and certainly monumental for the baby is his birth. Becoming a parent of a baby who is experiencing medical, surgical or major emotional trauma may fracture the optimism and joy which comes with the new baby. Parents in these circumstances may be surprised, or shocked when learning of their own complicated, sometimes dark, responses to their baby. In his important paper, Winnicott (1947) described many reasons why a mother may hate her baby. Here he is discussing the ordinary, good enough, parent; how much harder it is to manage the intensity and complexity of our feelings about the sick baby. A father is surprised by the extent of his resentful anger towards his unexpectedly damaged newborn baby, but works to understand how these feelings can coexist with love. The infant too maybe shocked and surprised by some of her own actions, and responses to others. "I cannot be feeling this!", is how a therapist may think when becoming aware of intense negative feelings which have crept into consciousness about an infant or parents. This presentation will provide some illustrative clinical material and discuss the concept of shock of surprise for both parents, infant and therapist.

### **Symposium S61 - INTERPERSONAL TRAUMA AND REFLECTIVE FUNCTION: TOWARD PROMISING INTERVENTIONS WITH HIGH-RISK PARENTS**

**Lemieux R.\***

*Université du Québec à Trois-Rivières ~ Trois-Rivières ~ Canada*

Childhood maltreatment (CM) is one of the most understudied public health issues (Afifi, 2011). However, 95% of 2016's studies in the field of trauma do not address how to limit the repercussions of CM on mental health (Garon-Bissonnette et al., 2017). Since CM has intergenerational

consequences, it is of critical importance to design and assess interventions aiming to interrupt the transmission of risk. The programs targeting the development of parental reflective functioning (PRF) are promising in this regard (Camoirano, 2017). PRF refers to the capacity of the parents to think about their own and their child's mental states, and how these mental states may underlie behavior (Slade, 2005). This capacity is related to the ability to provide care and comfort to the child (Katznelson, 2014). Even though reflective functioning seems to be a buffer in the context of CM (Berthelot et al., 2015), studies on trauma and PRF remain sparse. The first speaker in this symposium will present the results of a study examining associations between past and current traumas and PRF among mothers involved in infant mental health services. In the second talk, data on the maternal mental representations of the child, PRF and mother-child behavior following the experience of interpersonal violence will be report. The speaker will also discuss a novel intervention with mothers suffering from PTSD. The third speaker will present the design process of an intervention aimed at adults exposed to CM and are awaiting a child. Data supporting the importance of addressing unmentalized trauma-related affects/cognitions in the course of such interventions will be presented. Finally, the fourth speaker will present a pilot program offered to maltreating parents engaged in an infant-toddler court and will demonstrate how such interventions can improve PRF. Time for discussion will be reserved during the presentations.

S61.2

### **ASSOCIATIONS BETWEEN TRAUMATIC LIFE EXPERIENCES AND REFLECTIVE FUNCTIONING AMONG MOTHERS ENROLLED IN MICHIGAN'S INFANT MENTAL HEALTH STATE-WIDE SERVICES**

**Huth--Bocks A.\*<sup>[1]</sup>, Stacks A.M.<sup>[2]</sup>, Wong K.<sup>[2]</sup>, Muzik M.<sup>[3]</sup>, Rosenblum K.<sup>[3]</sup>**

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One promising target of Infant Mental Health (IMH) interventions is parental reflective functioning (RF), which refers to parents' capacity to understand their child's mental states and recognize links between mental states and behavior. The present study examined associations between past and present traumatic experiences and maternal RF among treatment seeking mothers enrolled in IMH Home-Visiting services. Participants include 79 mothers (mean age=27) with an average 2.3 children; intervention target children (56% female, 44% male) average 10 months old. Participants are predominantly White (55%) and African American (44%), unmarried (68%), unemployed (50%), have high school or less education (54%), and most receive public assistance. Participants completed baseline questionnaires and the Parent Development Interview (PDI-R; Slade et al., 2003), and are currently being followed at 3-, 6-, 9-, and 12-months post-enrollment. Baseline data revealed an average 4.5 Adverse Childhood Experiences (ACEs; range 0-10), 2.6 traumatic events in the past year (range 0-14), and 24% reported recent intimate partner violence. Low RF was characteristic (average PDI-R-RF score=2.7, SD=1.2; possible range=-1 to 9). Although total ACEs was not associated with RF, t-tests revealed that mothers with childhood sexual abuse histories and mothers with lifetime history of physical assault had poorer RF ( $t=2.16$ ,  $p<.05$ ,  $t=2.17$ ,  $p<.05$ ) than those without these experiences. Number of interpersonally-violent events tended to be related to poorer overall RF ( $r=-.19$ ,  $p<.10$ ). Yet women who reported witnessing partner violence as a child had better RF ( $t=-2.21$ ,  $p<.05$ ). Exploratory analyses revealed that participants who experienced childhood verbal, physical, and/or sexual abuse demonstrated especially poor mentalizing when asked about separations from and not 'clicking' with their child; participants with greater interpersonal trauma showed higher levels of bizarre/distorted mentalizing. Overall, results show complex associations between exposure to trauma and parental RF among mothers enrolled in IMH services, and highlight RF as a critical treatment target.

S61.3

**EMPIRICAL BASED INTERVENTION FOR TRAUMATIZED MOTHERS AND THEIR CHILDREN FOLLOWING THE EXPERIENCE OF INTERPERSONAL VIOLENCE.**

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Previous research has shown links between maternal interpersonal violence-related Posttraumatic Stress Disorder (IPV-PTSD), maternal mental representations as marked by negative and age-inappropriate (i.e. distorted) maternal attributions, and maternal-child behavior. Based on findings from the Parent-Child Interaction Project (New York) and Geneva Early Childhood Stress Project, Clinician Assisted Videofeedback Exposure-Approach Therapy (CAVEAT) was developed as an intervention to target the effects of maternal IPV-PTSD on the maternal-child relationship and on social-emotional development during infancy and early childhood. Empirical findings from 2 samples are reviewed, the most recent sample of 84 mothers and children in which a range of psychiatric, behavioral (CARE-Index, Emotional Face-Matching Task), physiologic and neuromaging measures were obtained, maternal reflective functioning (MRF) included. Findings from both a clinically referred and non-referred sample supported increased emotion appraisal errors and negative and age-inappropriate attributions towards their children, with significant reduction post-CAVEAT introduction change correlated to the level of baseline maternal RF. Further MRF data will be presented in relation to maternal sensitive and controlling behavior on the CARE-Index ( $p < .05$ ) will be presented. The presentation concludes with discussion of the role of CAVEAT in targeting these foci and an overview of the manual in modeling. By eliciting and modeling MRF and supporting sensitive affect appraisal and responsiveness during the therapeutic process following joint attention to video excerpts that display child negative affect that IPV-PTSD mothers the authors hypothesize that sustained positive change can be realized.

S61.4

**DESIGNING A MENTALIZATION-BASED INTERVENTION FOR ADULTS WITH HISTORY OF CHILDHOOD MALTREATMENT AND WHO ARE AWAITING A CHILD: THE STEP PROJECT**

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Transition to parenthood is recognized as a challenging period for mental health, especially when parents have been exposed to childhood maltreatment (CM). Efficient parenting interventions exist to help high-risk parents to cope with the birth of a child and to support the parent-child relationship, but no program intervenes on unmentalized trauma-related affects and cognitions involved in the intergenerational transmission of trauma. The general aim of this study is to present two concertation processes helping to design a prenatal group intervention aimed at adults who have experienced CM and are awaiting a child. The specific aims are to describe these qualitative processes and their results, and to explore how their outputs could lead to actions targeting to improve mentalization in this population. Fifteen stakeholders representing nine different health care and community organizations participated in a Delphi process during which they scored and discussed the pertinence of proposed actions on different topics related to parenthood in the context of interpersonal trauma. Moreover, ten parents who have been exposed to CM participated to a semi-structured interview to identify their perceptions of the needs of maltreated parents in term of interventions. The former part of the study have shown that two clusters of actions are of critical importance for interventions with adults awaiting a child and who have personal history of

interpersonal traumas: actions strengthening mentalization regarding parenthood, and actions aiming to support mentalization of trauma. The latter concertation process is still in progress, and the results of a preliminary thematic analysis will be presented. The viewpoint of skateholders and parents who have been exposed to CM gives a helpful insight to frame a prenatal group intervention promoting the physical and mental health of adults exposed to CM, and aiming to interrupt the intergenerational transmission of risk.

S61.5

### **CHANGES IN PARENTAL REFLECTIVE FUNCTIONING: PILOT RESULTS FROM AN INFANT-TODDLER COURT TEAM INTERVENTION**

**Stacks A.\*, Barron C., Wong K.**

*Wayne State University ~ Detroit ~ United States of America*

Maltreated infants show lower rates of secure attachment. Interventions can reduce rates of insecurity by improving caregiver sensitivity. IMH treatment targets sensitivity and security by improving caregiver reflective functioning (RF). Yet no published studies have assessed RF in maltreating samples or changes in RF as a result of treatment.

1. To describe how RF changes in a sample of maltreating parents participating in IMH treatment as part of a court team.
2. To assess changes in RF from pre- to posttest.
3. To explore whether risk factors are associated with changes in RF.

Sixteen parents participated in IMH treatment as part of an infant-toddler court team. RF was measured using the Parent Development Interview at pre- and posttest and coded using the parental RF coding system. RF scores were in the low range at both the pretest ( $M = 2.50$ ) and the posttest ( $M = 3.25$ ). Ten parents (62.5%) increased their RF score by at least 1 scale point; 43.8% demonstrated an increase in the number of types of RF used in the interview. Parents demonstrated significant increases in RF ( $Z = -2.37$   $p < .05$ ), which represents a moderate effect ( $r = .42$ ). Baseline risk was associated with change. Parents with low RF ( $< 3$  at baseline;  $N = 8$ ), showed greater increases in RF ( $p = .06$ ;  $r = .51$ ) than those whose scores were  $>3$  at baseline ( $p = .16$ ;  $r = .38$ ). Parents who had been in foster care as children also demonstrated significant increases in RF ( $n = 8$ ;  $p = .02$ ,  $r = .61$ ). Parents who were not in foster care did not show improvements in reflective functioning ( $p = .66$ ;  $r = .11$ ). IMH intervention was effective at increasing RF, especially for those with more baseline risk.

### **Symposium S65 - PARENT MENTAL HEALTH, REFLECTIVE FUNCTION, AND SOCIAL SUPPORT: EFFECTS ON PARENTING AND YOUNG CHILDREN'S DEVELOPMENT**

**Julian M.\*<sup>[1]</sup>, Guedeney A.<sup>[2]</sup>**

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Parents play a critical role in young children's development, and there is a solid base of evidence supporting the association between sensitive and responsive parenting and child wellbeing. However, less is known regarding what factors affect parents' ability to provide sensitive and responsive parenting. In this symposium, four talks explore how parent factors (i.e., reflective function, mental health, social support) relate to parenting behavior and children's development. The first talk found that parents' prenatal reflective functioning (i.e., capacity to imagine mental states in self and others) predicts their positive and negative parenting behaviors and their child's attachment and social-emotional competence at 2-years-old. The second talk discusses results showing that parents who talked about their relationship with their child in an emotion-activating

style and with low coherence showed less emotional responsiveness and positive affect in parent-child interactions—but only if they also had high self-reported mental health problems. The third paper then explores the role of parents' social support; this study found that parents with high levels of risk due to mental health, stress, or trauma history only showed poorer parenting behaviors if they also had low levels of social support. Finally, the last paper discusses the role of maternal depression in parenting and child development; this study found that depressed mothers showed less sensitive parenting at 14 months, and were more likely to move from sensitive to stressed parenting by 24 months. Children exposed to stressed parenting in toddlerhood showed more dysregulated aggressive and disoriented content themes in story stems at 5-years-old. Collectively, these papers present multiple perspectives suggesting that parents' mental health, reflective functioning, and social support play a vital role in parents' ability to provide sensitive and responsive care to their young children, both directly and indirectly through moderated effects. The discussant will examine implications of these findings.

S65.2

### **STABILITY OF PARENTAL REFLECTIVE FUNCTIONING ACROSS THE BIRTH OF A CHILD AND ASSOCIATIONS WITH PARENTING AND TODDLER ATTACHMENT SECURITY AT 2-YEARS POSTPARTUM**

**Pitzen J.\*<sup>[1]</sup>, Franz S.<sup>[2]</sup>, Riggs J.<sup>[1]</sup>, Huth--Bocks A.<sup>[3]</sup>**

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Parental reflective functioning (RF) refers to parents' capacity to have accurate perceptions about their child's mental states and their parenting experiences (Slade, 2005). While research indicates that RF assessed via the Adult Attachment Interview is a stable construct (Taubner et al., 2013), there has been little research examining the stability of parental RF. The present study examined the stability of parental RF assessed prenatally and 2-years postpartum and examined whether RF at these time periods predicted observed parenting, attachment security, and toddlers' social-emotional competence. Participants (N=93) came from a larger, longitudinal study on parenting beginning during the third trimester of pregnancy and ending at 3-years postpartum. Parental RF was assessed during pregnancy and 2-years postpartum using the Reflective Parenting scale (Rosenblum et al., 2008) for the Working Model of the Child Interview (Zeanah & Benoit, 1995). Positive and negative parenting composites were derived from coded parent-child free play interactions at 2-years postpartum. Toddlers' attachment security (assessed using the Attachment Q-set; Waters, 1987) and social-emotional competence (assessed using the Brief Infant-Toddler Social and Emotional Assessment; Briggs-Gowan & Carter, 2007) were also measured at 2-years. Results for those with coded RF at both time periods (n=40; coding is ongoing) showed a significant, positive correlation between prenatal and postnatal parental RF ( $r=.41$ ,  $p<.05$ ). Multiple regression analyses showed that prenatal RF significantly predicted more positive ( $F(1,31)=10.40$ ,  $p<.01$ ) and less negative parenting ( $F(1,31)=6.30$ ,  $p<.05$ ), greater attachment security ( $F(1,32)=6.43$ ,  $p<.05$ ), and greater social-emotional competence ( $F(1,33)=9.67$ ,  $p<.01$ ) at 2-years postpartum. Analyses with the completely coded RF dataset will examine how concurrent parental RF contributes to predicting parenting outcomes. Results of the present study suggest that parental RF remains relatively stable over time, without intervention, and that prenatal RF plays a significant role in dyadic outcomes, highlighting its importance as an intervention target for infant mental health services.

S65.3

### **PARENTING IN MILITARY FAMILIES WITH YOUNG CHILDREN: THE ROLE OF MENTAL REPRESENTATIONS AND PARENTAL MENTAL HEALTH**

**Julian M.\*<sup>[1]</sup>, Menke R.<sup>[1]</sup>, Bocknek E.L.<sup>[2]</sup>, Muzik M.<sup>[1]</sup>, Rosenblum K.<sup>[1]</sup>**

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Mental representations of relationships are central to parenting behaviors that affect young children's development. Parental mental health affects young children's development, but it is not yet known how parents' mental health relates to their representations and parenting behaviors. Using a sample of military families with young children, this study examines associations between parental representations and observed parenting behavior, and how these associations differ based on parents' mental health. Eighty-two parents (35 male) completed questionnaires (demographics, Patient Health Questionnaire-9, PTSD Checklist), Working Model of the Child Interview (WMCI), and the Crowell parent-child interaction procedure during a home visit. Videotaped Crowell interactions were coded for parents' Behavioral Responsiveness, Emotional Responsiveness, Positive Affect, Irritability/Anger. Security of parent representations were assessed via WMCI transcripts coded for Typology (Balanced, Disengaged, Distorted). A composite Mental Health Problems variable was created by standardizing and averaging PHQ-9 and PTSD scores. Hierarchical regression models were run for each parenting variable (Step 1: Demographic Risk Factors, Mental Health Problems; Step 2: Typology; Step 3: Mental Health Problems x Typology interactions). The overall models were significant for Behavioral Responsiveness, Emotional Responsiveness, and Positive Affect, with effect sizes in the medium to large range ( $R^2 = .19, .26, .29$ ). More Demographic Risk Factors were associated with less positive parenting. Main effects of Typology suggest that Disengaged parents show less Emotional Responsiveness and Positive Affect than Balanced parents. However, this main effect is qualified by a Typology x Mental Health Problems interaction. Relative to Balanced parents, there is greater risk for less positive parenting among parents with Distorted typologies who also have self-rated higher mental health problems (Emotional Responsiveness  $\beta = -.23, p < .10$ ; Positive Affect  $\beta = -.28, p < .05$ ). Non-balanced representations may not pose a risk for parenting behaviors unless parents also have mental health problems, and secure, Balanced representations may be protective for parents with mental health problems.

S65.4

### **SOCIAL SUPPORT MODERATES THE RELATIONSHIP BETWEEN PARENTAL RISK FACTORS AND OBSERVED PARENTING**

**Lawler J.M.\*<sup>[1]</sup>, Julian M.<sup>[2]</sup>, Brophy--Herb H.E.<sup>[3]</sup>, Jester J.<sup>[2]</sup>, Van Egeren L.<sup>[3]</sup>, Muzik M.<sup>[2]</sup>, Rosenblum K.<sup>[2]</sup>**

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Unresolved trauma and mental health problems have significant effects on parenting quality and child outcomes (Goodman & Gotlib, 1999). However, not all individuals with histories of trauma or current mental health symptoms show poor parenting. Social support is one aspect of the environment that may buffer parents from stressors such as past trauma and mental health problems (Kotchick, Dorsey, & Heller, 2005). The current study aims to examine the effect of parental social support on the relationship between parental risk factors and observed parenting behavior. Participants were 90 parents (78 mothers) and their young children recently enrolled in infant mental health home visiting services. Parents completed self-report questionnaires

examining: 1) Adverse Childhood Experiences, 2) Depression symptoms (Patient Health Questionnaire-9), 3) Post-traumatic Stress Disorder symptoms (PTSD Checklist-5), 4) Parenting Stress (Parenting Stress Index-Short form), and 5) Social support (Social Support Questionnaire). They were also videotaped in a 5-minute free-play interaction with their child, which was later coded for Dyadic Mutuality, or the coherent, synchronous mutually warm and cooperative interaction between a parent and child. Parent risk factors (1-4) were standardized and combined into a single risk composite. A multiple regression model was used to investigate whether the association between parental risk and quality of parenting depends on the amount of perceived social support. Results indicated that while greater parental risk and less social support were not significantly associated with lower observed parenting, the interaction between risk and social support was significant ( $b = .345$ ,  $SEb = .161$ ,  $\beta = .255$ ,  $p = .03$ ). Parents with high levels of risk showed poorer parenting only with low levels of social support. Perceived social support acts as a protective factor in parents experiencing stress or mental illness. Thus, interventions should target social support in high risk families.

S65.5

#### **EFFECTS OF MATERNAL DEPRESSION ON VARIATIONS IN PARENTING TYPOLOGIES ACROSS TODDLERHOOD AND RELATIONS TO PRESCHOOLERS' STORY STEMS**

**Martoccio T.L.<sup>[1]</sup>, Maupin A.N.<sup>[2]</sup>, Brophy--Herb H.E.<sup>[3]</sup>, Robinson J.L.<sup>[4]</sup>**

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Extensive research links parental psychosocial functioning and behavior with children's attachment quality (Verhage et al., 2016). Few studies have examined more nuanced patterns of early parenting and psychosocial characteristics as they relate to children's later representations of their early attachment relationships, however. Here, we employ a longitudinal framework to examine effects of maternal depression on variations in parenting typologies across toddlerhood as they relate to preschoolers' regulatory behaviors. Data come from the Early Head Start Research and Evaluation Project (N = 437 mother-child dyads). Repeated (at 14 and 24 months) maternal parenting indicators include parenting behaviors (sensitive parenting [composite of positive regard and sensitivity], harsh-intrusive parenting [composite of negative regard and intrusiveness], and detached parenting [inversely transformed for skewness]), dyadic mutuality, parenting stress (distress and dysfunctional interaction scales from the Parenting Stress Index), and family conflict. Twenty-eight percent of mothers according to the Center for Epidemiologic Studies Depression scale clinical criteria ( $\geq 16$ ), reported risk for depression. At age 5 years, children completed four attachment-specific story stems from the MacArthur Story Stem Battery. Latent transition analysis found three early-occurring parenting typologies (stressed, sensitive/responsive, and problematic parenting). Depressed mothers showed more problematic parenting at 14 months (less sensitive/responsive and more negative behaviors) and were more likely to move from sensitive to stressed parenting by 24 months. Additionally, children exposed to stressed parenting (moderator positive/negative parenting behaviors and high parenting stress and family conflict) in toddlerhood showed more dysregulated aggressive and disoriented content themes and less coherence in their story stems. Findings suggest that early exposure to stressful parenting environments with limited sensitive parenting behaviors manifest in children's later dysregulated internal representations. The findings support efforts for the early detection and treatment of depression and associated risk factors in families to protect maternal and child health and well-being.

## **Symposium S68 - OBSERVING ADULT-CHILD INTERACTIONS IN EARLY INFANCY: THE CONTRIBUTION OF EMOTIONAL AVAILABILITY**

**Porreca A.\*<sup>[1]</sup>, Zeynep B.<sup>[2]</sup>**

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The symposium aims to prominently feature the importance of observing adult-child interactions during early infancy in populations of children living under at-risk conditions, in order to identify relational difficulties as well as strengths. Emotional Availability (EA) is a useful conceptual framework and measurement system to understand the quality of adult-child emotional relationship quality, given its dyadic nature and its applicability across a wide developmental spectrum and range of contexts. The EA Scales include four adult qualities (sensitivity, structuring, nonintrusiveness, and nonhostility) and two child qualities (responsiveness to the adult and involvement of the adult). A new modification of the system includes EA Zones, which is a way to measure attachment style, mapping onto traditional attachment categories: Emotionally available, Complicated, Detached, and Problematic. The work of Salo and colleagues will consider the longitudinal relations between maternal pregnancy qualities (a new measure of pregnancy EA, reflective functioning, and adult attachment) with maternal reflective functioning, EA, and the child's socio-emotional well-being later in infancy. The work of Nazzari and colleagues will consider the role of EA in moderating the adverse effects of antenatal maternal anxiety on the later onset of children's behavioral difficulties. The work of Lebiger-Vogel and colleagues will feature the effects of EA on children's cortisol during the transition to kindergarten in children from "hard-to-reach" families, characterized by an immigrant background. Finally, the work of Porreca and colleagues will consider the early development of EA in dyads considered at risk for the presence of maternal substance use disorder. The collection of findings from these very diverse family backgrounds and at-risk conditions have implications for timely and tailored interventions. Zeynep Biringen will be the discussant and will consider the four research studies, concerning the use of the EAS across different populations and ages.

S68.2

### **EMOTIONAL AVAILABILITY, REFLECTIVE FUNCTIONING AND ADULT ATTACHMENT AMONG PRENATALLY DEPRESSED MOTHERS AS PREDICTORS OF CHILD WELL-BEING: A 2 YEAR-FOLLOW-UP STUDY**

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Pregnancy has been identified as a time of psychological change during which reflective functioning (RF) (Slade, Patterson, & Miller, 2007) and overall feelings about attachment and emotional relationships become highlighted (Cranley, 1981). However, few studies have focused on evaluating longitudinally the associations between prenatal RF, the emotional relationship with the fetus, adult attachment, and later indicators of child well-being. The aim of the study is to investigate the longitudinal relations between prenatal EA, RF, and Adult Attachment with later RF and EA measured during infancy along with measures on child socio-emotional well-being. The sample was comprised 45 prenatally low-to-moderately depressed mothers screened between 22 - 31 gw from a community sample using the Edinburgh Perinatal/Postnatal Depression Scale (EPDS; Cox, Holden,

& Sagovsky, 1987; scores <7 and >16). Reflective functioning was assessed twice, during pregnancy using Pregnancy Interview (PI), and Parent Development Interview at the age of one (PDI) (Slade et al., 2004; 2007). Emotional availability was assessed during pregnancy using modification of the original EA Scales (Salo, Flykt, & Biringer, 2016), and EA Scales at the age of one (Biringer, 2008). On both occasions, EA was scored from a semi-structured video-recorded procedure called the MIM (Marschak Interaction Method, 1960). Adult attachment (AAI; Main, George, & Kaplan, 1985) was measured during pregnancy. All measures were coded blindly by reliable coders. Child socio-emotional well-being was assessed using two questionnaires at the ages of one and two years (Bayley's Socio-Emotional Scale; Brief Infant Toddler Socioemotional Assessment, BITSEA; Briggs-Gowan, 2002). The preliminary results show predictive relations of pregnancy measures (RF, adult attachment, and observed qualities of mother-fetus EA) with RF and EA, as well as indicators of child socio-emotional well-being, later in infancy. Focusing preventively on prenatal maternal caregiving variables of RF and EA is indicated.

S68.3

### **MATERNAL EMOTIONAL AVAILABILITY MODERATES THE ASSOCIATION BETWEEN ANTENATAL MATERNAL ANXIETY AND INFANTS' BEHAVIORAL PROBLEMS**

**Nazzari S.\*<sup>[1]</sup>, Dottori N.<sup>[2]</sup>, Molteni M.<sup>[2]</sup>, Rice F.<sup>[1]</sup>, Fearon P.<sup>[1]</sup>, Frigerio A.<sup>[2]</sup>**

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Several studies have consistently found that antenatal maternal stress, and more specifically anxiety, is strongly associated with offspring behavioral and emotional problems. However, recent evidence suggests that postnatal factors such as the quality of mother-infant relationship may moderate this association. This study aimed at exploring the role of mother-infant interaction in the relation between prenatal maternal anxiety and infants' behavioral problems, taking into account the role of postnatal maternal symptoms. As part of an ongoing longitudinal study, the State-Trait Anxiety Inventory (STAI) was administered in the third trimester of gestation, 3 and 14 months after delivery in a sample of approximately 90 women. Additionally, the Emotional Availability (EA) Scales were employed to assess the quality of mother-infant relationship 3 months after delivery, while the Child Behavior Checklist for Ages 1.5-5 years (CBCL/1½-5) was used to evaluate children behavioral and emotional problems at 14 months. Hierarchical linear regressions showed a main effect of prenatal anxiety on infants' Internalizing, Externalizing, and Total Behavioral Problems. Additionally, in line with our hypothesis, maternal antenatal anxiety in interaction with maternal sensitivity and structuring significantly predicted infant's Externalizing and Total Problems, while controlling for infant gender and postnatal maternal anxiety. Specifically, higher levels of maternal anxiety in pregnancy predicted more behavioral problems at 14 months only in infants who were exposed to less optimal maternal parenting at 3 months. Our preliminary findings suggest that the early caregiving environment may moderate the adverse effects of antenatal maternal anxiety on infants' behavioral problems, raising crucial questions about the timing and target of interventions.

S68.4

### **PROJECT FIRST STEPS – ASSOCIATIONS BETWEEN THE EMOTIONAL AVAILABILITY SCALES AND CORTISOL LEVELS DURING THE TRANSITION TO KINDERGARTEN IN CHILDREN WITH AN IMMIGRANT BACKGROUND**

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The transition to childcare is a challenging time in a child's life and leads to elevated levels of cortisol. These elevations may be influenced by the quality of the mother-child relationship. Remarkably little is known about cortisol production in response to the beginning of child care among children-at-risk, such as children with an immigrant background. This study aimed at exploring this phenomenon, taking into account the emotional availability of mother-child dyads. Data of a subgroup of N = 24 "hard-to-reach" mother-child dyads was collected in the context of the psychoanalytic early prevention project FIRST STEPS. Children's hair cortisol concentration (HCC) was assessed one week before and 3 months after kindergarten entry. Hair analysis was conducted for both times of measurement, reflecting the first 3 months after kindergarten entry and 3 months prior. Emotional availability was assessed shortly before kindergarten entry. Analyses demonstrated a significant rise in children's cortisol after kindergarten entry, indicating elevated cumulated physiological stress levels during the 3 months after kindergarten entry compared to the months prior. Mother's intrusiveness and child responsiveness were associated with the rise in cortisol, with lower cortisol increases in responsive children and children who have experienced less intrusive mother-child relationships. This result suggests that children with an immigrant background who experience more emotionally available mother-child relationships regulate the stress induced by kindergarten entry more effectively. The results suggest that supporting early mother-child relationships, in particular, mother's non-intrusiveness and children's responsiveness, by intervention may have a positive effect on the children's ability to regulate stress induced by kindergarten entry, thus promoting child development. Furthermore, interventions promoting intercultural parent work and the EA of early child care and kindergarten teachers could facilitate the empathetic support of these children during the transition to child care, too.

S68.5

#### **MOTHER-CHILD EMOTIONAL AVAILABILITY IN THE CONTEXT OF MATERNAL SUBSTANCE USE DISORDER**

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Substance use disorder (SUD) constitutes a severe risk factor for parenting, adult-child relationship quality, and later child development. Children of mothers with SUD are often exposed to less sensitive and responsive parenting and to higher levels of intrusiveness and hostility during mother-child interactions (Flykt et al., 2012). Such children often show higher levels of irritability and difficulties in emotion regulation, leading to alterations in the organization of interactions (Tronick et al., 2005). The study aimed to assess the development of relationship quality in the context of parental SUD beginning in the early months after birth to the end of the first year. The research involved 20 mothers with SUD and their children aged 1-3 months, attending a rehabilitation community program. Quality of mother-child relationship was assessed during admission (T1) and when the children were 12 months old (T2). The dyads were videotaped during 20-minutes of free-play interactions and assessed through the Emotional Availability Scales (EAS, 4th ed; Biringen, 2008) and the EA Zones (EA-Z) (formerly EA Clinical Screener; Biringen, 2008). The results highlighted a generally poor quality of interactions at the beginning of treatment, with most of the dyads being classified as Complicated (40.9%) or Detached (27.3%) on the EA-Z. On the EA Scales, there was a significant increase from T1 to T2 in child responsiveness ( $Z=-2.058$ ,  $p=.04$ ) as well as in child involvement ( $Z=-2.226$ ,  $p=.03$ ); no changes were found on the maternal scales ( $p>.05$ ). Mothers with SUD and their children are at high risk for experiencing interactive difficulties (given the high percentages of Complicated and Detached interactions) in early infancy. Adequate intervention strategies, specifically focused on mother-child relationship, are required to support parenting

abilities and to sustain dyadic emotion regulation. Considerations about the clinical implications of the results in terms of treatment will be presented.

## **Symposium S71 - PARENTAL MENTALIZING AND ITS CONTRIBUTION TO PARENTAL EXPERIENCE AND CHILD ADAPTATION**

**Dollberg D.\***

*Academic College of Tel Aviv Yaffo ~ Tel Aviv Yaffo ~ Israel*

Introduction: Parental mentalizing, the parent's ability to hold the child's mind in own mind, to perform a mental visualization of the child's various internal states (such as thoughts, feelings, and wishes) and to recognize that the child's actions are motivated by these internal states (Slade, 2005), attracts much research and clinical interest. It has been shown as contributing to optimal child functioning and positive parenting (Camoirano, 2017) and to parents' subjective experience with parenting (Shai, Dollberg, & Szepsenwol, 2017). Majority of research up to date has focused on mother's mentalizing whereas less is known about fathers' parental mentalizing or about mentalizing among parents of premature infants. Aims: To examine the contribution of parental mentalizing, assessed in fathers and mothers via varied modalities to parental experience and child adaptation. Method and Measures: Three studies, using varied methodologies to assess parental mentalizing and focusing on varied populations and child age groups are presented. The first study examines mothers' and fathers' verbal descriptions of their preschoolers and examines the role of parental mentalizing in moderating the link between exposure to parental conflict and child adaptation. The second study examines parents' reflective narratives and mind-minded behaviors during parent-infant interactions of preterm and full-term infants, testing for differences between the groups in terms of parents' mentalizing tendencies as well as links between parental stress and mentalizing. The third study examines the role of parental reported verbal mentalizing in mediating the link between parental prenatal alexythymia and parental self-regulation. Results and Conclusions: Taken together, the three studies show that parental mentalizing is an important contributor to parenting, parent-child relationship, and child adaptation in high- and low-risk developmental contexts.

S71.2

### **STUDY 1: PARENTAL MIND-MINDEDNESS AND ITS CONTRIBUTION TO CHILD ADAPTATION IN THE CONTEXT OF PARENTAL CONFLICT**

**Hanetz Gamliel K.\*, Dollberg D.**

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Mind-mindedness (MM), an aspect of parental mentalizing, is defined as parents' ability to treat their children as individuals with own minds and to "tune in" into what their children may be thinking or feeling (Meins, 2013). Mothers' MM has been shown as negatively associated with children's internalizing and externalizing behaviors (Meins, Munoz Centifamti, Fernyhough, & Fishburn, 2013). Furthermore, exposure of children to marital conflict during early childhood has been repeatedly associated with increase in children's internalizing and externalizing behaviors (Cummings, George, McCoy, & Davies, 2012). The sample consisted of 50 Israeli, heterosexual, co-residing families (50 mothers and 49 fathers) of 3-6 year old children. Each parent was individually interviewed with the Describe Your Child Interview (Meins et al., 1998) and MM was determined based on the parent's tendency to use mental attributes to describe the child. Parents also completed questionnaires regarding the child exposure to marital conflict (OPS, Porter & O'Leary, 1980), and child internalizing and externalizing behaviors (CBCL, Achenbach & Rescola, 2000). As predicted, mothers' MM was positively correlated with child externalizing behaviors, however, no

associations were found between mothers' and fathers' MM and internalizing behaviors or between fathers' MM and externalizing behaviors. Preacher and Hayes' bootstrapping method was implemented to examine for moderation effect and revealed that maternal MM moderated the link between OPS and CBCL externalizing behaviors so that positive associations between the two were present under low and moderate MM but not under high MM. Maternal MM can serve as a protective factor, shielding young children from potentially negative effects of exposure to marital conflict. Mothers who are high in MM can "put themselves in their child's shoes", identify their children's feelings and experiences when exposed to marital conflict, differentiate between their own needs and their children's needs during such events, and provide their children with age-appropriate explanations and comfort, which prevents them from developing externalizing behaviors.

S71.3

### **STUDY 2: PARENTAL MENTALIZING AMONG PARENTS OF PRETERM AND FULL-TERM INFANTS**

**Dollberg D.\*<sup>[1]</sup>, Leitner Y.<sup>[2]</sup>**

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Premature birth is stressful for parents (Davis, Edwards, Moha, Wollin, 2003). The birth of a premature infant may interfere with the parent's parenting, which, in return, may further impede the fragile infant's development (Sroufe, 2004). The birth of a premature infant is associated with increased parental stress, especially during the first postpartum months (Schappin, Wijnorcks, Venema & Jongmans, 2013). Parental stress has been shown to interfere with mentalizing, both directly (McMahon & Meins, 2013) and indirectly (Shai, Dollberg, & Szepsenwol, 2017). The sample consisted of 54 families of 6 months old infants (27 premature). Home visits were conducted, during which the PDI-R2-S interview (Slade et al., 2003) was administered to each parent individually, the Parent Stress Inventory (PSI, Abidin, 1995) was completed by each parent, and parent-infant interactions were video-recorded. Parental mentalizing was determined by parents' reflective functioning (PRF) on the interview and appropriate verbal comments (MM) were assessed during parent-infant interaction. No differences were found between parents' PRF scores and rate of MM comments in the two groups. Nevertheless, during the PDI interview, mothers of premature infants displayed less self-focused PRF compared to mothers of full-term infants. For fathers, a negative association was found between appropriate MM and fathers' PSI reports of child-focused stress, so that the more stressed the father felt, the less accurate his MM comments were. These preliminary results suggest that parental mentalizing is sensitive to parental stress. A mother who recently gave birth to a premature infant may be coping with traumatic memories regarding the delivery and stressful daily adjustments, which may result in a defensive reluctance to get in touch with her painful inner experiences, thus showing lowered self-reflectivity. A father of a premature infant is also likely to experience stress regarding his fragile infant, which can interfere with his ability to accurately read his infant's mental needs. Thus, prematurity may interfere with parents' mentalizing capacities and is an important target for early preventive and therapeutic interventions.

S71.4

### **STUDY 3: THE EMOTIONAL PATHWAY TO PARENTHOOD: THE MEDIATING ROLE OF PARENTAL MENTALIZING IN THE ASSOCIATION BETWEEN ALEXITHYMIA AND PARENTAL SELF EMOTION REGULATION IN FATHERS AND MOTHERS TRANSITIONING INTO PARENTHOOD**

**Mc Devitt--Shai D.\*<sup>[1]</sup>, Szepsenwol O.<sup>[2]</sup>, Lassri D.<sup>[3]</sup>**

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Becoming a parent is perhaps one of the most dramatic processes in the lives of people and entails significant changes that challenge individuals' emotion regulation capacities (Rutherford & Mayes, 2011; Swain, 2011). Nonetheless, the precise mechanisms that drive parents' emotional wellbeing in the transition to parenthood remain poorly understood (Rutherford et al., 2015). The first aim of the current longitudinal study was to investigate the extent to which people's prenatal alexithymia predicts the various ways parents regulate their own emotions while facing the inherent challenges in early parenting. The second aim was examining mechanisms involved in explaining the associations between prenatal alexithymia and postnatal parental self-emotion regulation, namely, postnatal depression and parental mentalizing. 105 community-based families participated in this longitudinal study, expecting their first child. Alexithymia was measured prenatally using the TAS-20 (Taylor, Ryan, & Bagby, 1985). All postnatal measurements were assessed at 6-month-of-age. Postnatal depression was assessed via the Edenborough Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987); parental mentalizing was evaluated using the PRFQ (Luyten, Mayes, Nijssens, & Fonagy, 2017); and parental self-regulation in the parenting context was measured using the PERI-2 (Lorber, Del Vecchio, Feder, & Slep, 2017). Analyses revealed direct associations between both fathers' and mothers'-to-be alexithymia and the prospective use of maladaptive parental-self-emotion regulation, above and beyond levels of postnatal depression. These associations were partially mediated by deficits in parental mentalizing capacities. Additional dyadic influences were exemplified. These longitudinal findings suggest that already in pregnancy, we can identify risk factors that will hinder the parent's postnatal ability to efficiently regulate his or her own emotions while parenting, and that this emotional path is mediated by low parental mentalizing, above and beyond postnatal depression. Results also highlight the importance of considering dyadic effects when examining individual parenting capacities.

## **Symposium S72 - A CONTRIBUTION OF THE PSYCHOANALYTICAL RESEARCH FOR DEVELOPMENTALLY SENSITIVE DIAGNOSES IN INFANCY**

**Von Klitzing K.\***

*University of Leipzig ~ Leipzig ~ Germany*

The presenters of this panel are at the same time clinicians and researchers and work with a psychoanalytical perspective in early diagnoses in infancy. The first lecture considers overlap between asymmetry and bidirectionality in the adult/infant relationship, and the sociocultural context influence in our clinical approach. Asymmetry focuses on parent's subjectivity, narcissism, reflective function, unconscious conflicts. Bidirectionality refers moment to moment interaction, highlighting preconstitution in infants for intersubjectivity, innate polysensoriality and intersensorial channels adult/infant as basis of intersubjectivity. Emotional availability is crucial in assessing parent infant emotions expressivity and communication. Cultural, social and economic resources, health services available and the professional's theoretical background and interdisciplinary approach are central in diagnoses and early intervention. The second lecture will focus on a three steps research project in which mother infant dyads were videotaped at 6 months and at 4 years of the infant in a play situation and mothers were interviewed with the Parental Developmental Interview, PDI RII, in order to assess Maternal Reflective Function. Results focus on the relationship between Dyadic Affective Regulation, Children's Affective Self-Regulation, Dysregulation signs, Symbolization level in children's play, Maternal Reflective Function. The third lecture refers to somatic complaints in children and its relation with affect regulation. Patients with

somatic complaints are markedly heterogeneous with regard to the factors contributing to their illness, symptoms, and treatment response. A medical cause can only be found in few cases. Through a quanti-qualitative research (questionnaires, self-reports and projective techniques), we focused on somatic complaints, emotion and affect dysregulation, negative mood, bodily awareness of emotions and attention of others emotions, and differences between boys and girls. In the subjective experience of the child we studied self-representations, distortions in cognitive patterns, organization of symbolic play and interpersonal relationships. Research results and clinical material will be displayed, sustained in video tapes in each lecture.

S72.2

### **SOMATIC COMPLAINTS AND EMOTION/AFFECT DYSREGULATION IN CHILDHOOD**

**Miller D.\***

*Catholic University of Uruguay ~ MONTEVIDEO ~ Uruguay*

Classic psychoanalytic theories point the relation between alexithymia and somatic complaints or psychosomatic illness. Some authors support the hypothesis that this way of coping may be a personality trait and others point out that it would be a confrontation mechanism against stressful life events. Actual studies argue the importance of emotion regulation, based on sensoryality, as a core of affect regulation, based on feelings, considering affect as emotion plus feelings. Patients with somatic complaints are markedly heterogeneous with regard to the factors contributing to their illness, their symptoms, and treatment response, but a medical cause can only be found in few cases. Therefore, increasing attention is paid to psychological factors that might be related. Research suggests a key role for attachment history and mentalization in determining stress and emotion/affect regulation. In our study we focus on how somatic complaints in early childhood are associated with emotion dysregulation and poor interpersonal relationships. We highlight the subjective experience of children, particularly the rooting of individual's internal world in interpersonal relationships, and the incidence of parent's response in symptom establishment. Through a quanti-qualitative research, we found evidence of the relation between somatic complaints, dysregulation, separation anxiety, negative mood, aggressiveness, fear, bodily awareness of emotions, attention of others emotions, responses to sensory stimuli, identification and expression of own affects (Alexithymia). Results showed significant difference between externalizing and internalizing expression of affects in relation with somatic complaints in boys and girls. And in subjective experience we focused on self-representations, cognitive patterns, symbolic play.

S72.3

### **EARLY DIAGNOSES THROUGH A SENSITIVE DEVELOPMENTAL PERSPECTIVE**

**Raznoszczyk Schejtman C.\***

*University of Buenos Aires ~ Buenos Aires ~ Argentina*

Early diagnoses with a sensitive developmental perspective need to consider the complexity of different aspects of psychic structure in infancy. We are working on the overlap between asymmetry and bidirectionality in the adult/infant relationship in each particular socio cultural context. In reference to asymmetry the clinical work focuses on parent's subjectivity, parental narcissism, parental reflective function and unconscious conflicts regarding parenthood and child representations. Parent's individual infantile history is taken into account regarding personal elaboration and possible projection on the child. In reference to bidirectionality we consider the intersubjective interplay between caregiver and child in the moment to moment interaction observed in the therapeutic setting, highlighting: innate polysensoriality, and unique intersensorial

channels between adult and infant; Dyadic affective regulation; Emotional availability as expression of a full range of emotions (negative and positive) by both parent and child, whose emotional expressions provide information about what each of them is feeling and communicating. We also explore the mutual affective transformation between parents and infant and the parent's holding attitude toward infant's dysregulation. Regarding the child subjectivity we focus on the building of the Self, infant narcissism, libidinal stages and affective regulation /dysregulation. This approach suggests dyadic and familiar sessions and sessions with each of the parents and with both parents together. We also consider that the cultural ideal regarding healthy development has a crucial role in parenthood. Socio/economic resources, health services available and professional's theoretical background and interdisciplinary approach are also central in diagnoses and early intervention. Clinical material will be presented.

S72.4

#### **DYADIC AFFECTIVE REGULATION AND DYSREGULATION**

**Vardy I.\***

*University of Buenos Aires ~ Buenos Aires ~ Argentina*

Some results of a research programme funded by the International Psychoanalytic Association and by University of Buenos Aires, Argentina will be presented regarding the relationship between Dyadic Affective Regulation, Children's Affective Self-Regulation, Dysregulation signs and Maternal Reflective Function in the first 5 years of life. 48 mothers and their healthy babies (age 23 to 31 weeks) were videotaped in two interactive situations: a- 3 minute Face to Face interaction, microanalyzed using the ICEP Scale -Infant and Caregiver Engagement Phases- (Tronick & Weinberg, 2000) and b- 5 minute Free Play with toys, codified every 5 seconds using the Free Play Scale (Tronick, 2000). 20 mothers of the sample were interviewed with the PDI R II, evaluating Maternal Reflective Function when their children were 4-5 years old and the dyads were videotaped in a 15 minute-free play interaction with toys, codified applying Play Interactive Scale (Duhalde et al 2010) to assess Symbolization Level and Dysregulation signs in the child during play. At 6 months, dyads spend only 16% of coded time in the Face to Face situation and 12,5% in the Free Play interaction in positive affect matching. Regarding Affective Self-Regulation, while in Face to Face 21/48 infants presented Oral Self Comforting (OSC) signs, in the Free Play only 2/48 infants presented OSC behaviors. Reflective mothers were more attuned to infants affective display in the Free play situation. When children were 4-5 years, Dysregulation signs in the child play were more frequent in children whose mothers show low Maternal Reflective Function and in children that show less Symbolization Level in play. A relation between Affective Regulation, Self Regulation and Dysregulation at 6 months and at 4-5 years and Maternal Reflective function will be discussed. We will discuss the relationship between parental function affective regulation maternal role.

#### **Symposium S77 - PERINATAL AFFECTIVE DISORDERS IN FATHERS: FROM ASSESSMENT TO TREATMENT**

**Baldoni F.\*<sup>[1]</sup>, Matthey S.<sup>[2]</sup>, Caretti V.<sup>[3]</sup>**

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Recent research confirms that the father plays an important role from the early stage of pregnancy. However, during the perinatal period many fathers show affective disorders (like Paternal Perinatal Depression or Anxiety disorders) that can negatively affect the couple's life, the mother's mental health, and the child's psychological and physical development (Ramchandani, Psychogiou, 2009;

Fletcher et al. 2011; Habib, 2012; Tuszyńska-Bogucka, Nawra, 2014; Edward et al., 2015; Leach et al., 2015; Sethna et al., 2015; Paulson et al., 2016). Affective perinatal disorders in fathers are not uncommon (Paulson, Bazemore, 2010), but tend to occur differently than in women and are often under-assessed or undiagnosed. In fact, men are usually less inclined to reveal any psychological difficulty and tend to show discomfort in the form of externalizing behaviors. For these reasons, the depressive symptoms tend to be milder and more indefinite, and they frequently overlap with other psychological or behavioural problems like: anxiety symptoms, abnormal illness behaviour (hypochondria, somatization, functional medical syndromes), anger attacks and acting out (violent behaviour, extra-marital relations, fugues), relational and couple conflicts, alcohol or drug abuse, and other addict disorders. Although affective disorders in fathers were neglected by research for many years, interest in this field has increased in the last decade, and some new methods for the assessment of these paternal disorders have been proposed (Baldoni et al., 2016). Research data on the role of the father during the perinatal period, and on the specific expression of paternal perinatal affective disorders, have changed the perspective of how to assess for such mood problems in men, which will thus also impinge on the development of more effective prevention and treatment programs. The topic of this symposium, consisting of four talks, is perinatal affective disorders in fathers and to consider new perspectives in assessment of and early intervention on these disorders, taking into account the data of recent research.

S77.2

#### **PERINATAL ASSESSMENT OF PATERNAL AFFECTIVITY (PAPA). FIRST VALIDATION IN ITALIAN SAMPLES**

**Baldoni F.\*<sup>[1]</sup>, Matthey S.<sup>[2]</sup>, Agostini F.<sup>[1]</sup>, Schimmenti A.<sup>[3]</sup>, Caretti V.<sup>[4]</sup>**

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The assessment of affective disorders in fathers during the perinatal period represents a difficult challenge for clinicians. The Perinatal Assessment of Paternal Affectivity (PAPA) (Baldoni et al., 2016) is a new self-report questionnaire for the screening of affective symptoms in fathers during the perinatal period. It has been developed in recent research on perinatal affective disorders and assesses different dimensions of paternal affective problems: anxiety, depression, hostility, relational and couple difficulties, somatic complaints, dangerous behaviors and addictions (smoke, alcohol, drugs, gambling, internet, physical or sexual compulsive and at risk behaviors). The PAPA has a simple structure and is very fast and simple to complete. It also considers some ethnic and socio-cultural influences. This study presents the incoming preliminary data of a multicentric validation study of the PAPA that involved many Italian public services (AUSL Romagna, Cagliari, 15 Alta Padovana, Torino, Foggia, Roma1). Different samples of fathers and mothers (500 couples, 1000 parents) were involved in the study. All participants, at the VII-VIII months prenatal and at 3 months postnatal, completed the following questionnaires: PAPA (prenatal and postnatal versions), CES-D, SCL-90-R, Analogical Symptom Assessment (ASA), Perceived Stress Scale (PSS), Dyadic Adjustment Scale (DAS), EPDS. Statistical analyses were performed using IBM SPSS Statistics (Version 23). Preliminary findings concerning the prenatal period showed significant association between PAPA total scores ( $P = .05$ ) and single scale scores with many scores on CES-D, SCL-90-R, ASA, PSS and DAS. Preliminary data of this Italian validation study confirm the PAPA as a useful tool for the screening of paternal affective disorders in the perinatal period. However, the PAPA doesn't permit an accurate diagnosis but provides a simple and practical guide for detecting fathers at high-risk of perinatal affective alteration. In these cases, a more in-depth diagnostic assessment and a possible treatment are required.

S77.3

**HOME VISITING IN HIGH-RISK FATHERS ASSESSED BY PAPA: A PROTOCOL FOR EARLY INTERVENTION IN AN ITALIAN MENTAL HEALTH SERVICE**

**Caretti V.<sup>[1]</sup>, Ducci G.<sup>[2]</sup>, Di Cesare G.<sup>[2]</sup>, Cacioppo M.<sup>[1]</sup>, Terrone G.\*<sup>[3]</sup>**

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Over the last few years, services in prevention and promotion in mental health have given importance to Home Visiting programs, that involve health experts (Terrone et al., 2017).

The aim is to offer an early and efficient support to the couple, emphasizing the exclusive importance of the mother in order to establish a quality mother-child interaction after the child is born. The Intervention Protocol adopted in Rome ASL RM1 has applied the procedure of Home Visiting in order to give necessary resources and skills to families that are considered at-risk, evaluating the affective and emotional state during the perinatal period by PAMA questionnaire for the mothers (n=150) and PAPA (Baldoni et al., 2016) questionnaire for the fathers (n=150). The home visits of the specialist aim to promote maternal and paternal sensitivity through specific techniques that facilitate taking the child's perspective (speaking for the child) and consist of a series of home-based video recordings. The specialist in charge works with both caregivers observing the videotape and proposing hypotheses about the reasons for the behavior during the interaction, with the goal of improving the dyadic and triadic exchange. Pearson's correlation showed a significant difference between parenting stress and dyadic adjustment ( $p > 0.05$ ). A multi-group analysis further found that the paths did not differ across mothers and fathers. The results suggest that mental health is an important dimension that mediates the relationship between parenting stress and dyadic adjustment in the transition to parenthood. Involvement of fathers in the treatment was important to improve the psychopathological symptoms of both parents and the quality of interactions with their children.

S77.4

**DEPRESSION AND ANXIETY DURING THE POSTNATAL PERIOD: ASSOCIATIONS BETWEEN MOTHERS AND FATHERS.**

**Giannotti M.\*<sup>[1]</sup>, Facondini E.<sup>[2]</sup>, Cena L.<sup>[3]</sup>, Ancora G.<sup>[2]</sup>, Chirico G.<sup>[4]</sup>, Baldoni F.<sup>[5]</sup>**

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<sup>[5]</sup>Department of Psychology, University of Bologna ~ Bologna ~ Italy

Literature has widely studied prenatal and postnatal depression in mothers, but recent research highlights that perinatal affective disorders are also a problem for fathers. Furthermore, many studies showed significant correlations between maternal and paternal perinatal mental states, confirming that when a parent suffers from a perinatal affective disorder, even the partner is at risk. The aim of this study is to investigate the possible association in mothers and fathers of affective symptoms during the postnatal period. The main hypotheses are: 1) depression and anxiety levels correlate in both parents at any postnatal time; 2) significative affective symptomatology in one parent is associated with a higher symptomatology in the partner. 122 parents (61 couples) were recruited in collaboration with the Rimini and Brescia Hospitals. At 3 months (T1) and 6 months (T2) after childbirth all subjects completed the Center for Epidemiological Studies Depression Scale (CES-D) and the State-Trait Anxiety Inventory (STAI-Y). Statistical analyses were performed using R-3.4.0 for Windows. 14 mothers (23%) and 7 fathers (11%) reported a significant depressive

symptomatology at 3 months postnatal (CES-D > 16). Unlike mothers (T2=8%), fathers showed an increased rate of significant depressive symptoms at 6 months (T2=16%). Correlations among paternal depression (T1), maternal anxiety (T1;  $p < .05$ ) and maternal depression (at any time point;  $p < .01$ ) were found. Moreover, paternal depressive symptomatology at 3 months resulted significantly associated with maternal depressive symptomatology at 6 months ( $p < .05$ ), but not vice versa. These findings confirm that maternal and paternal affective symptoms are associated in the first 6 months postnatal, suggesting the need to support both parents during the post-partum period. Furthermore, professionals should become aware of the different expression of affective disorders in fathers and mothers and their possible effect on the partner's mental state.

### **Symposium S80 - ATTUNEMENT IN THE CONSULTATION RELATIONSHIP: A NEW APPROACH TO TRAINING INFANT AND EARLY CHILDHOOD CONSULTANTS**

**Gilkerson L.<sup>[1]</sup>, Steier A.\*<sup>[2]</sup>**

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Infant and Early Childhood Mental Health Consultation (I-ECMHC) refers to partnering of mental health professionals with child care and education providers to enhance their capacity to understand and meet the social and emotional needs of children in their care. A central part of the model is the "consultation stance," which distinguishes this intervention from direct mental health strategies such as assessment or treatment. The effectiveness of I-ECMHC to early care and education programs has been well established in the US in large-scale evaluations and rigorous studies, including random-controlled experiments. However, much less focus has been placed on how to prepare consultants to operationalize the consultation stance and on its unique contribution to the overall consultation outcomes. In this symposium, we hear from recognized leaders in the US, representing three statewide systems of I-ECMHC, each of which has added specialized training to operationalize the consultation stance. The training is based on the FAN (Facilitating Attuned Interactions) approach to engagement and reflective practice. Adapted for I-ECMHC, the Consultation FAN provides a structure for the consultation, called the ARC of Engagement, and a conceptual framework and practical tool for attunement to the consultatee's primary concerns and preferred ways of engaging in the consultation interaction. The presentations will (1) present the FAN approach, its theory of change, five core processes and attunement process, (2) describe the training and mentoring process in learning the FAN approach and illustrate the process with a case study, (4) describe the impact of the infusion of the FAN into a well-established state system and (5) present findings of a multi-site qualitative study examining the effect of the FAN on the consultant's sense of efficacy from the perspective of the consultants and their supervisors.

S80.2

### **CONSULTATION FAN: THEORY OF CHANGE AND CORE PROCESSES**

**Heffron M.C.\***

*UCSF Benioff Children's Hospital ~ Oakland, CA ~ United States of America*

The theory of change guiding the FAN is that of attunement defined as feeling connected and understood. It is a form of resonance with another which opens the space for change. The FAN prepares the consultant to attune to the client's cues for engagement, use the FAN Core processes to offer interactions which most closely respond to what the client can use in the moment, and then move flexibly based on the responses. The five core processes will be described and illustrated with examples from consultation. Mindful Self-Regulation focuses on the consultant's self-awareness by developing the ability to track and regulate his/her own responses in order to stay calm and present

for the client. Empathic Inquiry is providing listening with acceptance and inquiry when feelings take precedence; Collaborative Exploration is used when affect is contained, and client wants to think together to understand the concern; Capacity Building is used when the consultatee is able to focus and take in new information and guidance. Integration highlights their insights and discoveries. The FAN ARC of Engagement provides structure using reflective questions during pre-contact, beginning, middle and end of the consultation to promote collaboration and reflective functioning. FAN provides a tool for reflection in action to help “think on your feet” and after action to understand where and why there was attunement or misattunement and what might be learned for the future.

S80.3

### **PARALLEL PROCESS APPROACH TO TEACHING AND LEARNING THE CONSULTATION FAN**

**Heller S.\*<sup>[1]</sup>, Whitman K.<sup>[2]</sup>**

*<sup>[1]</sup>Tulane University ~ New Orleans, LA ~ United States of America, <sup>[2]</sup>Mid -South Health Systems ~ Jonesboro, AR ~ United States of America*

Consultation FAN Training includes a two-day Core Training for the consultants and their supervisors, followed by a period of 6-8 months of Facilitated Practice where the consultant is supported in using the approach in their work. The presenter will describe the training content and illustrate the parallel process approach to training wherein the trainers model the use of the ARC of Engagement and the FAN attunement process in their interactions during training. The presenter will engage the participants in a brief training activity on Mindful Self-Regulation. During Facilitated Practice, the consultants complete Post-Consultation Reflective Learning Tools after their contacts with a teacher, center director, or parent and review these with their supervisor, who is then mentored by the FAN Trainer. The supervisor also uses a reflective tool to record their experience. The presenter will review the reflective tools and the parallel process that the supervisor uses to guide the FAN discussions in supervision. To illustrate this reflective process, a case study which includes examples of completed Reflective Tools by the consultant and supervisor will be presented.

S80.4

### **SUSTAINING THE FAN IN PRACTICE IN A STATEWIDE SYSTEM OF CONSULTATION**

**Steier A.\*<sup>[1]</sup>, Shivers E.M.<sup>[2]</sup>**

*<sup>[1]</sup>Southwest Human Development ~ Phoenix, AZ ~ United States of America, <sup>[2]</sup>Indigo Cultural Center ~ Phoenix, AZ ~ United States of America*

The discussion will begin with the rationale for adding the FAN Approach to an already well-established program with demonstrated efficacy. All mental health consultants (n=36) and supervisors (n=8) were trained in the FAN using the process described above. Here we focus on the strategies in place to maintain a high degree of proficiency on the FAN Approach and fidelity to the model, support new employees to learn it, and encourage its persistent use within the program. Survey findings will be presented related to the FAN as “value added” in the work of mental health consultation. We highlight the specific value that the ARC of Engagement and FAN processes have for new consultants and for experienced consultants. Finally, special consideration when applying the FAN Approach in early care and education settings will be discussed.

S80.5

### **IMPACT OF THE FAN ON THE CONSULTANT’S SENSE OF EFFICACY**

**Edge N.\*<sup>[1]</sup>, Gilkerson L.<sup>[2]</sup>, Steier A.<sup>[3]</sup>, Heller S.S.<sup>[4]</sup>, Drnach G.<sup>[4]</sup>, Barry J.<sup>[2]</sup>**

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The study uses a series of focus groups to explore the impact of the FAN approach from the perspective of I-ECMH consultants and their supervisors. Separate groups are conducted with supervisors, consultants who received FAN training during their orientation prior to starting their work, and consultants who received FAN training during implementation of consultation. Coding is focused on identifying themes related to how consultants incorporated the ARC and FAN core processes (e.g. mindful self-regulation, empathic inquiry) into their consultation work and specifically how the FAN training enhanced their ability to adhere to core principles of I-ECMHC. Emerging themes indicate consultants view the FAN approach as a concrete tool able to help them embody the consultative stance. Key themes involve the use of Mindful self-regulation as a tool that has enhanced the consultants' ability to stay calm in difficult cases, the role of Empathic Inquiry in diffusing teacher frustration and how the FAN approach has helped consultants observe teachers' cues and avoid 'jumping ahead' with solutions the teacher is not ready to hear. Results suggest that consultants and supervisors have found training in the FAN approach to benefit their practice of I-ECMHC.

#### **Symposium S81 - THE MATERNAL LOOKING GUIDE TRAINING VIDEO PACKAGE EVALUATION: RESULTS AND LEARNINGS FROM EVALUATING THE TRAINING ACROSS THREE INTERNATIONAL SITES AND CONTEXTS**

**O'Rourke P.\*<sup>[1]</sup>, Maguire C.<sup>[2]</sup>**

<sup>[1]</sup>Women's and Children's Health Network ~ Adelaide ~ Australia, <sup>[2]</sup>Irish Association for Infant Mental Health ~ Cork ~ Ireland

The Maternal Looking Guide (MLG) training video package was developed with the Maternal Looking Guide as part of recently completed research in Adelaide, Australia. Prior to wider implementation, the training package has been evaluated across four countries with midwives and IMH workers, both students and experienced workers. Data was gathered regarding the effectiveness of the training package and the requirements essential for implementation in different sites and contexts. The symposium will provide the results and learnings from each site. The discussant will reflect on the results presented, the referral pathways and understandings necessary for this knowledge to be translated into best practice for mothers and their infants, and facilitate discussion.

S81.2

#### **THE MATERNAL LOOKING GUIDE TRAINING VIDEO PACKAGE EVALUATION: THE DEVELOPMENT OF THE MLG TRAINING AND AN OUTLINE OF THE EVALUATION**

**O'Rourke P.\***

*Women's and Children's Health Network ~ Adelaide ~ Australia*

The Maternal Looking Guide (MLG) is a recently developed, clinical tool for midwives and infant mental health workers that can be used for early assessment and decision-making about the mother-infant relationship. The tool uses maternal looking and associated looking behaviours to identify possible relational difficulties between a mother and her newborn. Maternal looking—the unidirectional looking by a mother at her newborn baby over the first hours and days post birth—is a precursor to bi-directional mother-infant gaze. Mothers need to make space in their mind for their babies to look, to be a mirror for their baby so their baby can engage in face-to-face interaction with them. The MLG reliably translates well-researched knowledge of the importance of gaze to early

relationship into evidence-based behaviours. It validates previous clinical intuition and assists organisations to allocate scarce resources to those who most need them. The fifty-minute training video consists of information about maternal looking and its role in infant gaze and the mother-infant relationship. The video uses four vignettes to demonstrate the various categories and parameters of the tool, and includes a practice tape. The evaluation has met the ethical requirements of the Australian National Statement on Ethical Conduct in Human Research and was conducted in Australia, Ireland, Norway, and the USA. Data was gathered regarding the usability of the training package and the requirements essential for implementation in different sites and contexts.

S81.3

### **THE MATERNAL LOOKING GUIDE VIDEO TRAINING PACKAGE EVALUATION: RESULTS FROM MICHIGAN, USA**

**Ribaudo J.\***

*University of Michigan ~ Michigan ~ United States of America*

Though many professional disciplines interact with families in the perinatal and infancy phase of family life, attention to training practitioners who work with these families is nascent in the United States. Very little focused training exists to develop the skills of master's level clinical social workers who with interact with the parents of newborns. This evaluation examines the applicability of and user satisfaction with the Maternal Looking Guide (MLG) and the accompanying training video among Masters in Social Work (MSW) students who are studying to become social workers. Two groups of students were recruited: one group studying to become general clinical social workers, and a smaller group interested in becoming infant mental health (IMH) specialists. Approximately 50 students were recruited across the two groups. Both groups agreed to join the study as part of a course class. The data concerning the training was collected immediately after training, and data concerning the usability of the tool was collected approximately two months after training. Qualitative data has been gathered regarding:

- the value of the MLG in training MSW students to observe mother-infant interactions
- the kind of knowledge and type of experience needed to understand and use the MLG
- the usefulness of the MLG and the training video in training IMH students to consider suitable intervention strategies.

S81.4

### **THE MATERNAL LOOKING GUIDE VIDEO TRAINING PACKAGE EVALUATION: RESULTS FROM CORK, IRELAND**

**O'Sullivan C., Williams C.\***

*Cork University Maternity Hospital ~ Cork ~ Ireland*

This study examines the thoughts, feelings and experiences of thirty experienced midwives who participated in the piloting of the Maternal Looking Guide (MLG) and the accompanying training video. It also examined the midwives' experience and use of the MLG. Thirty midwives were voluntarily recruited from an antenatal ward, a postnatal ward and the DOMINO scheme. A number of the participants had received a masterclass in Infant Mental Health Training and a number had completed a 6 day preparation for birth and parenthood education facilitation module. Data was collected immediately after the video training was conducted and further data concerning the use of the tool was collected two months post training. The focus of this evaluation was on the usability of the MLG training video and the MLG. Qualitative data was gathered regarding:

- the midwives' experience of the helpfulness of the training video in understanding more about

the mother-infant relationship

- identification of possible relational difficulties in the perinatal period
- baseline knowledge and type of experience required to understand and use the MLG,
- systemic requirements for implementation
- the most appropriate referral pathways and specific interventions required for mothers and babies identified by the categories outlined in the MLG.

It is hoped that the evaluation of the MLG will support the implementation of this valuable tool into our maternity hospital.

S81.5

## **THE MATERNAL LOOKING GUIDE VIDEO TRAINING PACKAGE EVALUATION - RESULTS FROM BERGEN, NORWAY**

**Greve R.A.\***

*University of Applied Sciences ~ Bergen ~ Norway*

The Norwegian welfare system grants every newborn child a free, universal and extensive health care service. It provides an interdisciplinary approach to supporting families. This approach includes midwives, public health nurses, social workers and special educators in the primary health care system. This evaluation examined the applicability of and user satisfaction with the Maternal Looking Guide (MLG) and the accompanying training video with two groups of participants in Norway:

1. experienced public health nurses and midwives
2. students who are studying to become public health nurses.

Approximately thirty participants were recruited in each group. Group 1 participants were recruited when they took part in NBO-training, and group 2 were asked to join the study as part of their course class. The data concerning the training was collected immediately after training, and data concerning the usability of the MLG was collected approximately 2 months after training was delivered. Qualitative data was gathered regarding:

- the requirements for implementation
- the kind of knowledge and type of experience needed to understand and use the MLG
- how effectively use of the MLG identified dyads who may benefit from an intervention
- possibilities for intervention aimed at mothers identified by the MLG.

## **Poster Workshop PW07 - PARENTHOOD AND CHILD DISABILITY**

PW07.1

### **THE CONSENSUS PAPER ON PARENTHOOD AND CHILDREN'S DISABILITY**

**Grasso F.\***

*Accompagnare la Genitorialità - IMPRESA SOCIALE ONLUS ~ CATANIA ~ Italy*

This work presents the actions aims at creating an exploratory dossier, based on acknowledgment, titled 'Parenthood and Children Disability' with a view to fostering reflections, inside and outside the Waimh, on the special significance of this issue in the field of children mental health. A consensus paper (CP) has been developed as a starting point for debate. It is addressed to those who work and deal with disabilities; to parents and their Associations; and to all those who, for their profession and/or role, deal with children with disability. The Paper consists of three parts that can be reviewed and expanded as the work progresses: 1) the Preliminary Assumptions, where some statements are made on the characteristics and the special aspects of parenthood of children with disabilities; 2) Building Knowledge, i.e. the call for an active cooperation to survey what and to what

extent research, clinical prevention, and social policies appear in scientific literature to date; 3) Some key points for consensus listed in groups under the Understanding, Preventing, Accompanying & Caring labels. The methodology is participatory and based on interval distribution, which means contributions will be distributed in rounds as follows. 1. All contributors will receive the contributions and opinions obtained. 2. Contributions will be grouped by conceptual similarity and the percentage of agreement/disagreement/neutrality will be shown. 3. Further information will be disseminated after original contribution have been processed with a view to validate such information and consensus opinions. The dissemination of the CP is in progress. Until now, the CP has been distributed to 26 international working groups from France, Israel, Lebanon, Palestine, UK, Bulgaria, USA, Belgium, the Netherlands, Italy, etc. that have shown interest in the initiative and submitted to the AISMI (Waimh Italy). We are expecting clinical as well as research contributions by the authors concerned

PW07.2

### **THE EXTRA BURDEN OF DISABILITY ON EMOTIONS AND THINKING: CONSIDERATIONS IN A CASE OF CP , ABIGAIL 9 MONTHS OLD**

**Acquarone S.\***

*Parent Infant Clinic and The School Of Infant Mental Health ~ London ~ United Kingdom*

This presentation will account for the early intervention with ABIGAIL, nine month old, Cerebral Palsy and Failure To Thrive and her family. This is part of a project to offer early psychoanalytic interventions to babies with special Needs that had had all sort of other interventions and parents would like to give up the babies for adoption. Referred by Accident and emergency services because mother couldn't cope any longer with her screaming baby, if she was not hanging from her left arm. I will describe the process :of assessment, and psychoanalytic early intervention will be recounted to understand the deep dynamics involved. We assessed the individual needs and offer initially a two days assessment. The mother and the baby alone, and the entire family consisting of a girls 4 years older, and the father. Individual and joint weekly one hour meetings with mother and baby. We include in the understanding different clinical theories and approaches including: psychoanalytic thinking, relational psychotherapy; attachment theory and neuroscience. We offered 5 sessions initially and given the level of trauma revealed, we continued for a year and half. Mother and child understanding of their emotions involved, helped the process of attachment. Father and sibling benefited from the experience of understanding the dynamics and being able to keep the family together and develop a realistic and positive relationship with each other. It is possible to imagine how the vulnerability of the disable child and her parents (manifested from pregnancy), can start vicious circles of perverse behaviour and other manifestations which fragment the family, and prevent emotional and physical growth

PW07.3

### **SIBLINGS OF CHILDREN WITH CHRONIC NEUROLOGICAL DISEASE: A QUANTITATIVE AND QUALITATIVE STUDY WITH A CLINICAL INTERVIEW**

**Ferruzza E.\*<sup>[1]</sup>, Sale E.<sup>[2]</sup>, Passera C.<sup>[3]</sup>, Gatto Rotondo C.<sup>[1]</sup>, Balottin L.<sup>[4]</sup>**

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The traumatic experience of families with a disabled child presents many peculiarities that deserve particular attention especially for the impact on the healthy siblings' development (Boucher, 2003), with the risk of psychopathological relapses. Purposes of the work is to compare: - the profile of skills and possible psychopathological traits in the healthy siblings of patients with chronic neurological disease with a control group of siblings belonging to the general population, according to the parents' perspective - the perception of parents of healthy siblings with the perception of teachers and children themselves. In addition a purpose is qualitatively investigate the family history of parents and, through their indirect point of view, the experiences of healthy children Questionnaires Child Behaviour Checklist (CBCL), the Teacher Report Form (TRF) and the Youth Self Report (YSR 11-18). In addition the parents participated in a semi-structured Clinical Interview. In the age range of 1½ to 5 years, participants in the experimental group do not present, according to the parents' evaluations, more psychopathological elements than the peers of the control group. In the age range of 6-18 years, participants detect more cases of psychopathological risk than the control group. The degree of agreement between mothers and fathers on child assessments is very high for both groups while the degree of average agreement between parents and teachers in the experimental group reveals the existence of some diversity. Clinical interview results show that parents' silence on childhood disability is more correlated with factors such as birth order or, in the case of milder disabilities, with negation mechanisms rather than with the trauma generated by the birth of a child with severe disability. Among the therapeutic implications, an open communication concerning the disability can be the basis for a more spontaneous fraternal relationships and a more adaptive development.

PW07.4

#### **"CHILD ON THE RAINBOW", A SHOW BY PARENTS OF CHILDREN WITH SPECIAL NEEDS**

**Shlomy D.\***

*Haifa University, Haifa, Israel ~ Haifa ~ Israel*

#### **POSTER AND VIDEO PRESENTATION**

The show "Child on the Rainbow" came to be as a result of a will of a Parent Group Counselor and a Music Teacher, who is a parent of a child with special needs, to mutually create the show. The idea was welcomed by a group of parents of children with special needs in Israel. The way to the stage begun by working with Playback Theatre techniques. A process took place during the group sessions in which each participant reveals his difficulties associated with raising a child with special needs, and with the groups help takes another step towards peace within himself and acceptance. Each session was recorded and later served as raw material for the play. The next step was meeting with a professional director who transformed the raw material to ten separate scenes telling the story of everyday life of parents to children with special needs, in a wise and humoristic way. In addition, incorporated into the show are two pieces of poetry and one quote from a play by Chanoch Levin. Topics covered in the play deal with issues such as: coming to terms with the diagnosis, shame, family relationships, society's attitude and prejudice.

PW07.5

#### **YEARNING FOR A CURE - HOW PARENTS OF YOUNG CHILDREN FACE THE TRAUMA OF AN ASD DIAGNOSIS**

**Woodside R.\*, Taddonio D.**

*Rivendell School, NYC, USA ~ New York ~ United States of America*

Rivendell School's CORE (Corrective Object Relationship Education) provides early intervention to preschool children diagnosed with Autistic Spectrum Disorders. Building relationships with trusted

adults, CORE facilitates incremental understanding in these children of complex environments and the people within them. Established in 2007 with public funding, CORE is successful and highly regarded in New York City. Our paper focuses on supporting these parents as they build very different kinds of relationships with their children than the ones they imagined. Parents are often frustrated by the rate of these children's progress. They retain the trauma of their child's initial diagnosis and need meaningful support to help them cope with the shocking loss of their "perfect" baby and accommodation to the demands placed on them by this "other" child. Sadly, such support is often hard to come by. As all autistic children face significant challenges to forming and maintaining relationships, their parents frequently find themselves confused and in a state of crisis. They worry about how their child can succeed, both in school and in the Community. Their children's behavior often isolates them and their families from experiences parents of many children take for granted. These families need a viable support system, opportunities for productive reflection, and access to outside expertise. While our investment in and responsibility for these children is high, we cannot neglect or trivialize their parents. Instead we must search for common ground to help parents keep hope alive even when we cannot cure their children.

PW07.6

#### **IMPACT OF CLEFT LIP AND PALATE ON PARENTS AND PRIMARY RELATIONSHIP TO THEIR CHILD, DEPENDENCE OF THE DELAY BEFORE THE FIRST SURGERY**

**Gavelle P.\*<sup>[1]</sup>, Grollemund B.<sup>[1]</sup>, Gall J.Y.<sup>[2]</sup>, Frochisse C.<sup>[3]</sup>, Peres Martinez C.<sup>[5]</sup>, Guedeney A.<sup>[4]</sup>**

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A Clinical Research Hospital Program named "Relationship Development of children with cleft lip and palate: Influence of the delay before the first surgery and psychological perception of malformation on parents" was built by Dr Grollemund with 4 hospitals in France (2 were proposing early surgery before 1 month and 2 late surgery around 3 months). 127 parents and babies were met. We used with both mothers and fathers 6 questionnaires, filled at 4 months after birth and at 12 months: Edinburgh Post partum Depression Scale (EDPS), Parental Stress Inventory (PSI), Impact on Family Scale (IOFS), Psychological Distress Index (IDP), and the Dyadic Adjustment Scale (Marital Satisfaction). An other ad-hoc questionnaire was proposed to parents to hear their feelings about diagnosis conditions and care during this time. The interaction and babies withdrawal was also assessed. Results are currently under final analysis. IOFS indicates a low-moderate impact of infant malformation on family life and greater at 4 months than at 12 months (the greatest impact of malformation for both mothers and fathers resides in travel to the hospital). About Depression, mothers reported higher means at 4 months (23%) and 12 months (28%) than fathers (16% and 12%), and results are higher than in general population. It should be noted that marital satisfaction decreased between four and twelve months, in both mothers and fathers. Several groups in this population will be compared: Cleft lip or cleft lip and palate, early and late surgery. The diagnosis is a real traumatic time and parents must be supported just after, to be able to build a positive relationship with this baby, as he is. This research will help clinicians to know what kind of relevant criteria of vulnerability we can use to support those parents and babies.

PW07.7

**THE USE OF LAUSANNE TRILOGUE PLAY (LTP) AND VIDEO INTERVENTION THERAPY (VIT) TO SUPPORT CAREGIVING IN PARENTS OF PRETERM CHILDREN: A SINGLE CASE**

**Svanellini L.\*<sup>[1]</sup>, Sisti M.<sup>[1]</sup>, Bonato I.<sup>[1]</sup>, Miscioscia M.<sup>[2]</sup>, Simonelli A.<sup>[2]</sup>, Battistella P.A.<sup>[2]</sup>, Gatta M.<sup>[1]</sup>**

*<sup>[1]</sup>SC Infancy Adolescence Family, ULSS6 ~ Padua ~ Italy, <sup>[2]</sup>Department of Developmental and Social Psychology, Padua University ~ Padua ~ Italy*

According to scientific literature (Cox SM, Hopkins J., Hans SL, 2000; Davis L., Edwards H., Mohay H., 2003; Mohay H., Wollin J., 2003), premature birth could constitute a traumatic and penalizing experience for both the infant and the parents. Early family relationships, so central to the child's emotional and psychic development, could be adversely influenced by this event. It becomes a clinical exigency to find techniques and methods able to help "premature families" and to prevent developmental psychological diseases. With the purpose to prevent psychological diseases, we are applying techniques and interventions to work on family interactions in our Neurorehabilitation Service for developmental age disorders. We present then an example of our work based on LTP (Lausanne Trilogue Play) - a procedure to videotape family interactions - and VIT (Video Intervention Therapy) a technique to work on triadic dynamics with videos. This approach allows parents, guided by the clinician, to look at themselves in interaction with their children, and to reflect and discuss about their parenting styles. In this work we compared two videos, one done at the beginning and one after six months of VIT. We could verify how some LTP variables linked to family interactions had improved after some months (f.i. "Posture", "involvement of partners in the role", "parental scaffolding", "child communication skills", "co-construction", "affection validation" "family warmth" ...). It is discussed as this kind of techniques can be an important preventive intervention for evolutionary discomfort, especially in situations with a traumatic risk factor such as the premature birth.

PW07.8

**THE LAUSANNE TRILOGUE PLAY AS PART OF THE TREATMENT SUPPORTED BY VIDEO FEEDBACK INTERVENTION THERAPY: A SINGLE CASE REPORT**

**Sisti M.\*<sup>[1]</sup>, Svanellini L.<sup>[1]</sup>, Miscioscia M.<sup>[2]</sup>, Valentini P.<sup>[1]</sup>, Sudati L.<sup>[1]</sup>, Battistella P.A.<sup>[2]</sup>, Gatta M.<sup>[1]</sup>**

*<sup>[1]</sup>Childhood Adolescence and Family Center ~ Padua ~ Italy, <sup>[2]</sup>Department of Developmental and Social Psychology, Padua University ~ Padua ~ Italy*

Both clinical work and scientific research underline the need to place side by side parental support and child psychotherapy in the treatment of the infant mental health. Within this frame, the present work aims to show how the LTP procedures can be successfully used not only as an evaluating tool but also as part of the treatment through the support of the Video Feedback Intervention Therapy (VIT). This paper provides a clinical exemplification by means a case report that is part of a larger longitudinal study conducted at the Childhood Adolescence and Family Center in collaboration with the University of Padua. The clinical case refers to a child (6 years old) who attended a psychodynamic psychotherapy (30 weekly sessions) due to his behavioral problems and his parents who attended a parental support (20 fortnightly sessions) with the VIT application that is designed to elucidate the micro frame of selected dysfunctional family interactions and to promote functional changes. The VIT was applied to the LTP procedure, carried out by the family at the beginning of the takeover (T0), after 10 sessions (T1) and 20 sessions (T2) of the parental support. We observed that the VIT helps the parent to identify discrepancies between the image of himself and his parental skills, to improve parent's capability to self-observation and to promote the effectiveness of treatment in term of improving family interaction. After one year of treatment, we evaluated an

improvement in the child's symptomatology and important changes in the management of family relationships.

### **Video Presentations V13 - THE ULM MODEL (ZIEGENHAIN, 2004) IN PRACTICE THERAPEUTIC STARTING POINTS AND PROGRESS IN THE TREATMENT OF DELAYED LINGUISTIC DEVELOPMENT IN 2;4 YEAR OLD TWINS**

**Schöllhorn A.\*<sup>[1]</sup>, Graf P.<sup>[2]</sup>**

*<sup>[1]</sup>Pädagogische Hochschule Thurgau ~ Kreuzlingen ~ Switzerland, <sup>[2]</sup>Heilpädagogische Früherziehung ~ Willisau ~ Switzerland*

The two-year-old twins were brought to the baby-surgery because of their delayed linguistic development. In the case history the mother expressed her anxiety regarding the health of the twins in pregnancy and postpartum. In their first months of life, the mother was highly stressed and suffered from a sleep disorder. The first video recording of playing and feeding shows a conspicuous interaction between the mother and the children. In the categories of the CARE-Index (Crittenden, 2007) the mother acts in an intensely controlling way towards the children. The children respond with difficult and compulsive compliant behavior. Regarding joint development tasks mother and children show a basic approach of «turn-taking». Further and more complex joint development tasks were observed at best at a rudimental level. The treatment was based on assumptions developed from the analysis of the videorecordings. The mother's anxiety about the health of the twins led to a strengthened pattern of controlling the children's behavior. The children adapted their behavior, and this led to a vicious cycle. The first aim of the treatment was to look, together with the mother, at the skills the children had already developed. Her anxiety could thus be calmed and her perception of the twins could approximate the real situation. Subsequently the children could learn via self-efficacy, even in the linguistic area.

### **Video Presentations V14 - NURTURE&PLAY - GROUP FOR FUSSY BABIES AND THEIR MOMS**

**Leskelä--Ranta A.<sup>[1]</sup>, Lampi H.\*<sup>[2]</sup>**

*<sup>[1]</sup>Pilke Clinic ~ Helsinki ~ Finland, <sup>[2]</sup>TerapiaLampi ~ Espoo ~ Finland*

Early parent-child interaction has long been associated with child's later cognitive and socio-emotional development and well-being. Attachment theory and related empirical evidence has demonstrated the importance of continuity and sensitive responding of parental care especially in stressful situations in forming the internalized models of secure (or insecure) relationships by the end of first year of life (Ainsworth, Blehar, Waters, & Wal, 1978). When a parent experiences the child as fussy or difficult it is important that they receive enough support and help to be able to form a secure base for development. Nurture and Play – intervention focuses on building a template for positive way of relating with the child utilizing Theraplay-based activities and enhancing mothers mentalization capability. We are presenting a Nurture and Play group for mothers who felt that their baby was fussy in collaboration with Family Counselling Centres in Espoo, Finland. Dyads were met before the start and assessed with NBO (when applicable), SensoryProfile and MarschackInteractionMethod, the group met 8 times, once a week for 90 minute sessions. In this presentation we are able to show video material from the group meetings that show some of the changes in the interaction of dyads and mentalization of mothers.

## Brief Oral Presentations BOP26 - METHODS OF INTERVENTION WITH INFANTS & FAMILIES - PART II

BOP26.1

### **"BUBS IN MIND" - AN INFANT MENTAL HEALTH COMMUNITY PARTNERSHIP**

**Eyre K.\*, Da Silva L., Chapman M., Paul C.**

*Royal Children's Hospital ~ Melbourne ~ Australia*

"Bubs in Mind" is a community based partnership between a children's hospital and two local government municipalities aimed at prevention and early intervention for vulnerable infants and their families. Maternal and child health (MCH) nurses are a family's main support following the birth of a child. They provide an invaluable role in the prevention and early detection of mental health concerns for infants and their families. They have capacity for follow-up until a child starts school, becoming the 'go to' person when concerns arise. The "Bubs in Mind" program was established in response to the increasing prevalence of infant mental health concerns within the broader community. The program aims to support and enhance the work undertaken by MCH nurses through the provision of regular primary and secondary consultations with an Infant Mental Health clinician, as well as greater access to information about IMH presentations and interventions. "Bubs in Mind" aims to work collaboratively to provide greater access to mental health supports for infants and families who, for a variety of reasons, may not access traditional IMH services. The program also allows for a smoother transition into other services should they be required. "Bubs in Mind" is an evolving community based program working to ensure best outcomes for infants and their families. This presentation will outline the workings of the "Bubs in Mind" program, and present preliminary data on the population of infants and families who have been seen.

BOP26.2

### **AIM HIGH: OUTCOMES OF A UK MULTI-CENTRE EVALUATION OF MELLOW BABIES - AN ATTACHMENT BASED PARENTING PROGRAMME**

**Malcolm R.\***

*Mellow Parenting ~ Glasgow ~ United Kingdom*

Mellow Parenting is a Scottish charity working with local governments, voluntary sector organisations, family and community support services and practitioners globally in order to benefit families and provide every child, wherever they are in the world, with the opportunity to be part of a safe and nurturing family that will allow them and future generations the best possible start in life. One of the ways we seek to do this is by gathering evidence of our work in order to ensure that our programmes are improving lives. With funding from the AIM Foundation we have been able to undertake an in-depth evaluation of the outcomes for parents attending our Mellow Babies programme in the UK. We sought to identify potential changes in parents' well-being and confidence, interactions with their baby and their children's social and emotional development due to their participation in the Mellow Babies programme. Changes in participants was assessed through the comparison of questionnaires administered at the beginning and following the end of the group. The questionnaires used included the Ages and Stages Questionnaire: Social Emotional, Karitane Parenting Confidence Scale, Brief Symptoms Inventory-18 and the Quality of Life Enjoyment and Satisfaction Questionnaire. Semi-structured interviews were also conducted with parents following their participation in the programme and pre-post group videos were used to assess changes in parent-child interaction. As this study is still ongoing, results are not yet known. This study will share quantitative results for families as a whole before separating out and showing results for mothers. Mellow Parenting colleagues will cover outcomes for dads in other

presentations. Conclusions drawn from this study will centre around the effectiveness of the programme and whether or not we are able to effectively have our desired impact on families.

BOP26.3

### **HEALING FROM THE GROUND UP - THE GREATEST RESOURCE - RELATIONSHIPS**

**Jackson A.\*, Barr J., Mcloughlin S.**

*Berry Street ~ Morwell ~ Australia*

We aim to discuss a collective impact initiative in a regional Australian town facing enormous challenges. The focus is not only on a community working together to improve children's wellbeing, but how focusing on children helps build a community. Morwell4Kids is a collective impact initiative aiming to make Morwell a good childhood place. Morwell is a regional town of 14000 people in south-eastern Australia. Once a thriving industrial centre, Morwell has experienced hardship, disadvantage, and poor outcomes for children. Morwell has some of the highest reports in Victoria, Australia of family violence, child abuse, substance misuse, youth offending, and mental health issues. The cumulative trauma for children has seen numerous responses. Yet efforts have yielded few results and not recognised the biggest resource that Morwell has to access – a call to action for community to see itself as key relationships. Morwell4Kids walked the streets of Morwell and sat at kitchen tables hearing what community had to say about childhood. Through a 1000 conversations people spoke of the need to focus on early years, safety, resourcing parents and carers, and highlighting importance of connection, rather than referral. People want relationship not isolation. These reflect the centrality of relationships for the child, which is central to achieving infant mental health and well-being. Morwell is moving ahead to support children from birth through transition into adulthood. This includes increasing capacity of children and families in attachment, literacy and numeracy, development, access to services, and parent-to-parent support relationships

BOP26.4

### **THE ANNA PAVILION - FAMILY INTEGRATED CARE IN SINGLE FAMILY ROOMS**

**Van Veenendaal N.\*<sup>[1]</sup>, Van Der Schoor S.<sup>[1]</sup>, Van Kempen A.<sup>[1]</sup>, Van Goudoever H.<sup>[2]</sup>**

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This ward is a full integration of obstetric, maternity and neonatology services, integrating care for the mother and child in 1 room. In this room prenatal monitoring, labour and postnatal care can be provided for mother and child together, without separating them physically, also when either of them requires high (or short intensive) care. When mother does not need care after labour, mother (and partner) can room-in continuously with their baby if the infant requires hospitalisation. Also, additionally we have adapted and implemented a Family Integrated Care model where parents are trained to be the primary caregiver of their infant, and nurses support, teach and counsel parents. The nurses perform specific nursing tasks like administration of IV medication and placing feeding tubes. In this FIC model, parents are encouraged to actively participate in the care for their (premature) infant, to be present for at least 8 hrs per day, and receive weekly education sessions. Also, family-centred rounds are implemented and include parents on rounds, thus involving them in the process of patient management. Parallel, we are conducting a prospective observational cohort study, to study the short and longterm influence of this care model on parents and neonates.

BOP26.5

### **ENHANCING COMMUNITIES THROUGH CROSS-SECTOR DEVELOPMENTAL PROMOTION**

**Jessee V., Martini--Carvell K.\***

*Help Me Grow National Center ~ Hartford, Connecticut ~ United States of America*

This presentation will share strategies to support early childhood and child health professionals in enhancing developmental promotion in the community through professional development. Supporting infant mental health in any community requires a focus on developmental promotion and anticipatory guidance across the many sectors that make up the early childhood system. The Help Me Grow (HMG) system model, replicated in 20+ states across the U.S. to ensure early detection and linkage, embeds professional development as a critical element to support service providers across early childhood in adopting best practices. Over the past year, in partnership with national Strengthening Families Framework leaders and other early childhood professionals, the HMG National Center designed and implemented a learning collaborative to support HMG care coordinators in enhancing their interactions with and service to families of young children. The learning collaborative leveraged a Program Self-Assessment Tool to support each site in reflecting on their processes and whether and how certain workflow improvements could increase their capacity to promote protective factors, such as parent knowledge of child development and parental resilience. A focus on professional development is central to the HMG model, with HMG affiliate communities conducting regular outreach to early care and education providers as well as health care providers. This cross-sector outreach approach includes professional development opportunities in early detection through developmental screening and surveillance with validated tools and linkage through the local HMG System. These strategies utilized to enhance developmental promotion throughout HMG systems can inform best practices across the field of infant mental health.

## **Brief Oral Presentations BOP29 - INFANT REGULATION SLEEP AND CRYING**

BOP29.1

### **IMPORTANCE OF MIXED METHOD APPROACH TO CLINICAL IMPLICATIONS: THE CASE OF TODDLERS' SLEEP AND MOTHERS' DIFFERENTIATION OF SELF**

**Simon T.\*, Amir D., Scher A.**

*University of Haifa ~ Haifa, Israel ~ Israel*

The majority of studies on children's sleep is based on quantitative research paradigms applying tools such as actigraphy and questionnaires (e.g. Tikotzky, et.al. 2016). However, among the factors that impact and predict children's sleep quality are parenting variables such as parental sleep related involvement (Sadeh et al., 2010). To a large extent, these factors are shaped by parents' values, cognitions and emotional needs (Sadeh & Tikotzky, 2009; Scher, 2008). Thus, revealing internal motives leading to parental behavior in the context of sleep is of high importance regarding the implementation of intervention programs. This study combines quantitative child sleep measures with qualitative tools to expose mothers' values, beliefs and emotional needs imbedded in their involvement in the regulation of toddlers' sleep. A community sample of 130 mothers completed the DSI-R (Skowron & Schmitt, 2003). Based on the score, a sub-sample of 40 mothers (20 High and 20 Low) were interviewed and their children's sleep was assessed by actigraphy. (a) children of mothers in the Low differentiation of self group had longer awakenings and their sleep was less efficient compared to children of mothers in the High group; (b) mothers in the Low group emphasized the emotional aspect of sleep while mothers in the High group were more pragmatic and practical. Mixed-method approach enabled a wider understanding of the relations between mothers' inner beliefs, maternal sleep related behavior and child sleep quality. The differences found between the two groups of mothers regarding maternal beliefs and emotional needs may provide guidelines for future toddlers sleep intervention programs.

BOP29.2

### **EMOTIONAL DEMANDS IN PARENTAL ADAPTATION TO A BABY'S SLEEP PATTERN AT THREE MONTHS OF AGE**

**Schoffel Sehn A.\*, Espíndola De Jesus T., Augusto Piccinini C., De Cassia Sobreira Lopes R.**

*Universidade Federal do Rio Grande do Sul ~ Porto Alegre ~ Brazil*

A baby's sleep regulation occurs in the family and babies require parents to adapt to their needs and sleep pattern, especially in the stage of absolute dependence, which may cause emotional overload. The aim of the study was to investigate the emotional demands involved in parental adaptation to a baby's sleep pattern at three months of age. 26 primiparous parents were interviewed three months after the baby's birth about motherhood, fatherhood and child development. Qualitative content analysis was done using NVivo software, based on data of the following categories: 1) Changes in parental routine due to the baby's sleep pattern; 2) Parental emotional adaptation to the baby's sleep pattern. In the first category, we identified a disruption of parental routine after the baby's arrival. The time and place of sleep varied. Co-sleeping or bedsharing (10) was frequent, which involved the mother's desire as to the practicality to care for the baby. Half of the mothers (13) were responsible for the sleep time, but some fathers (7) participated in this task, either by taking it on or by supporting the mother-baby pair, especially on the weekends. In the second category, most mothers (18) mentioned fatigue and exhaustion at baby's sleep time. The accounts associated with overload were mostly of the mothers, because of nocturnal awakening for breastfeeding, for example. Fathers also reported changes in their sleep pattern, caused by being more attentive to the baby's activity at night. These results illustrate how demanding it is to adapt to a baby's sleep pattern during the stage of absolute dependence, especially for the mother, because of the physical and psychic intimacy between her and the baby. In this adaptation, babies require empathy and flexibility from the parents in order to welcome them.

BOP29.3

### **ELIMINATION COMMUNICATION: CAREGIVERS' PERCEPTIONS OF CRYING SYMPTOM REDUCTION**

**Jordan G.\***

*Trinity Western University ~ Langley ~ Canada*

Elimination communication (EC) involves the use of cues by which the infant signals to the caregiver that the infant needs to micturate or defecate. The caregiver uses these cues, as well as timing (such as after a feeding, or waking from a sleep) to help the infant eliminate by holding the infant in a secure and supported squatting position. This position increases the infant's anorectal angle thus facilitating complete defecation, increasing the infant's physical comfort. Some elimination cues used by infants are small cries and fussing. This study aims to determine retrospective caregiver perceptions of infant crying duration and symptoms before and after the introduction of EC as a caregiving practice. An online survey was deployed (2014) to two English-language internet-based EC support groups to examine caregivers' perceptions of EC. Among other questions, respondents were asked about crying duration and crying-related symptoms before and after starting the practice of EC. The before and after data for crying duration and crying symptoms were then statistically compared. There were 36 respondents whose answers were analyzed for changes in daily crying durations. For these respondents, daily crying durations decreased (less than 1 hour) after the practice of EC was adopted (exact McNemar's test;  $n=36$ ;  $p=0.002$ ). For crying symptoms, a significant reduction was found between frequency reported by respondents before, compared to after, starting EC (Wilcoxon signed-rank,  $n_{\text{symptoms}}=13$ ,  $p=0.002$ ). These results indicate that perceived crying durations and symptoms decrease with the adoption of EC as a caregiving practice.

However, because EC may have been adopted by respondents during the descent of their infants' Normal Crying Curve, further research is required. We conclude that the practice of EC improves caregivers' retrospective perceptions of infant crying duration and symptoms.

BOP29.4

### **MOTHERS' AND FATHERS' EMOTION REGULATION: MANAGING DISTRESS IN THE FIRST 24 MONTHS**

**Russell B.\*, Hutchison M.**

*University of Connecticut ~ Storrs ~ United States of America*

Infant crying is a common parental stressor that can lead to poor mental health outcomes, maladaptive caregiving responses, and forecast dysfunctional parent-child dynamics. Intervention supports are often initiated when families experience clinical levels of infant distress creating a gap in service provision for the common circumstance of parents struggling to cope with subclinical levels of cry behavior. Studies of parents' dysregulation while responding to infant distress overwhelmingly represent mothers and emphasize infant soothing over parental self-care, despite consistent evidence that a wide range of infant cry behavior - including inconsolable crying - is normative. Our aim is to describe associations between emotion regulation (ER) and infant cry behavior in a sample of fathers and mothers of infants younger than 2 years.

188 parents (53% fathers;  $\mu$ age=32.4 years) with infants ( $\mu$ age =14.7 months) completed online surveys regarding stress, distress tolerance, mental well-being, coping, ER, and infant behavior (fussing/crying and subsequent soothing routines). The sample reported white (64%), non-Latino/Hispanic (88%) racial/ethnic characteristics and fulltime employment (63%) with an average household income of \$20,000-\$39,999. Parents reported less than average ease in soothing their infant, and described their infant's cries as less than average frequency (43%) but moderate intensity (77%). Results indicate parents' well-being is significantly predicted by ER and infant cry behaviors ( $R^2=.35$ ,  $F=16.37$  (6, 181),  $p<.001$ ) after controlling for infant age and parent gender. The best predictors of well-being were perceived stress, difficulties regulating negative emotions, and negative emotion in response to infant's cries ( $B_s = -.97$  to  $2.76$ ,  $p<.05$ ). Parental well-being - regardless of parent gender - is best predicted by facets of ER, despite reports on the frequency, duration, and intensity of their infants' cries. Implications for infant mental health services and addressing gaps in cultural attitudes towards mothers' and fathers' responses to infants' cries are discussed.

BOP29.5

### **TEMPERAMENT AND EMOTIONAL REACTIVITY AND REGULATION IN INFANCY**

**Liu S.\*<sup>[1]</sup>, O'Farrelly C.M.<sup>[1]</sup>, Capron L.<sup>[2]</sup>, Barnicot K.<sup>[1]</sup>, Ramchandani P.<sup>[1]</sup>**

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Compared to the literature supporting the impact of maternal sensitivity/depression on infants' affect and behaviours in response to distress, fewer studies have examined the influence of temperament. It remains unclear regarding the effects of temperament (especially other than negative emotionality) on infant emotional responses. In addition, differential susceptibility theory suggests that temperament may moderate the effects of caregiving factors on infant emotion regulation. Eighty-two mothers and their infant of 4-5 months participated in the SFP. Mothers reported their perception of infant temperament using the modified Infant Behaviour Questionnaire Activity Level, Limitation to Distress, Smiling & Laughter subscales and their concurrent depression and anxiety. Maternal report of Smiling & Laughter positively correlated with infant positive affect and gaze toward the mother during baseline, mother-oriented gaze during

reunion, and increases in positive affect from still-face to reunion as well as negative affect during the still-face episode and decreases in positive affect from baseline to still-face (Spearman's rho = .21 to .35,  $p < 0.05$ ). No moderating effect of temperament on the relationship between maternal distress and infant still-face responses was found except infant Smiling & Laughter and maternal anxiety interacted to positively predict decreases in infant positive affect from baseline to still-face ( $\beta = .21$ ,  $p = .045$ ). Our findings offer preliminary support for the influence of a positive temperament dimension on baseline positive affectivity and affect recovery to distress, and use of social gaze. Interpretation of the results must be cautious due to the small sample size. Further research on the role of temperament in shaping early emotion regulation within the attachment context will inform parent intervention.

BOP29.6

### **PERSISTENCY OF REGULATORY PROBLEMS FROM AGE 2 TO 9 MONTHS, AND THE ROLE OF CHILD, FAMILY AND RELATIONAL FACTORS**

**Olsen A.L.\*<sup>[1]</sup>, Ammitzbøll J.<sup>[2]</sup>, Olsen E.M.<sup>[3]</sup>, Skovgaard A.M.<sup>[4]</sup>**

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Regulatory problems (RP) in infants are common causes of parental concern, and associated with increased risk of emotional and behavioral difficulties later in childhood. Early intervention is hampered by the lack of knowledge about RP in early infancy, and role of parental and relational factors in the risk mechanisms. To investigate regulatory problems (RP) of feeding, sleep and excessive crying/ emotional reactivity across infancy, and examine the influence of gender, maternal mental health problems, and mother-child relationship problems. RP were assessed at home visits at ages 0-2, 2-6 and 8-10 months in a general population of 2,598 infants. Community child health nurses (CHN) made the assessments during home visits, and included evaluation of maternal mental health and mother-child relationship. Perinatal data were obtained from national registries. Logistic regression models were used to examine the persistency of RP and influences of co-variables. Combined RP at mean age 2.3 months; SD 8.4 days, were associated with a more than threefold increased risk of combined RP at mean age 9.3 months; SD 13.2 days (OR 3.74 95% CI:2.15-6.50). Low maternal education, immigrant parents, maternal mental health problems and mother-child relationship problems were prospectively associated with RP. Adjusted analyses showed persistency of RP after the age of 2 months, independently of perinatal, psycho-social and relational factors; and, seemingly a different risk pattern for boys and girls. RP with onset after the age of 2 months are associated with a highly increased risk of persistent problems later in infancy, independently of earlier exposures to maternal mental health problems and relationship problems. The findings point to a group of infants, who need increased clinical attention and intervention in their own right, in clinical as well as in community settings.

BOP29.7

### **RECIPROCAL INFLUENCES AMONG FAMILY PROCESSES AND TODDLERS' SLEEP**

**De Stasio S.\*<sup>[1]</sup>, Ragni B.<sup>[1]</sup>, Boldrini F.<sup>[1]</sup>, Bevilacqua F.<sup>[2]</sup>, Giampaolo R.<sup>[2]</sup>, Bucci S.<sup>[2]</sup>, Gentile S.<sup>[2]</sup>**

<sup>[1]</sup>*Jumsa ~ roma ~ Italy*, <sup>[2]</sup>*ospedale bambin Gesù ~ roma ~ Italy*

The regulation of sleep-wake states represents one of the most challenging task occurring in parent-child relationship. Within a transactional family dynamics model (Schermerhorn & Cummings, 2008),

children's adjustment, including sleep behaviors, is conceptualized as influencing and being influenced by multiple subsystems within the larger family system (Bell & Belsky, 2008; Bernier et al., 2013). Based on this conceptual framework, the current study examines reciprocal links between young children's sleep, emotion regulation, parenting stress, marital satisfaction and perceived social support by both parents. Main aim of our study was to contribute to the growing field of knowledge about connections between parenting dimensions and toddlers' sleep, including both parents, and examining the conditions under which parental psychosocial functioning was related to bedtime routines in toddlerhood. 80 Italian intact two-parent families of toddlers aging from 18 to 36 months (48 boys) participated in this study. Parents completed Emotion Regulation Checklist (Shields & Cicchetti, 1997), Parent-Child Sleep Interaction Scale (PSIS, Alfano et al., 2013), Parent-Stress Index-Short Form (PSI-SF; Abidin, 1995), Social Provisions Scale (SPS, Cutrona & Russell, 1987), Dyadic Adjustment Scale (DAS-4; Sabourin et al., 2005) and ad-hoc semi-structured interview. As expected, the results confirmed that child emotion lability and parenting stress' dimensions were significantly positively correlated with PSIS Total and Sleep Conflict scores. The main results of the hierarchical regression model, performed to evaluate the predictive roles of studied variables on parenting stress level, showed that child emotion lability ( $\beta = .28, p < .001$ ), critical sleep interaction ( $\beta = .31, p < .001$ ), sleep's problems ( $\beta = .20, p < .001$ ) reported by the mothers predicted variance PSI Total of both parents. Furthermore, the findings of the second hierarchical regression model, performed to evaluate the predictive roles of studied variables on child's sleep, showed that maternal parenting stress ( $\beta = .55, p < .001$ ), low perceived social support ( $\beta = .40, p < .001$ ) predicted variance of child's sleep problems. Findings highlight the importance of examining children's sleep within the context of the larger family system.

#### **Workshop WS56 - HOLDING THE PARENT IN MIND: PROMOTING REFLECTIVE FUNCTIONING THROUGH ATTUNEMENT**

**Gilkerson L.<sup>[1]</sup>, Sontoski S.<sup>[3]</sup>, Guy D.\*<sup>[2]</sup>, Cosgrove K.<sup>[4]</sup>, Nenide L.<sup>[5]</sup>, Norris--Shortle C.<sup>[6]</sup>**

<sup>[1]</sup>Erikson Institute ~ Chicago ~ United States of America, <sup>[2]</sup>Psychological Medicine ~ Christchurch NZ ~ New Zealand, <sup>[3]</sup>University of Wisconsin-Milwaukee ~ Milwaukee ~ United States of America, <sup>[4]</sup>Kennedy Krieger Institute ~ Baltimore, Maryland ~ United States of America, <sup>[5]</sup>Wisconsin Association of Infant Mental Health ~ Madison, Wisconsin ~ United States of America, <sup>[6]</sup>University of Maryland ~ Baltimore, Maryland ~ United States of America

We explore the role of parallel process in promoting reflective functioning: that is, the importance of the interventionist holding the parent in mind while promoting the parent's capacity to hold the child in mind. Our hypothesis is that attunement to the parent helps the parent feel connected and understood and creates a space for change—for understanding the child more deeply and seeing the child in new ways. Reflective functioning refers to the ability to imagine mental states in self and others. We present three models designed to promote reflective functioning in parents or professionals: (a) two group-based infant mental health interventions in US: PIWI (Parents Interacting with Infants) and PACT Therapeutic Nursery for homeless families and (b) an approach to case consultation in infant mental health services in New Zealand. We describe how these approaches are enhanced by the integration of a meta-framework, FAN (Facilitating Attuned Interactions), to increase the sensitivity of the professional to the mental states of the parent/supervisee and respond flexibly based on their cues, needs, and motivations. We use video to demonstrate the approaches, share research on their effectiveness, and describe the impact that increased attunement from the FAN had on the interactions. We will engage participants around how increased attunement might enhance effectiveness of their own work in promoting reflective functioning. The presenters are interdisciplinary (social work, psychology, psychiatry, and early

childhood education) and international. Each presenter brings an in-depth understanding of infant mental health, knowledge their intervention and is a FAN National Trainer

### **Workshop WS57 - THE COMMUNITY RESILIENCE MODEL TO PROMOTE OPTIMAL CAREGIVER-INFANT ATTACHMENT**

**Murphy J.\*<sup>[1]</sup>, Grabbe L.<sup>[1]</sup>, Rogers G.<sup>[2]</sup>**

<sup>[1]</sup>Emory University School of Nursing ~ Atlanta ~ United States of America, <sup>[2]</sup>NurseHER, Inc. ~ Atlanta ~ United States of America

The Community Resiliency Model® (CRM) is a trauma-informed, community-based, cross-cultural intervention that supports healthy caregiver-infant interactions. Informed by attachment theory and the Adverse Childhood Experiences (ACE) study, CRM® provides a set of three skills specific to infant development that place the tools for resilience and mental well-being into the hands of caregivers. The basic CRM® skills, i.e., Tracking, Resourcing, and Grounding, are used with infants who are preverbal, either to promote secure attachment or as an intervention for children who have experienced trauma. During critical developmental periods, the CRM® skills support the optimal priming of the nervous system and stress response mechanisms by widening an infant's "Resilience Zone." When the skills are first taught to a caregiver, the caregiver is better prepared to use the skills with an infant and promote mental wellness throughout infancy and childhood. To date, the CRM® skills have been used all over the world with diverse populations including incarcerated pregnant women, homeless women and children, refugees, and the community leaders and first-responders who manage the needs of high-risk groups. The CRM® workshop will introduce Tracking, Resourcing, and Grounding in the context of promoting healthy caregiver-infant relationships. Certified CRM® Trainers will host a didactic and experiential workshop that will include interactive demonstrations that invite audience participation. We will also describe the easy accessibility of the CRM® model as provided through a variety of mediums including opportunities to receive training in the CRM® model, the utility of the free CRM® app, and information on how to get in contact with one of the many Certified CRM® Trainers located all over the world

### **Workshop WS62 - THE HIDDEN MEANINGS OF REPETITIVE BEHAVIORS – A WINDOW INTO THE CHILD'S INNER WORLD THROUGH A MULTIDISCIPLINARY PERSPECTIVE**

**Peleg Y., Bruck--Binya Y.\***

*Society of children at risk - DIR Israel ~ Israel ~ Israel*

When children exhibit repetitive behaviors we often respond with anxiety and frustration. Such behaviors may seem odd, bizarre, unrelated to the social situation and difficult for us to understand. We will explore the repetitive behaviors from a functional-emotional point of view, i.e., their underlying reasons and functions and ways to respond not only to mediate the anxiety and despair, but to gain deeper understanding into the child's inner world. Through video case presentations and discussion, we will glance into the intricate connections between repetitive behaviors and stress, individual differences and visual spatial processing. We will also demonstrate how deep and multifaceted attention to such behaviors can increase capacities for parents and professionals to become curious, empathic and reflective of the child's inner world and experience. This introspective view can lead to healing and hope within the parent- child relationship.

### **Workshop WS63 - EARLY INTERVENTION FOR ASD CHILDREN AND THEIR FAMILIES: FROM THE RELATIONAL CONTEXT EVALUATION (DC: 0 TO 5, AXIS II, PART B) TO THE COPARENTING SUPPORT**

**Mazzoni S.\*<sup>[1]</sup>, Fontana I.<sup>[2]</sup>, Nonnis E.<sup>[2]</sup>, Bianco F.<sup>[1]</sup>, Manarin M.<sup>[1]</sup>, Morgante L.<sup>[1]</sup>**

<sup>[1]</sup>Department of Dynamic and Clinical Psychology- Sapienza University of Rome ~ Rome ~ Italy, <sup>[2]</sup>ASL RM 3, TSMREE ~ Rome ~ Italy

Introduction: A new clinical intervention, based on a videofeedback procedure for families with ASD children, will be presented. The Aim is to involve parents to promote the child social communication a) assessing the Relational Context (DC: 0-5, Axis II – Part B) to highlight the family strengths or concerns in caregiving environment and b) sharing the assessment with parents through the videofeedback. The hypothesis is that functional family relationships can moderate typical ASD interactions and social disorder. Methods: The procedure was proposed to eight families with 2 to 4 years old children with a suspect autism disorder and without any therapy in progress. Three sessions have been gathered: the first one for the family observation through the LTP procedure; the second one for the videofeedback and the third one for the follow-up, six months later. The assessment focused: family structure, style of child engagement and coparenting style. Children have been evaluated with ADOS, ADI-R, VABS, PSI-SF and PVB. Results: The assessment highlights a positive influence among the functional family alliance and the style of the child's triangular engagement that seems associated with bids with a predominantly positive affective configuration. The follow-up highlights that although at the beginning some families showed a dysfunctional family alliance, it can become a functional one. A contrast case highlighted the evolution towards the dysfunctionality of family alliance, together with the worsening of the style of the child's engagement. Conclusions: The goal is to contribute implementing the guidelines for the intervention with particular reference to environmental caregiving support, which is a protection factor for social development of autistic children.

## **Brief Oral Presentations BOP32 - HELPING PREMATURE BABIES AND FAMILIES - PART II**

BOP32.1

### **DO READING SESSIONS SUPPORT THE MOTHER- BABY SYNCHRONIZATION? SYNCHROPREMA, A EXPLORATORY STUDY ON MOTHER AND THEIR PREMATURE BABIES, IN A NEONATAL INTENSIVE CARE UNIT**

**Boissel A.\*, Guilé J., Wallois F., Kongolo G.**

*Boissel ~ Amiens ~ France*

The observation of parent-baby interactions from the first days of life onwards reveals the importance of the rhythmic, multisensory, intermodal communication referred to as dynamic synchrony. The latter is essential for the development of the parent-child relationship, which in turn underpins the child's psychological and cognitive maturation. In premature babies, this synchronization process is impaired. For the last ten years, Amiens University Hospital's perinatal Child Psychiatry team has organized story-telling sessions for parents and their babies. The goal of the Synchroprema project is to evaluate the impact of this reading session on physiological, neuroendocrine, behavioural and psychological markers of mother-baby synchronization. This study includes 20 mothers and their premature babies. The primary criterion for evaluation is the synchronization of the child's, mother's and reader's respective vagal tones during the reading session. The secondary criteria (as neuroendocrine, behavioural and psychological endpoints, respectively) are saliva levels of oxytocin & vasopressin, social & prosodic signals, and identification processes. Concerning the primary criterion, the study suggests that this mediation can aid mother-baby synchronization. Reading session may support the synchronization of mother and their premature babies, in a neonatal intensive care unit.

BOP32.2

### **EDUCATIONAL INTERVENTION FOR NICU STAFF PREVENTS PROLONGED POSTPARTUM DEPRESSIVE SYMPTOMS AMONG MOTHERS OF PRETERM INFANTS**

**Ahlqvist--Bjorkroth S.\*, Axelin A., Korja R., Huhtala M., Lehtonen L.**

*Universtiy of Turku ~ Turku ~ Finland*

The prevalence of prolonged postnatal depression among the mothers of preterm infants is elevated (17-20%). Because postnatal depression compromises parenting and is a risk for poor development outcomes of a child, it is clinically important to find comprehensive ways to decrease the maternal depression. The study aimed to evaluate the effects of the Close Collaboration with Parents™ intervention on maternal depressive symptoms at 6 months and 2 years of child's corrected age. The intervention was implemented by training the whole staff in a NICU in Finland between 2009 and 2012. The intervention aimed to improve staff skills to support parenting during the infant's hospitalization. The baseline cohort was recruited before the intervention in 2001-2006. The post-intervention cohort was recruited in 2011-2015. Included mothers 1) had an infant with birthweight of  $\leq 1500$  g who was alive at discharge without major congenital anomalies or syndromes and 2) spoke Finnish or Swedish. Maternal depressive symptoms were measured using the Edinburgh Postnatal Depression Scale (EPDS). The EPDS scores of the mothers in the post-intervention cohort at 6 months ( $n=93$ ) and 2 years of child's age ( $n=48$ ) were significantly lower than the EPDS scores of the mothers in the pre-intervention cohort at the same measurement points ( $n=145$ ,  $n=146$ , respectively). In the univariate analysis, the estimates of the differences were at 6 months 2.17 (SD=0.58),  $p<0.001$  and at 2 years 2.21 (SD=0.78),  $p=0.005$ . The proportion of mothers who scored above the clinical cutoff ( $>12$ ) of the EPDS decreased after the intervention; from 10.3% to 2.1% at 6 months and from 9.6% to 6.2% at 2 years measurement points. The intervention decreased prolonged depressive symptoms among mothers of very low birth weight infants. We conclude that an intervention improving the skills of NICU staff to support parenting effectively prevents maternal depression.

BOP32.3

### **MUSIC-BASED DEVELOPMENTAL STIMULATION ON THE DEVELOPMENTAL OUTCOMES OF THREE MEDICALLY COMPLEX LONG-TERM NICU INFANTS**

**Hanson--Abromeit D.\*<sup>[1]</sup>, Neugebauer C.<sup>[2]</sup>**

*<sup>[1]</sup>University of Kansas ~ Lawrence, Kansas ~ United States of America, <sup>[2]</sup>Texas Tech University Health Sciences Center Department of Pediatrics ~ Lubbock, TX ~ United States of America*

This presentation will illustrate a clinical music intervention aimed at promoting developmental outcomes and quality of life for three infants hospitalized in the NICU long-term due to complex medical needs. In addition to prematurity, the NICU services full-term infants born with complex medical needs requiring hospitalization of several weeks or months. Prolonged hospitalization may negatively impact immediate developmental competence and quality of life, placing these infants at-risk for their long-term development. Few interventions exist that address the complex needs of these infants in the context of the NICU environment. Infant-directed and contingent singing has been shown to be an effective way to engage an infant in a developmental and caregiver responsive manner. This case will illustrate three post-term, medically complex infants who received a music-based developmental intervention across four weeks in the NICU. The framework of the intervention will be briefly described with particular attention to how the interventionist tailored the music elements to elicit or support developmental competence in the infants. Focus of the presentation will be on the specificity of the music elements (e.g. rhythm, tempo, melodic contour,

timbre and dynamics) in relationship to the infants' behaviors supportive to developmental competence.

BOP32.4

#### **DEVELOPING AN INFANT MENTAL HEALTH CENTERED MODEL OF CARE FOR NEW NICU SERVICE IN QATAR**

**Valentine E., Watt F.\*, Ahmed S.**

*Sidra Medical and Research Center ~ Doha ~ Qatar*

This presentation will outline the process, challenges, and successes in setting up a psychological consultation services for a new Neonatal Intensive Care Unit (NICU) at Sidra Medical and Research Center in Doha, Qatar. Qatar is a small Arab country with a diverse and growing population of over 2.6 million, with an increasing national focus on providing regional and world excellence in medical care. Within this cultural and medical background a new 50 bed NICU is opening in January 2018 as part of a women's and children's hospital. This presentation will outline what was undertaken to create a NICU environment that goes beyond an infant and parent supportive model, to an infant mental health informed, family centered, and culturally responsive model of NICU care. The following steps for creating this new clinical service will be presented and discussed: outlining patient pathways to the NICU including prenatal referrals for high-risk pregnancies; how to educate nurses, allied health, and physicians about infant mental health and its implications; providing parent counseling, education, and support that embodies a social-emotional model of wellbeing for a family's stay in the NICU and beyond; and supporting multidisciplinary decision making, consideration, and interventions to promote infant mental health. Specific cultural advantages and barriers related to developing this service in the Gulf region, as well as systematic barriers and how they can be addressed and overcome will be discussed with examples.

BOP32.5

#### **MATERNAL REPRESENTATION OF VERY PRETERM, PRETERM AND FULL-TERM NEWBORNS**

**Fuertes M.\*<sup>[2]</sup>, Antunes S.<sup>[1]</sup>, Lopes J.<sup>[2]</sup>, Alves M.J.<sup>[2]</sup>, Silva R.<sup>[3]</sup>, Patrocínio R.<sup>[3]</sup>, Moreira J.<sup>[1]</sup>**

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Maternal representations have been often linked with infants' behavior, self-regulation and attachment. In our study, we compare maternal first and later representations of very preterm babies (less than 32 weeks of gestation), preterm (born between 32 and 36 weeks of gestation) and full-term infants (born with more than 36 weeks of gestation) and their association with maternal representation of infant temperament at 3 and 9 months. For that purpose, we recruited 40 dyads with very preterm infants, 57 dyads with prematurely born and 60 dyads with babies born at term. At the babies second day of life, an interview was carried out to collect mothers initial representations about their pregnancy, labor, and first 48-hours experience. At 3 months corrected age, mothers described their infants' temperament using a Portuguese temperament scale (Escala de Temperamento do Bebê). Findings indicate that mothers that delivered prematurely had more negative perceptions about their pregnancy and labor. Mothers of very preterm babies described the labor as a traumatic experience. Mothers of preterm were concerned with their babies' health and development while mothers of very prematurely born infants are alarmed with their infant survive. Nonetheless, mothers of preterm (of both groups) were more confident than mothers of full-term in their ability to engage in a positive relationship with the baby regardless of any possible developmental problem. At 3 months, positive maternal representations of prematurely born infant's temperament were associated with positive expectations at birth and family social support.

Taking these results in consideration, guidelines are proposed for the intervention with parents of prematurely born babies according to family needs and infant clinical status risk.

BOP32.6

**SELF-REPORTED MENTAL HEALTH PROBLEMS AMONG LATE ADOLESCENTS PREVIOUSLY BORN EXTREMELY OR VERY PRETERM (EP/VP) AND MATERNAL ATTACHMENT REPRESENTATION: AN ATTACHMENT-BASED LONGITUDINAL STUDY FROM 320 G IN INCUBATOR TO EARLY MAJORITY**

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A "preterm behavioural phenotype" with internalizing and social problems exists (Johnson, Marlow 2011). Nonetheless, long-term risk associated with adverse socio-emotional outcomes in late adolescents born EP/VP through the lens of attachment theory is poorly understood. Third follow-up in a prospective longitudinal study (about the long-term socio-emotional/attachment development of infants born EP/VP (<1500g) including the state of mind of their mothers. N= 84 (54 singletons/30 multiples) teenagers born EP/VP (weeks of gestation: 24-32) at the mean age of 18.77 years participated with their mothers. Psychological distress was measured by the Symptom-Checklist-90-Revised and behavioral patterns by the Youth-Self-Report, both completed by the teenagers. Maternal attachment was assessed by the Adult-Attachment-Interview 6 months postpartum. Data analysis are still running but preliminary findings of a large subsample indicate that overall Youth-Self-Report and internalizing symptoms are significantly predicted by the Symptom-Checklist-General-Severity-Index. Teenagers born EP/VP assigned to the Symptom-Checklist-90-Revised clinical range group (Symptom-Checklist-General-Severity-Index-T-score, or any two Subscales-T-Scores  $\geq 63$ ), provided significantly higher scores in the Youth-Self-Report, overall and on the internalizing Syndrome-Scale. These subjects had to be referred to psychotherapy. On average, EP/VP teenagers of mothers with an insecure attachment representation reported significantly more overall Youth-Self-Report and internalizing problems than those of mothers who were securely attached. Additional data on the full sample which strengthen/weaken associations (teenagers' (e.g. birthweight, attachment representations assessed at 18 months) and maternal underlying characteristics) will be discussed at the conference. Our findings may contribute to gain basic attachment-based knowledge of long-term consequences of maternal attachment/attenuate sensitivity on psychological/ behavioral outcome of EP/VP teenagers up to the age of 18 years, which should be forwarded to professionals involved in aftercare.

**Symposium S85 - NEW INSIGHTS INTO MOTHERS' REFLECTIVE FUNCTIONING AND REPRESENTATIONS IN HIGH-RISK SETTINGS**

**Isosävi S.\***

*University of Tampere ~ Tampere ~ Finland*

Caregivers' mentalizing ability or reflective functioning (RF) is conceptualized as a central component in sensitive parenting and in children's healthy development. However, research on high-risk families suggests that effects of low maternal RF are moderated and mediated by other risk factors (e.g. Sleded, 2013) and that high-risk parents' mentalization ability may not improve as a result of interventions, although other risks decrease (Fonagy, Sleded, & Baradon, 2016; Ordway et al., 2013). To understand such results better, more research is needed on the interconnections of parents' RF and other risk factors. In order to increase clinical relevance, the role of RF in diverse cultural contexts and the long-term effects of at-risk parental RF on child development should be

explored, In addition, to plan efficient interventions, detailed analysis of the quality of parents' high-risk states of minds are needed. In this symposium, international, multi-disciplined presenters help researchers and clinicians in fine-tuning their understanding about the role of maternal mentalization in high-risk contexts. The first presentation ("Identifying transgenerational transmission of early dysregulated attachments onto mother's representations of herself and her infant") is a case study analysing if the second-generation effects of mother's early attachment problems show as unintegrated mental representations or as failures in RF. The second presentation ("Meaning and measurement of parental reflective functioning in a high-risk sample of South African mothers") focuses on parental RF among South-African mothers enrolled in a home-visiting program and their controls. The third presentation ("High-risk parenting: The interplay of trauma, substance misuse and reflective functioning") investigates how maternal trauma history, substance abuse and pre-mentalizing states of mind predict parenting stress and parenting competence among treatment-enrolled mothers of young children. The fourth presentation (Mother's prenatal reflective functioning and child socioemotional development at school-age: a study among high- and low-risk mothers and their children") looks into how maternal prenatal mentalization associates with the child's school-age socioemotional development among dyads where mothers have a history of substance misuse and their non-using comparisons. The presentations will be discussed by an internationally known expert from the field of high-risk parenting and infant mental health.

S85.2

#### **TRANSGENERATIONAL TRANSMISSION OF EARLY DYSREGULATED ATTACHMENTS ONTO MOTHER'S REPRESENTATIONS OF HERSELF AND HER INFANT**

**Isosävi S.\*<sup>[1]</sup>, Flykt M.<sup>[1]</sup>, Finger B.<sup>[2]</sup>, Heiskanen L.<sup>[3]</sup>, Wahlström J.<sup>[4]</sup>, Punamäki--Gitai R.<sup>[1]</sup>**

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Attachment experiences where caregivers have failed to help in stress and affect regulation (helpless) or actively disrupted individual's self-regulation (hostile) can disturb parenting via internalized un-integrated, distorted working models (Lyons-Ruth & Spielman, 2004). Such representations might be central treatment targets with high-risk parent-infant dyads (Fonagy, Sled, & Baradon, 2016). In this psychotherapy case study of a mother with relational trauma, we identify how the early experiences are represented and how this is reflected onto the mother's representations of herself and her infant. We analysed mother's Adult attachment interview (AAI) using three coding systems (the 4-way system [Main, Goldwyn & Hesse, 2003] the hostile/helpless (HH) coding system [Lyons-Ruth & Melnick, 2004] and reflective functioning (RF) coding system [Fonagy, Steele, Steele & Target, 1998]). Also, documentations of parent-infant psychotherapy sessions were analysed using content analysis. The results show that traditional AAI or RF coding did not capture the high risk in mother's attachment representations, whereas they were identified as un-integrated/helpless. H/H representations were also central in mother's discourse of herself-as-mother and of her infant, where 1) self and infant-as-bad, 2) helplessness, 3) fearfulness, and 4) hostile working models were identified. Most of these representations showed little change during psychotherapy, indicating that they are pervasive components of the mother's caregiving system. However, hostile representations decreased as the mother became more aware of her normative aggression. Results implicate that H/H features of parental representations should be identified and actively targeted in parent-infant psychotherapy when parents have experienced dysregulated early caregiving. As changing the poorly integrated self/child representations is partial and slow,

interventions should simultaneously help caregivers in self and dyadic regulation, in order to support their everyday parenting and to protect their infants' development.

S85.3

### **MEANING AND MEASUREMENT OF PARENTAL REFLECTIVE FUNCTIONING IN A HIGH-RISK SAMPLE OF SOUTH AFRICAN MOTHERS**

**Dawson N.<sup>[2]</sup>, Sled M.<sup>[1]</sup>, Sprecher E.\*<sup>[1]</sup>**

<sup>[1]</sup>*Anna Freud National Centre for Children and Families ~ London ~ United Kingdom,* <sup>[2]</sup>*University of the Witwatersrand ~ Johannesburg ~ South Africa*

Parental reflective functioning is associated with quality of caregiving, child attachment security and better mentalising in children. Studies in Europe and the USA have had mixed findings regarding the impact of interventions on parental reflective functioning, however, few studies to date have addressed this subject in a South African context. This study specifically examines differences in parental reflective functioning between the experimental and control arms of a randomised control trial examining the effectiveness of the Ububele Mother-Baby Home Visiting Programme for high-risk mother-infant dyads in Alexandra Township in Johannesburg, South Africa. This intervention focused on improving maternal reflective function and knowledge regarding infant's relational needs and took place over 14 visits and was delivered by local mothers. Mentalising capacity was measured using the Reflective Functioning Scale in mothers during pregnancy, using the Pregnancy Interview, and following the home-visiting intervention, using the Parent Development Interview. Preliminary analyses of early data have demonstrated a significantly higher level of reflective functioning post-intervention in mothers that received home-visits compared to the control group. This was despite non-significant differences in reflective functioning between the groups during pregnancy, as measured by the Pregnancy Interview. Early findings from cohort suggest that home-visiting interventions may be effective in improving maternal reflective functioning in a South African context. However, this study also raises questions regarding the validity of wholly verbal measures of mentalising in multilingual populations. Moreover, the function of parental reflective function and the nature of its association with effective caregiving for this high-risk sample is considered.

S85.4

### **HIGH-RISK PARENTING: THE INTERPLAY OF TRAUMA, SUBSTANCE MISUSE AND REFLECTIVE FUNCTIONING**

**Paris R.\*<sup>[1]</sup>, Herriott A.<sup>[1]</sup>, Holt M.<sup>[2]</sup>**

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Parenting capacities are multi-determined, particularly in high-risk populations where trauma and substance misuse are prevalent. Additionally, aspects of reflective functioning (RF) can play an important role in parenting. Therefore, understanding the relationships among these factors is crucial for honing attachment-focused interventions to enhance parenting abilities. This study aimed to explore the direct and indirect effects of maternal substance misuse, pre-mentalizing aspect of RF and parental trauma on the experience of parenting stress and competence. Baseline data were analyzed from a study of 54 mothers with young children in methadone treatment participating in a dyadic parenting intervention. Included were self-report measures of heroin use, parental RF, adult trauma symptoms, parenting stress and parental sense of competence. Participants were long-term heroin users with extensive trauma histories and symptoms. In the analysis we hypothesized that the role of substance misuse in predicting self-

reported parenting stress and competence would be mediated by maternal trauma symptoms and RF. Two hierarchical regression models were computed, predicting parenting stress (#1) and parenting competence (#2). In both cases, heroin use and parent age were entered first, followed by the PRFQ pre-mentalizing Scores (PM). Lastly, PSS (trauma symptoms) scores were entered. Neither heroin use nor parent age predicted parenting stress in model #1, but PM scores did in the third step, along with PSS in the fourth. In model #2, heroin use was significant in the first three steps along with PM. When PSS scores were entered PM and heroin use were no longer significant, leaving only trauma symptoms directly predicting parenting competence. Results demonstrate that pre-mentalizing RF and trauma symptoms were directly associated (positively) with parenting stress, but only trauma symptoms directly predicted parenting competence (negatively). This study suggests that varying approaches may be needed to influence these different parenting capacities.

S85.5

### **MOTHER'S PRENATAL REFLECTIVE FUNCTIONING AND CHILD SOCIOEMOTIONAL DEVELOPMENT AT SCHOOL-AGE: A STUDY AMONG HIGH- AND LOW-RISK MOTHERS AND THEIR CHILDREN**

**Flykt M.<sup>\*[1]</sup>, Lindblom J.<sup>[1]</sup>, Saurio K.<sup>[1]</sup>, Hyysalo N.<sup>[1]</sup>, Belt R.<sup>[3]</sup>, Kerns K.<sup>[2]</sup>, Punamäki--Gitai R.<sup>[1]</sup>**

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Maternal prenatal ability to mentalize (reflective functioning, RF) is known to protect early child development. However, little is known about its long-term effects on child socioemotional development, and about the intergenerational transmission of mentalization. It is also unclear, whether similar protective mechanisms exist among low- and high-risk families. This study aims to find, whether maternal prenatal RF predicts child school-age socioemotional development: mentalization, emotion regulation, emotion recognition and attachment security. We further examine, whether the associations differ between families with maternal prenatal drug-addiction (DA), and low risk controls. The original sample comprised 51 pregnant DA mothers participating in outpatient treatments, and 50 non-DA controls. At the child age of 8-12 years, families were re-contacted and 39%(n=20) of the DA group and 61%(n=31) of the control group participated. Maternal prenatal RF was measured with AAI (George et al., 1985; RF scale: Fonagy et al., 1998). At school-age, child mentalization was measured with LEAS-C (Bajgar & Lane, 2004), emotion regulation with CEMS (Zeman et al, 2001), emotion recognition with DANVA (Nowicki & Carton, 1993) and attachment with Attachment Story Stem for school-age (Granot & Mayseless, 2001; Kerns et al., 2011). In both groups, higher maternal prenatal RF predicted higher child school-age mentalization, especially related to self, and, curiously, higher use of emotional suppression, usually considered harmful. In the control group only, higher RF predicted better recognition of ambiguous facial expressions, as well as higher child attachment security and lower avoidance. The results show that maternal prenatal RF has far-reaching consequences on child socioemotional development. In low risk families, protective effects were more pronounced, but intergenerational transmission of mentalization was also found in high-risk families. Targeting maternal RF in early interventions is crucial, but also more comprehensive range of intervention elements are needed.

### **Brief Oral Presentations BOP35 - INFANCE OUT OF PRENATAL CARE - FOSTERING & ADOPTION**

BOP35.1

#### **DO TEMPERAMENTAL AND NEUROBIOLOGICAL MARKERS MATTER IN ADOPTIVE PARENTS' PERCEPTION OF THEIR CHILDREN'S BEHAVIORAL PROBLEMS AT ADOPTION PLACEMENT?**

**Ozturk Y.\*, Barone L.**

*University of Pavia, Department of Brain and Behavioral Sciences ~ Pavia ~ Italy*

Adoptive parents are faced with a unique set of challenges associated with the quality of the early nurturing environment of children they adopted and with an attachment bond with children. It is not surprise that parents of adoptees report their institutionalized children had more behavioral problems than parent-reared, non-institutionalized children. The question still not fully answered relates to possible factors which may affect parents' reports and perception of their adoptive children's behavioral problems. This study investigated whether adoptive parents' individual differences, including temperament and genetic markers, and children's distal features (i.e. age at adoption) might have roles in how they perceive behavioral problems in their just arrived children, by testing the moderating role of both age at adoption and genetic polymorphisms for mothers, and age at adoption for fathers. The analyses with 78 adoptive families (mothers, fathers and their adoptive child) were performed. They were asked to complete the Child Behavior Checklist for Ages 1.5-5 and the Adult Temperament Questionnaire. Regarding the DNA collection, buccal swabs were collected at the same time of self-report administration. The results suggest that mothers tend to rate higher on temperamental features of negative affectivity than adoptive fathers do and to perceive more behavioral problems in their just arrived children, if compared to fathers. Mothers' dopamine D4 receptor gene (DRD4-7 repeat allele) and children's age at adoption are two moderators in the association in which mothers' temperament was affecting their evaluation of their children's behavioral problem. Regarding the fathers, as we tested children's age at adoption as a single moderator, it moderates the relationship between negative affectivity and their evaluation of their children behavioral problems. This study allows us to more properly understand how specific individual differences of parents further affect the perception of their own children and the mechanisms involved in this perception.

BOP35.2

### **PRELIMINARY RESULTS FROM AN RCT OF FAMILY MINDS: A MENTALIZING PSYCHOEDUCATION INTERVENTION FOR FOSTER PARENTS**

**Adkins T.\***

*University of Texas ~ Austin ~ United States of America*

Mentalization-based interventions show promise in improving mental health outcomes for children and parents through increasing a family's ability to mentalize. Mentalization, or reflective functioning, develops within the context of a secure attachment relationship and involves the ability to understand behavior in relation to mental states such as thoughts and feelings. One area not given much consideration when training foster parents is their capacity to mentalize. Ensuring foster parents have such skills is especially relevant given that maltreated children who have been removed from their homes display higher rates of insecure attachment as well as emotional/behavioral challenges. Family Minds is a short-term, psychoeducational intervention developed specifically for foster parents, to increase their mentalizing skills and help them see the meaning behind their children's behaviors and their own reactions. In 2014, a quasi-experimental study evaluated this intervention and results indicated the intervention significantly increased foster parents' mentalization as well as lowered parenting stress (Bammens, Adkins & Badger, 2015; Adkins, Fonagy & Lutyen, under review). Due to these very promising results, a Randomized Controlled Trial (RCT) of this intervention was designed to more rigorously evaluate its' effectiveness. This presentation will discuss preliminary results from an RCT of this intervention. Data collection is occurring from April 2017 – April 2018. The study involves 100 foster parents in Texas, who have been randomly assigned to the intervention group and a "treatment as usual" group. Measures include the Parental Reflective Functioning Questionnaire, the Five-Minute Speech Sample coded for Reflective Functioning (FMSS-RF), the Difficulties in Emotional Regulation Scale and the Parenting Stress Index. Quantitative and qualitative results will be discussed as it

relates to parental reflective functioning, parenting stress and emotional regulation. Pre and post excerpts from the interviews (FMSS-RF) will also be provided and discussed.

BOP35.3

### **TRANSITION OF CHILDREN 0-3 INTO ADOPTIVE HOMES: CURRENT PRACTICES**

**Redmond R.\***

*Oregon Infant Mental Health Association ~ Portland ~ United States of America*

Transitioning into an adoptive home is one of the most important events in a child's life yet no data exists on child welfare practices. Document current practices for transitioning children up through age 3 into adoptive homes. 54 respondents were surveyed on the most recent transition they participated in. Participants were recruited through a nonprofit serving adoptive families and at community trainings on child welfare topics. Subjects were 29 females and 25 males with a mean age of 24.5 months and were adopted in the Portland, Oregon area. Transitions took on average 15.7 days and 5.3 in-person visits. 68% of children had contact with former caregivers after the transition; 43% had in-person contact. 72% of adoptive parents were unrelated strangers, 17% were kin and 11% were unrelated but had known the child. When adoptive parents were unrelated strangers, fewer visits occurred compared to other groups combined (4.8 vs 8.5;  $F=6.30$ ,  $p<.02$ ). The transition was rated as too short by 37% of respondents (2.85 visits), just right by 54% (5.9 visits) and too long by 9% (11.8 visits). 62% of foster parents, 37% of adoptive parents, and 12% of caseworkers rated the transition as too short. 84% of children's caseworkers were involved in planning the transition and, when involved, transitions had fewer visits (4.8 vs 9.6;  $F=7.63$ ,  $p<.01$ ). 69% of adoptive parents were involved and were linked to a trend toward more visits (6.5 vs 3.9 ;  $F=3.35$ ,  $p=.07$ ). 67% of foster parents were involved and were associated with significantly more visits (6.6 vs 3.8;  $F=4.03$ ,  $p=.05$ ). Who plans the transition and the nature of the adoptive relationship are more important for the length of the transition than characteristics of the foster or adoptive homes or of the child.

BOP35.4

### **PSYCHOSOCIAL ADJUSTMENT OF ADOPTED CHILDREN IN GERMANY: THE ROLE OF PREADOPTIVE STRESSORS AND PARENTAL STRESS**

**Hornfeck F., Bovenschen I.\*, Sabine H., Kindler H.**

*German Youth Institute ~ Munich ~ Germany*

Many adopted children were exposed to early adversity before adoption which can lead to emotional and behavioral problems even after adoption (Juffer & Ijzendoorn, 2005). As a consequence, adoptive parents may face specific problems and challenges during and after the adoption process (Lesens et al., 2012). The current study focuses on how child factors (current age, age at adoption, gender), pre-adoptive stressors and family-related factors (parenting, parental stress, family characteristics) affect adopted children's psychosocial adjustment in both intercountry and domestic adoptions. Adoptive families were contacted via adoption agencies in all regions of Germany as part of the nationwide survey of the "Research Center on Adoption". 257 adoptive parents, who had adopted a child within the last two years, participated (domestic:  $n=197$ ; mean age=30 months; intercountry:  $n=57$ ; mean age=62 months). The children's emotional and behavioral problems were assessed with the Strengths and Difficulties Questionnaire (SDQ). Preadoptive stressors (traumatic events, multiple placements, experiences of maltreatment and neglect) as well as the age at placement were reported by the adoptive parents. Family-related factors were assessed with standardized questionnaires (Brief Symptom Inventory, BSI; Parenting Stress Inventory, PSI; Alabama Parenting Questionnaire, APQ). The results show that the majority

of adopted children showed psychosocial adjustment appropriate to their age. Multiple regression analyses revealed that an important predictor for the existence of emotional and behavioral problems in adopted children was the parental stress reported by the parents. Moreover, the results indicate a tendency of the origin of the child and the age at placement to be meaningful predictors. This study comprises the largest survey of adopted families in Germany. It confirms the results of international studies on adoptive families and highlights the importance of parenting stress for the well-being of their adopted children. These results point to the importance of interventions focusing the whole family system.

BOP35.5

### **WORKING WITH THE FAMILIES IN RESIDENTIAL CARE - EVALUATION OF A TRAINING PROCESS WITH SOCIAL PROFESSIONALS**

**Negrão M., Veiga E.\*, Pereira C., Veríssimo L.**

*Universidade Católica Portuguesa ~ Porto ~ Portugal*

Despite the global pressure for the deinstitutionalisation of children in care across Europe, and recent changes in national legislation, Portugal remains a country with very high prevalence of residential care amongst at risk children (87,4% - CASA, 2016). Professionals who work in residential care face many demands, not only in working directly with the children, exposed to risk factors for their development, but also in addressing their biological and extended families in order to accomplish the best interest of the child (Mullins, 2011). However, in contrast with the multiple requirements of social work, these professionals are described as frequently lacking the specific training and up-dated scientific knowledge required for an effective assessment and intervention with these at risk children and families through the out of home care process (Bergmark & Lundstrom, 2002; Rosen, Proctor, Morrow-Howell, & Staudt, 1995). This study aims to evaluate a training program, designed at request of the Social Welfare Services and tailored to the specific needs of 44 residential care workers (psychologists, social workers, educators from 12 residential care institutions of in the district of Porto, northern Portugal) regarding the relationship and intervention with at risk families. The main goals, contents and strategies of this 28h long training program will be presented, as well as a mixed method evaluation of the process, encompassing data from questionnaires and focus group with the participants to assess their views about training process, the satisfaction with the training, and the ability of the training to alter perceptions and promote changes in professional practices. Data collection is still on-going and will be finished December 2017.

BOP35.6

### **ASSESSING CO-PARENTING IN THE PRE-ADOPTION INVESTIGATION: A PILOT STUDY**

**Miscioscia M.\*<sup>[1]</sup>, Sordano A.<sup>[2]</sup>, Porreca A.<sup>[1]</sup>, Consolini L.<sup>[2]</sup>, Di Ciommo R.<sup>[2]</sup>, Mandirola S.<sup>[2]</sup>, Simonelli A.<sup>[1]</sup>**

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Italian adoption laws mandate a four-month procedure in which a married couple who ask for adoption can be evaluated. Social workers and psychologists need to check individual and couple functioning in order to understand how suitable they are for adopting children. Clinical experience has brought to light some recurrent dysfunctional patterns in couples' co-parental coordination characterized by an over-involvement of mothers and child-centered interactions. Extensive research highlighted the usefulness of Prenatal LTP Paradigm (Fivaz-Depeursinge & Corboz-Warnery, 1999) to evaluate co-parental interactive style of future parents. To this regard, this pilot

study aims to introduce the observation of co-parental interactive style in the process of couple's pre-adoption investigation in order to observe if specific dysfunctional co-parental patterns and possible factors of risk could be discriminated. The Prenatal version of the Lausanne Trilogue Play (Fivaz-Depeursinge & Corboz-Warnery, 1999) has been adapted to be included in the pre-adoption investigation with a setting which provides for different dolls, according to the adopted child ages and ethnicity. 31 married couples without children, asking for their first adoption, have been recruited for this pilot study (31 Males: Mage=40.81; SD=6.04; 31 Females: Mage=39.97; SD=6.25). The results showed good internal consistency (Cronbach's  $\alpha = 0.658$ ) and a good level of inter-rater reliability ( $r = 0.756$ ). The studied group is characterized by a tense functional co-parental interactive style, which suggest that pre-adoptive LTP could reveal hidden conflicts in co-parental functioning that could compromise the future family functioning. Adoptive parents need to face more variables in their affiliation process, either for the long waiting time before they are matched with a child and the possible change in the ecological system, either for the unpredictable child story. The pre-adoptive LTP can better objectify risks in the adoptive affiliation, predicting the position that the child can assume in that specific co-parental frame.

#### **Workshop WS68 - MOVEMENT PATTERNS, TEMPERAMENT, AFFECT REGULATION AND PARENT-CHILD INTERACTION: OBSERVATIONAL DATA AND APPLICATIONS IN PRIMARY PREVENTION**

**Sossin M.\*<sup>[1]</sup>, La Barre F.<sup>[1]</sup>, Bryl K.<sup>[2]</sup>**

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In early development, body, mind, and relationships are intrinsically commingling in their influence upon observable behavior and subjective/intersubjective states. This workshop will describe both research findings and movement-informed prevention and intervention practices. Correspondences among temperament and distinct movement will be described, in which infants (9-14 months) and primary caregivers were video-observed in 20-minute periods of dyadic free-play. In an initial study of 35 parent-infant dyads, 62 distinct movement patterns utilizing the Kestenberg Movement Profile (KMP) were coded and correlated with infant temperament as measured by the parent-completed Revised Infant Behavior Questionnaire (IBQ-R), providing information regarding infant self-regulation, reactivity, activity, attention, and affects. Measures of parent-personality (NEO-R), parent-stress (PSI), and emotional-availability (EA) also pertained. The Parent-Infant Relational Assessment Tool (PIRAT), rating qualities of parent-infant interaction and identifying risk allows for distinct contributions of the IBQ-R, the KMP, and the PIRAT to be highlighted regarding implications for IMH work with infants and parents. Drawing on case studies (from the Pace Parent-Infant Toddler Research Nursery) of observable temperamental differences in parents and infants, will foster discussion of the dyad's discovery and co-creation of shared "action repertoires" through movement. These can predict problematic trajectories through childhood and beyond, and inform pathways to interventions in infancy. Two contrasting studies of mother-child pairs will be detailed to exemplify different types of movement interaction. Both empirical and case-study approaches warrant enhanced attention to movement qualities in psychodynamic developmental theory and in infant mental health practice, from primary prevention to parent-infant psychotherapy.

#### **Workshop WS74 - WORKPLACE SUPPORTS FOR INFANT MENTAL HEALTH PROFESSIONALS: AN EXPLORATION**

**Eaves Simpson T.\*, Robinson J., Megan C.**

University of Connecticut ~ Connecticut, US ~ United States of America

Although reflective supervision is widely regarded in the infant mental health (IMH) field as essential to workforce development and support, organizational culture significantly impacts how IMH practitioners manage work-related stress as they navigate the complexities of caring for vulnerable infants, toddlers, and their families.

This workshop aims to explore the contextual influences impacting infant mental health (IMH) practice and the role of reflective supervision as a protective mediator against work-related stressors unique to the infant mental health field.

Review preliminary data from a mixed methods study examining daily challenges clinical IMH professionals encounter and identified workplace supports that facilitate effective job performance. Thirty practicing IMH clinicians ranging in ages 28-61 (specialist and mentor levels) from home-visiting, early intervention, and mental health programs in Colorado and Connecticut completed the Maslach Burnout Inventory online survey for human service professionals and were interviewed. The semi-structured interview consisted of 14 open-ended questions focusing on: caseload, client engagement, change/growth in the therapeutic relationship, teamwork, clinician experience, and clinician self-care. An inductive approach to qualitative data analysis revealed that reflective supervision was consistently identified as a primary source of professional support essential to clinicians' maintenance of emotion-regulation and management of work-related stress. Unanticipated common themes emerged identifying structural factors like organizational culture, flexible work hours (i.e. full-time vs. part-time), sustained collegial support networks, and professional versatility as critical to facilitating self-care, management of work-related stress, and career longevity in the IMH field. The authors contend that a life span development perspective focusing on women in mid-life is essential to examining the lived experience of IMH clinicians and exploring more systematic methods of fortifying this particular workforce.

### **Workshop WS75 - TOGETHER WE GO FAR! HOW RESEARCHERS, CLINICIANS, COMMUNITY ORGANIZATIONS AND THE GOVERNMENT IN ONTARIO, CANADA HAVE WORKED TOGETHER TO AFFECT MAJOR SYSTEM CHANGE FOR YOUNG CHILDREN AND THEIR FAMILIES**

**Clinton J.\*<sup>[1]</sup>, Fuller S.<sup>[2]</sup>, Lupa M.<sup>[3]</sup>**

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<sup>[3]</sup>Canadian Mothercraft Society ~ Toronto ~ Canada

The Government of Ontario is currently engaged in an ambitious agenda to modernize and enhance early childhood services in the province: from child care and early years to child and youth mental health to special needs supports. Common among the initiatives are several key objectives: to integrate services; to improve service pathways; and, most importantly, to ensure that young children are able to more easily access the programs, services and interventions they need to optimize development. Three key stakeholders who have contributed to the transformation of Ontario's child care and early years' sector will share their experience with:

- 1)The development of a new pedagogical framework for the early years and child care, "How Does Learning Happen?"
- 2)The introduction of a policy framework to support the pedagogy, including use of the Early Development Instrument (<https://edi.offordcentre.com/>)
- 3)The implementation of service system change in collaboration with community-based service providers, including infant and early childhood mental health organizations

Dr. Jean Clinton, an infant and child psychiatrist, is an advisor to the Premier of Ontario and the Minister of Education. Shannon Fuller is the Assistant Deputy Minister of the Early Years Branch with the Ontario Ministry of Education. Michele Lupa is the Executive Director of the Canadian Mothercraft Society, a Toronto-based NGO that serves families with young children.

## 13:15-14:45 General Sessions

### Symposium S58 - PSYCHOTHERAPY WITH MALTREATED AND TRAUMATIZED CHILDREN: EFFICACY AND MODELS OF INTERVENTION

**Nicolais G.\***, Ammaniti M.

*Sapienza University ~ Rome, Italy ~ Italy*

Children who experience persistent maltreatment within their families are at risk of a range of physical, social, emotional, behavioral and economic adversities (Herrenkohl et al., 2013), with a long-term impact on emotion processing abilities in adulthood (Cahall Young, Spatz Widom, 2014). This wide array of potentially chronic consequences need to be specifically addressed in treatment. There is an ample range of psychosocial and psychotherapeutic interventions currently available to children who experience complex trauma as a consequence of maltreatment. Even so, availability varies enormously and those interventions are based on a variety of theoretical underpinnings, with very little attention given to how best to address and intervene on the consequences of maltreatment. Centers of excellence for the clinical management of child maltreatment cases aim at providing effective mental health services, implementing systematic reflections on their organizational features and research on the efficacy of their interventions. The aim of the symposium is to offer and illustrate research data and methodologies of intervention from three such centres of excellence: “Spazio Sicuro” (Safe Space), serving the population of Rome and Lazio Region in Italy; the MOSES treatment model within the Department of Pediatrics and Developmental Neurology, Munich University in Germany; and the Parenting Education Program, Family Resource Center (T-PEP) at Tulane University, New Orleans, USA. The first presentation shows research data on differences in outcomes between two psychotherapeutic approaches with maltreated children. The effects of Eye Movement Desensitization and Reprocessing (EMDR) and of psychodynamic (PD) therapy on neural processing of emotions in children with complex trauma were compared. The second presentation shows the effects of a specific treatment model (MOSES) on behavioral, cognitive and emotional level and psycho-neurobiological development of maltreated children. Data are discussed in the light of the potential efficacy of a multimodal approach. The third presentation describes the transition of a former infant mental health service to a wider Parenting Education Program and Family Resource Center. Methodological changes towards a more articulated clinical and organizational identity are discussed, in the light of better efficacy outcomes in the intervention with traumatized and high-risk children and families.

S58.2

#### **EYE MOVEMENT DESENSITIZATION AND REPROCESSING THERAPY VERSUS BRIEF PSYCHODYNAMIC THERAPY: A HDEEG STUDY ON NEURAL PROCESSING OF EMOTIONS IN CHILDREN WITH COMPLEX TRAUMA**

**Trentini C.\*<sup>[1]</sup>**, Pagni M.<sup>[2]</sup>, Nassisi V.<sup>[1]</sup>, Nicolais G.<sup>[1]</sup>, Speranza A.M.<sup>[1]</sup>, Tambelli R.<sup>[1]</sup>, Fernandez I.<sup>[3]</sup>, Ammaniti M.<sup>[4]</sup>

<sup>[1]</sup>*Sapienza University, Department of Clinical and Dynamic Psychology ~ Rome ~ Italy*, <sup>[2]</sup>*Institute of Cognitive Sciences and Technologies of the Italian National Research Council (ISTC-CNR) ~ Rome ~ Italy*, <sup>[3]</sup>*EMDR Italy Association ~ Milan ~ Italy*, <sup>[4]</sup>*International Psychoanalytical Association ~ Rome ~ Italy*

Early maltreatment alters the trajectories of brain development, decreasing functionality of cerebral regions related to the processing of emotions. From these premises, our study aimed at exploring possible differences between the effects of Eye Movement Desensitization and Reprocessing (EMDR) and of psychodynamic (PD) therapy on neural processing of emotions in children with

complex trauma. Seventeen school-aged children with histories of early traumatization were enrolled in the study: 10 children were treated with EMDR (EMDR group) and 7 children were treated with PD therapy (PD group). Children were examined before (T0) and within one month after the conclusion of the clinical interventions (T1). High density Electroencephalographies (hdEEGs) were recorded while children passively viewed angry, afraid, happy, and neutral faces; therefore, clinical scales were administered at the same time. Correlation analyses were performed to detect brain regions whose activity was linked to children's traumatic symptom-related and emotional-adaptive problem scores. At T0, in all four conditions, both EMDR and PD group showed similar significantly higher activity on the right medial prefrontal and fronto-temporal limbic regions. At T1 as compared to T0 interesting differences were found between groups. While EMDR group showed similar response to all adult emotions in the left medial and superior temporal regions, PD showed cerebral responses that varied in relation to specific emotions. In both groups, significant correlations were evidenced between clinical scales and the same regions whose activity significantly differed between pre- and post-treatment, indicating the decrease of post-traumatic symptoms and the improvement of emotional-adaptive functioning in children over time. These preliminary results may contribute in expanding the knowledge on the specific effects of EMDR and of PD therapy on neural processing of emotions, in children with histories of early interpersonal traumatization.

S58.3

**FROM INFANT TEAM TO T-PEP: ADJUSTING A SERVICE DELIVERY SYSTEM TO MEET THE NEEDS OF CHILDREN, FAMILIES, PROVIDERS AND A SOCIAL SERVICES SYSTEM**

**Wajda--Johnston V.\*, Bailey L.**

*Tulane University ~ New Orleans ~ United States of America*

The Tulane Infant Team provided Infant Mental Health Services to children in foster care ages birth to 6 years and their caregivers in one parish in Louisiana from 1997 to 2013. In 2013, the Infant Team transitioned to being the Tulane Parenting Education Program, Family Resource Center (T-PEP). The transition included the development of new services, and expanded service area and the development of a new organizational identity. Services are no longer limited to children placed in foster care, and families who retain custody of their children and are involved with social services are also served. As part of the Louisiana Family Resource Center network, the clinic has expanded services to include parenting education, as well as continuing to provide assessment and therapy services. Over the past 4 years, the T-PEP has evolved to its current method of delivering services. The effect of the changes in structure on service effective delivery will be presented. Additionally, the challenges to providing effective Infant Mental Health services, developing a new organizational identity, and ethical dilemmas in providing services will be discussed. The evolution and expansion of Infant Team to T-PEP required the restructuring of the clinical staff, investment in training in new services, and expansion of staff to meet the expanded needs of the clients. Additionally, the team continues to refine its identity and its relationship with the social services system with which it is partnered.

S58.4

**THE MOSES® TREATMENT MODEL: EFFICACY AND WORKING MECHANISMS OF TREATMENT EFFECTS OF CHILDREN WITH ATTACHMENT-TRAUMATIZATIONS IN INFANCY**

**Brisch K.H.\*, Oberschneider L., Ebeling L., Hilmer C., Quehenberger J.**

*Pediatric Psychosomatic Medicine and Psychotherapy, Dr. von Hauner Children's Hospital, LMU ~ Munich ~ Germany*

The severe consequences of early-life interpersonal traumatization can be described as complex PTSD and developmental trauma disorder. Though intensively studied, etiological and treatment mechanisms remain insufficiently understood in detail. MOSES® is an attachment based intensive in-patient psychotherapeutic treatment model for severely early-traumatized children from 6 to 13 years. Effects of the MOSES® treatment model are studied with reference to reduction in symptoms of developmental trauma on the behavioral level, psycho-neuroendocrinological stress response and developmental progress in brain structure and connectivity. We investigated the efficacy of the treatment including (1) questionnaires addressed to parents, children and clinical staff ( Parental Report of Post-traumatic Symptoms, PROPS and Child Behavior Check List, CBCL), (2) salivary psycho-neuroendocrinological stress parameters in response to attachment interviews and (3) fMRI compared to matched healthy subjects and a waiting control group with treatment-as-usual. In a 6 months follow-up, the stability of effects over time was studied. Treatment group consisted of 26 children, average duration of treatment was 7.9 months. Measurements were performed 2 months before therapy (waiting control group), at admission to therapy, at discharge and 6 months after therapy (follow-up). PROPS and CBCL values decreased with clinical significance and stability throughout follow-up. Assumed corresponding therapy effects on psycho-neurobiological condition measured by fMRI and physiological parameters will be presented. Efficacy of attachment based intensive in-patient treatment of severely early-traumatized children as measured by developmental progress in socio-emotional competencies and reduction of trauma-related symptoms over time is promising.

#### **Symposium S62 - CHILD MALTREATMENT: EXPLORING TRANSMISSION MECHANISMS AND ITS IMPACT ON PSYCHOPATHOLOGY**

**Madigan S.\***

*University of Calgary ~ Calgary ~ Canada*

Population-based surveys undertaken in different countries, along with national statistics compiled through reports to state and local child protective service agencies, reveal that the incidence of child maltreatment is a global health problem of epidemic proportions. The worldwide prevalence of childhood maltreatment is 13%, 27%, and 18% for sexual, emotional, and physical abuse, respectively (Stoltenborgh et al., 2011; 2012; and 2013). Considerable research has been devoted to understanding the determinants and long-term consequences of child maltreatment. The studies in this symposium give an extensive overview of the current literature and enhance our understanding of the mechanisms that may be responsible for explaining how maltreatment is passed along from one generation to the next, as well as the consequences of this phenomena. The first paper presents possible mechanisms of intergenerational transmission and examines whether cumulative childhood trauma, psychological functioning, and family ecology can explain continuities versus discontinuities of intergenerational maltreatment. The second paper reports on processes that may account for the cycle of maltreatment, with a specific focus on maternal emotional reactivity and inhibitory control as potential mechanisms. Using a three-generation design, the third paper explores the role of nature versus nurture on the intergenerational transmission of child maltreatment. Finally, the fourth paper meta-analytically summarizes the literature on the deleterious consequences of maltreatment for children in different rearing conditions (e.g., foster care, group care, etc.). Together, these studies have important implications for preventative and intervention efforts aimed at breaking the intergenerational cycle of maltreatment.

S62.2

**INTERGENERATIONAL CONTINUITY OF CHILD MALTREATMENT: THE ROLES OF CHILDHOOD TRAUMA, MATERNAL PSYCHOLOGICAL FUNCTIONING AND FAMILY ECOLOGY**

**St-Laurent D.\*, Milot T., Dubois-Comtois K.**

*Université du Québec à Trois-Rivières ~ Trois-Rivières ~ Canada*

Childhood maltreatment is associated with a higher risk of abusive or neglectful parenting behaviors in adulthood (e.g., Bartlett et al., 2017). Despite evidence of intergenerational transmission of maltreatment, a substantial number of parents maltreated in childhood do not perpetuate the cycle with their own children (Dixon et al., 2009; Thornberry et al., 2012). Studies on factors that may potentiate the risk of intergenerational transmission have yielded divergent results (e.g., Banyard et al., 2003; Ben-David et al., 2015; Cort et al., 2011). This study examined whether the following factors distinguish mothers who perpetuate the cycle of maltreatment from those who break the cycle: cumulative childhood trauma, psychological functioning and family ecology. Participants were 193 mother-child dyads (children aged 4 to 6 years) from low-income families: 74 of these children were maltreated (according to Child Protection Agencies) and 143 mothers reported having been maltreated in childhood (Childhood Trauma Questionnaire; Bernstein et al., 1994). Mother's psychological functioning included psychological distress (Symptom Checklist-90-R; Derogatis & Lazarus, 1994), dissociation (Dissociative Experiences Scale; Carlson & Putnam, 1993) and parental stress (Parenting Stress Index; Abidin, 1995). Measures of family ecology included socio-demographic risk, residential instability, social network, intimate partner violence (IPV) (Revised Conflict Tactics Scales; Straus et al., 1996) and stressful events (Life Experiences Survey; Sarason et al., 1978). Compared to mothers who broke the cycle, mothers who perpetuated the cycle experienced greater childhood trauma, more socio-demographic risk and reported more IPV and stressful events, more residential instability and fewer contacts with their own family. Mothers did not differ on psychological functioning. These results suggest that mothers who perpetuate the cycle live in highly stressful conditions that may greatly challenge their coping skills and interfere with their ability to adequately take care of their child.

S62.3

**PARENT-CHILD EMOTIONAL REACTIVITY AND THE INTERGENERATIONAL TRANSMISSION OF PHYSICAL ABUSE**

**Timmer S.G.\*, Brandi H., Usacheva M., Urquiza A.**

*UC Davis Children's Hospital ~ Sacramento ~ United States of America*

Approximately 30% of parents who experienced abuse have been found to have perpetrated abuse on their own children (Butchart & Mikton, 2014). The mechanisms underlying the transmission of abusive parenting are not well understood. However, links between harsh discipline and negative emotionality (e.g., Patterson, 1972), combined with children's reactivity to cues of hostility (e.g., Shackman & Pollak, 2014), led us to propose maternal inhibitory control and emotional reactivity in parenting interactions as the mechanisms by which abuse is transmitted from one generation to another. The purpose of this study was to investigate the mediating role of mothers' emotional reactivity and inhibitory control in the intergenerational transmission of abuse. We used a sample of 327 ethnically diverse 2 – 8 year old children referred to Parent-Child Interaction Therapy together with their biological mothers. A third of the children had a history of physical abuse, with mothers being perpetrators in 56% of cases. Mothers' history of childhood abuse was measured by their responses to questions about having been abused as a child on the Child Abuse Potential Inventory (Milner, 1990). An observational measure of emotional availability in parent-child play situations (Biringen, 2000) was used to measure emotional reactivity. Mothers' inhibitory control

was self-reported on the Brief Symptom Inventory (Derogatis, 1995). Results of preliminary analyses predicting mothers' abusiveness suggested that the likelihood of mothers' physical abusiveness was predicted by higher self-reported inhibitory control, mothers' higher negative reactivity, and children's lower, possibly overcontrolled negative reactivity. However, these effects did not moderate the effect of mothers' history of abuse on their abusiveness. Results suggest that mothers' psychological states resulting from early abuse may affect the parent-child relationship and children's emotional reactions through mothers' reactivity and lack of inhibitory control. Implications of these findings will be discussed.

S62.4

#### **THE ROLE OF GENETIC AND ENVIRONMENTAL FACTORS IN THE INTERGENERATIONAL TRANSMISSION OF CHILD MALTREATMENT - AN EXTENDED FAMILY DESIGN**

**Pittner K.\*, Bakermans--Kranenburg M., Lenneke A., Buisman R., Van Den Berg L., Compier--De Block L., Voorthuis A., Elzinga B., Lindenberg J., Tollenaar M., Linting M., Diego V., Van Ijzendoorn M.**

*Leiden University ~ Leiden ~ The Netherlands*

Studies on the intergenerational transmission of child maltreatment have shown that experiencing maltreatment growing up increases the risk of becoming a perpetrator. However, it is unclear to what extent intergenerational transmission is due genetic factors, and to what extent to environmental factors. Genetic and environmental factors may play a role at the child level – by affecting the risk of experiencing maltreatment - as well as the parent level – by affecting the risk of perpetrating maltreatment. Evidence from twin studies indicates that genetic and environmental factors may affect the risk of experiencing maltreatment but results are mixed. To date no study has examined the effects of parent-driven genetic and environmental factors on perpetrating maltreatment. The present study examined genetic and environmental effects on experienced and perpetrated maltreatment in an extended family design. The sample consisted of 395 individuals (225 women; Mage = 38.85 years, range = 7 to 88 years) from 63 families participating in a three-generation study. Experienced and perpetrated child maltreatment (emotional and physical abuse and neglect) were assessed using self-report questionnaires. All heritability analyses were performed in the SOLAR (Almasy & Blangero, 1998). For experienced maltreatment, all maltreatment phenotypes were partly heritable with estimates ranging from 0.25 (SE = 0.14) for physical abuse to 0.47 (SE = 0.12) for emotional abuse. For perpetrated maltreatment, only emotional abuse was heritable with an estimate of .33 (SE = .08). Shared environmental effects (c2) explained a significant proportion of variance for all phenotypes except perpetrated emotional abuse. The present study shows that both genetic and environmental factors are critically involved in experiencing maltreatment but findings for perpetrating maltreatment are more complex. A better understanding of the transactional relationship between child and parent risk factors may be crucial in developing more targeted prevention measures.

S62.5

#### **ARE MALTREATED FOSTER CHILDREN AT GREATER RISK OF MENTAL HEALTH PROBLEMS THAN THEIR PEERS? A SERIES OF META-ANALYSES**

**Dubois--Comtois K.\*<sup>[1]</sup>, Cyr C.<sup>[2]</sup>, Bussières E.<sup>[1]</sup>, St--Onge J.<sup>[1]</sup>, Baudry C.<sup>[1]</sup>, Milot T.<sup>[1]</sup>**

*<sup>[1]</sup>Université du Québec à Trois-Rivières ~ Trois-Rivières ~ Canada, <sup>[2]</sup>Université du Québec à Montreal ~ Montreal ~ Canada*

The detrimental effects of child maltreatment on psychopathology are well documented (e.g., Kim & Cicchetti, 2010). When child safety is compromised, removal from home is necessary to protect

from further harm. Foster care placement is a form of intervention promoting child security and well-being (Horowitz et al., 2001). However, given the different, yet conflicting, set of experiences, including prior experiences of maltreatment and safer experiences with their new caregiver, it is unclear how this twofold condition influences foster child outcomes. This meta-analysis tests whether foster children show higher levels of psychopathology symptoms in comparison to 1) maltreated children from different settings (group care or with biological parents), and 2) non-maltreated peers from diverse populations (community, at-risk, clinical samples). Fifty-nine studies, including 80 foster care samples and 97 comparison samples, were included in the present meta-analysis, with a total of 113 independent effect sizes (N foster care=41,622 children; N comparison=207,983 children). These studies were published between 1988 and 2017. Children in foster care showed higher levels of psychopathology symptoms than non-maltreated children from community samples ( $d=.33$ , CI[.20–.47]) or matched/at-risk samples ( $d=.50$ , CI[.24–.76]). They were as likely to show mental health issues as maltreated children living at home ( $d=.04$ , CI[-.07–.16]) or non-maltreated children from clinical samples ( $d=.08$ , CI[-.03–.18]). However, foster children showed lower levels of psychopathology than those in group care ( $d=-.50$ , CI[-.58–.41]). Significant Q statistics for each of these outcomes indicated heterogeneity of effect sizes and further analyses revealed the influences of several moderators: number of children with experiences neglect, time into care, type of foster care, clinical levels of symptoms, and informants. The discussion will focus on the enduring effect of child maltreatment despite placement in foster care and the protective and risk factors that may mitigate this effect.

#### **Symposium S66 - THE SIGNIFICANCE OF THE INTERPARENTAL RELATIONSHIP FOR YOUNG CHILDREN'S WELL-BEING**

**Lux U.\*, Walper S.**

*German Youth Institute ~ Munich ~ Germany,*

This symposium addresses the parents' partnership as an important context for children's development in the first years of life, be it as a resource or as a risk factor. While more visible in separated families, relationship quality and interparental conflict has also proven important for children's well-being in nuclear families (Grych & Fincham, 2001). From infancy to adolescence, distressed couple relationships, interparental conflict and dysfunctional coparenting have been shown to contribute to child adjustment difficulties in various ways (e.g. Baril, Crouter & McHale, 2007; Cummings & Davies, 1994). In particular, interparental aggression or rather domestic violence have been pointed out as major risk factor for children's well-being. However, evidence regarding such effects on very young children is still scarce. The first contribution addresses "The influence of interparental conflict and (co)parenting on toddler's adjustment difficulties" using parents' reports in a nationwide longitudinal panel study in Germany. The second paper draws attention to the negative impact of "Primary caregiver domestic violence victimization and their young children's development" across time in a high-risk environment in the United States. The third paper "Exposed to family aggression – The significance of domestic violence for the well-being of infants" highlights the impact of domestic violence in a family perspective by focussing on both couple members. The last contribution from Great Britain: "Parents as Partners: Promoting the interparental relationship as a protective factor for children's wellbeing" sheds light on the substantial benefits of a couple-based intervention for all family members. The session closes with an active discussion by a discussant in the light of related findings for older age groups and with the involvement of the audience.

S66.2

### **THE INFLUENCE OF INTERPARENTAL CONFLICT AND (CO)PARENTING ON TODDLERS' ADJUSTMENT DIFFICULTIES**

**Lux U.<sup>[1]</sup>, Wendt E.<sup>[1]</sup>, Thoennissen C.<sup>[2]</sup>, Wilhelm B.<sup>[2]</sup>, Walper S.\*<sup>[1]</sup>**

<sup>[1]</sup>*German Youth Institute ~ Munich ~ Germany*, <sup>[2]</sup>*Ludwig-Maximilians-University ~ Munich ~ Germany*

Interparental conflict has been pointed out as major risk factor for the well-being of children. Empirical studies reveal clear associations between children's maladjustment and frequent destructive conflicts between parents (Buehler et al., 1997). It is assumed that interparental conflict spills over from the couple to the coparental relationship, undermining parents' skills to cooperate. Furthermore, partnership discord is often detoured to the parent-child relation by undermining parenting competencies and caregiving behavior. Several meta-analyses provide evidence for such negative effects of interparental conflict on the parent-child relationship and children's adjustment problems (Gershoff, 2002; Krishnakumar & Buehler, 2000). This longitudinal study addresses the underlying mechanisms and consequences of interparental conflict for coparenting and parenting competencies and its impact on toddler's behavioral and emotional problems. Analyses are based on data from the German Family Panel pairfam. The sample comprised N=933 target participants (58.6 % mothers and 41.4 % fathers) who reported on their 3- to 5-year old children (mean 4.1 years; 53.7 % males) in wave 6 (2013/14). Information regarding infants' adjustment difficulties as well as on interparental conflict, coparenting problems and negative parenting behavior were used (see Scales Manual, Thoennissen et al., 2016). Mothers' and fathers' report on interparental conflict predicted children's behavioral and emotional problems. These effects were mediated by coparenting problems and in part also by negative parenting. Further analysis regarding gender effects and the interplay of mediators revealed a more direct path of interparental conflict on negative parenting for fathers, while more total variance of maternal reports was explained by the mediation model including coparenting. Longitudinal data will show the impact of these effects over time. The findings provide strong support for the significance of parents' partnership and coparenting quality as targets for prevention and intervention efforts to diminish their negative impact on parenting behavior and child development.

S66.3

### **PRIMARY CAREGIVER DOMESTIC VIOLENCE VICTIMIZATION AND THEIR YOUNG CHILDREN'S DEVELOPMENT**

**Christ S.L.\***

*Departments of Human Development and Family Studies & Statistics, Purdue University ~ Indiana ~ United States of America*

Young children living in high-risk environments are often exposed to multiple negative experiences. It is important to understand how domestic violence experienced by their primary caregivers affects children's well-being in the context of other deleterious exposures. The sample included 1,286 children aged 0 to 2 years at baseline (2008). Data come from the National Survey of Child and Adolescent Well-Being II (NSCAW II) study. The sample is representative of children involved with Child Protective Services in the US. Children were observed at three time points approximately 18 months apart. The effects of mild DV, severe DV, and total DV episodes experienced by the primary caregiver on children's development trajectories in adaptive behaviors, temperament domains, and communication were estimated using marginal regression modeling. DV negatively affected the trajectories of children's daily living skills and socialization skills after controlling for child maltreatment and the home environment. Mild, severe, and total episodes of DV were all related

to a reduction in the increases in socialization skills from age 0 to age 5. Mild DV had the most impact on developmental deceleration in daily living skills. Mild DV also negatively affected growth in expressive communication between ages 0 and 5. Also, children showed declines in the friendliness scale from age 0 to 3 with increases in DV whereas child maltreatment measures did not associate with this temperament. In this high-risk population, infants do not show marked differences in outcomes due to the DV experiences of their primary caregiver; however, these children's developmental trajectories in toddlerhood are affected. Interestingly, in some instances DV is relevant while other negative exposures, including child abuse and neglect are not.

S66.4

#### **EXPOSED TO FAMILY AGGRESSION – THE SIGNIFICANCE OF DOMESTIC VIOLENCE FOR THE WELL-BEING OF INFANTS**

**Liel C., Lux U.\*, Lorenz S., Eickhorst A., Walper S.**

*German Youth Institute ~ Munich ~ Germany*

Besides other burdens, a poor interparental relationship is a major risk factor for child abuse and neglect (Stith et al., 2009). Destructive conflicts and especially aggression between parents (domestic violence; DV) do have traumatic effects on children's development. Infants' exposure to DV is also associated with harsh parenting and child's adjustment difficulties (Graham, Kim & Fisher, 2012). Besides the huge overlap to other forms of child abuse, DV has been shown to be a form of abuse itself (Evans, Davies & DiLillo, 2008). Evidence in the research of family burdens and risks for child maltreatment still is largely based on individual reports from mothers, instead of focusing on both caregivers at the same time. In order to reduce this limitation, this study addresses the impact of DV in a family perspective. In the national main study KiD 0-3 data on psychosocial burdens and risk factors of child abuse and neglect was collected from 8.063 families with at least one child aged 0-3 years. According to screening data, 197 families with different risk levels were recruited for two in-depth assessments 7 months apart. This in-depth study collected data on child adjustment and both parents' self report on family violence, couple distress, parental self efficacy and sensitivity for infants' emotions. Data-analyses showed a greater impact of risk factors for mothers, presumably due to their role as primary caregivers. Findings corresponded to risk factors for DV in the KiD 0-3 main study. Also, differential associations of risk factors for DV for mothers and fathers could be identified. This study shows the importance of addressing violence in a family perspective. The implications of the differential associations of risk factors for mothers and fathers in displaying IPV for interventions have to be taken into account.

S66.5

#### **PARENTS AS PARTNERS: PROMOTING THE INTERPARENTAL RELATIONSHIP AS A PROTECTIVE FACTOR FOR CHILDREN'S WELLBEING**

**Casey P.\*<sup>[1]</sup>, Cowan P.A.<sup>[2]</sup>, Cowan C.P.<sup>[2]</sup>, Draper L.<sup>[3]</sup>, Mwamba N.<sup>[3]</sup>, Hewison D.<sup>[3]</sup>**

*<sup>[1]</sup>Evidence Based Practice Unit, University College London and the Anna Freud Centre ~ London ~ United Kingdom, <sup>[2]</sup>University of California ~ Berkeley ~ United States of America, <sup>[3]</sup>Tavistock Relationships ~ London ~ United Kingdom*

Supportive interparental relationships have consistently been linked to children's psychological wellbeing. Yet, despite the well-established links between couple relationship quality and healthy family functioning, and burgeoning evidence from the international intervention field, there is no evidence of the efficacy of couples-based interventions for children's wellbeing from the United Kingdom. This presentation describes an attempt to address that gap. The Parents as Partners Program (PasP) comprises a 16-week couples curriculum modelled on the U.S. intervention

Supporting Father Involvement. Changes from pre- to postintervention for the first 97 couples to complete the U.K. program are described. This study explored whether the PasP program, a group-based intervention developed in the United States, brought about the same benefits in a U.K. high-risk sample. The study is based on 97 couples with children (median age of the youngest child: 5.4 years) from U.K. communities with high levels of need, recruited to PasP because they are at high risk for parent and child psychopathology. Mothers and fathers completed self-report questionnaires pre- and postintervention assessing parents' psychological distress, parenting stress, couple relationship quality and conflict, fathers' involvement in child care and, importantly, children's adjustment. Parent-report SDQ data collected at baseline indicated above-average levels of emotional and behavioural difficulties among these children. Multilevel modelling analysis comparing pre- and postintervention responses not only showed substantial improvements for both parents in couple relationship quality, but also improvements in parent and child psychopathology. Analyses also indicated most substantial benefits for couples displaying poorest functioning at baseline. The findings provide initial evidence for the successful implementation of PasP in the U.K., and adds support for the concept of the couple relationship as a resource by which to strengthen families and to mounting evidence for the inoculative effect of strong couple relationships for families and children.

#### **Symposium S69 - DREAM-BIG: COMPLEX AND NOVEL APPROACHES TO STUDYING DEVELOPMENTAL PSYCHOPATHOLOGY**

**Wazana A.\***

*McGill University ~ Montreal ~ Canada*

Estimates suggest that half of the population will meet criteria for a lifetime psychiatric disorder, resulting in considerable individual and social burden. As most mental disorders first emerge in childhood, intervening early in life is key to effective prevention and early treatment. For prevention and intervention to be cost-effective, reproducible and comprehensive models of pathophysiology are needed. In this symposium, we present novel, interdisciplinary approaches that advocate a developmental perspective and incorporate recently proposed guidelines, such as the NIMH's RDoC approach, to the study of mental illness. Study 1—introduces the recently established DREAM-BIG consortium: an international framework of comparably designed, independent birth cohorts. In the current example, we focus on modeling and reproducing key effects of the prenatal environment on early age offspring psychopathology utilizing large amounts of data collected from multiple informants and at multiple time points. Study 2—proposes a novel method for characterizing developmental risk from multiple environmental and genetic factors at the same time. The LEGIT approach relies on machine learning techniques, such as alternating optimization, for simultaneously analyzing the contribution of multiple genes and environments to predict the outcome based on data-driven weighing of each parameter. This approach will be demonstrated in a model predicting attentional competence during infancy from dopaminergic pathway genes, prenatal depression and early postnatal maternal sensitivity. Study 3—reviews the most important postnatal moderators of the link between prenatal risk and offspring psychopathology. The emphasis on potential buffers of the adverse effect of prenatal stress serves to more precisely inform early interventions. Study 4—presents a conceptual model for understanding positive mental health outcomes in the context of adversity and risk and its specific clinical and policy implications. The prediction of a strength-based outcome from prenatal adversity and genetic risk scores illustrates the importance of conceptualizing risk as susceptibility.

S69.2

**STUDY 1: A LONGITUDINAL, MULTI-COHORT STUDY OF ANTENATAL MATERNAL STRESS AND EARLY LIFE OFFSPRING PSYCHOPATHOLOGY**

**Szekely E.\*<sup>[2]</sup>, Neumann A.<sup>[3]</sup>, Sallis H.<sup>[1]</sup>, Pearson R.<sup>[1]</sup>, Tiemeier H.<sup>[3]</sup>, Evans J.<sup>[1]</sup>, Wazana A.<sup>[2]</sup>**

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Consistent with fetal programming, antenatal maternal stress is an important risk factor for a wide range of mental disorders over the lifespan. Understanding which type of maternal stress confers vulnerability for which outcome remains elusive, and has important implications for prevention and early intervention. Our aim was to anchor diversely designed longitudinal studies in comparable measures of major types of prenatal stress, to study their effects on offspring psychopathology early in life. The DREAM-BIG network of three comparably designed, independent birth cohorts: ALSPAC (Bristol, U.K.; N=11,612); Generation R (Rotterdam, the Netherlands; N=7,946); and MAVAN (Montreal & Hamilton, Canada; N=408). The three cohorts had numerous measures on key aspects of antenatal maternal adversity, which were used to construct comparable, underlying latent factors representing major sources of adversity. In addition, all cohorts had multi-informant, repeated assessments of childhood psychopathology, which were used to extract a general psychopathology factor and the more specific internalizing and externalizing factors. In ALSPAC and Generation R, psychopathology measures spanned the early school years (6-8 years), whereas MAVAN focused on the preschool period (4-6 years). Subsequently, we examined the specific links between distinct areas of antenatal adversity and offspring psychopathology (both general and specific). The latent factors consistently identified across the three cohorts for antenatal adversity were stressful life events, contextual risks, parental risks, interpersonal risks and maternal psychopathology (with separate loadings for anxiety, depression and anhedonia). Consistent associations between specific factors of antenatal adversity and early offspring psychopathology will be presented. In addition to providing insights into the specific links between antenatal adversity and offspring mental health, this study is a powerful example of how to anchor diversely designed longitudinal studies with comparable measures to facilitate reproducibility and generalizability of research findings.

S69.3

**STUDY 2: THE LATENT ENVIRONMENTAL AND GENETIC INTERACTION MODEL (LEGIT): THE NEXT STEP IN GXE INTERACTION TESTING**

**Wazana A.\*<sup>[1]</sup>, Jolicoeur--Martineau A.<sup>[2]</sup>, Szekely E.<sup>[1]</sup>, Greenwood C.<sup>[1]</sup>**

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The Maternal Adversity, Vulnerability, and Neurodevelopment (MAVAN) project aims to understand how variations in the early environment modify developmental risk characterized by genetic and prenatal influences, to predict a number of outcomes, cognitive, social-emotional and psychopathological. Models which interact genes and environment have faced a number of methodological issues not the least of which are limitations of monogenic and mono-environmental construction of risk factors. In this presentation, we describe and test a Genotype  $\times$  Environment interaction (G $\times$ E) model with multiple genetic variants and environmental exposures. A method to estimate the parameters in a G $\times$ E model where G is a weighted sum of genetic variants (genetic score) and E is a weighted sum of environments (environmental score) is presented. The algorithm converges very quickly, and Gene  $\times$  Gene interactions (G $\times$ G) and Environment  $\times$  Environment interactions (E $\times$ E) can be incorporated into the genetic and environmental scores. We illustrate this approach in comparison to a traditional G $\times$ E model, in the prediction of a repeated measure of attention at 18 and 24 months (ITSEA) from third trimester prenatal stress (CESD and pregnancy-

specific anxiety), postnatal maternal depression (CESD), child and maternal dopaminergic genotype (DRD4, DAT1, COMT, BDNF), and mother-child interactions at 6 months (micro-analytic measures). Alternating optimization improves significantly upon the fixed environment and genetic weighted score models. A maternal interaction score consisting of three aspects of the mother-child interaction (inattention, tactile, play) and a dopaminergic genetic risk score (including main effect and GxG components) interacted with prenatal depression to predict child attention. This model explained 41% of the in-sample variance and 25% of the out-of-sample variance. The implications for modeling the environmental risk is discussed as are the implications in supporting exploration and development of gene network models.

S69.4

**STUDY 3: ENVIRONMENTAL AND CHILD CHARACTERISTICS AS MODERATORS OF THE RELATIONSHIP BETWEEN PRENATAL DEPRESSION AND EARLY CHILD INTERNALIZING PROBLEMS**

**Marshall C.\*, Gordon Green C., King L., Szekely E., Wazana A.**

*McGill University ~ Montreal ~ Canada*

Exposure to prenatal maternal depression is associated with the development of child psychopathology, including a heightened risk for both externalizing and internalizing problems. An understanding of moderators of risk would elucidate developmental models and inform strategies for early identification and prevention. Articles were searched for using the Medline database with no limitation on publication date. Abstracts were examined for relevance by one reviewer and the papers were retrieved if original data was presented on the moderation of prenatal maternal depression in the prediction of childhood internalizing pathology before the age of 5. Data was extracted from the identified articles by one reviewer. The results are summarized in a tabular and narrative review which structures identified moderators by biological and genetic, environmental and social factors, and child characteristics, such as temperament and gender. The effect of the following moderators are presented: biological susceptibility including candidate genotypes and genetic risk scores; environmental, such as parenting styles (intrusive, over controlling), level of father involvement (presence, time spent with the child), the type of maternal care; psychological factors, including attachment (insecure attachment); socioeconomic status and positioning, including maternal education and SES, as well as child gender and temperament. Greatest evidence at this time points to an important moderating role of maternal care and attachment. Moderators are regularly lacking from predictor models of prenatal maternal depression. The separate effect of prenatal and postnatal depression are also inconsistently disentangled. There is a small literature available specifically predicting anxiety or depression in preschool-aged children. Inclusion of moderators would support efforts to explain inconsistencies in the literature pertaining to the development internalizing problems among this age group.

S69.5

**STUDY 4: RESILIENCE IN THE CONTEXT OF CUMULATIVE EARLY LIFE ADVERSITY**

**King L.\*<sup>[1]</sup>, O'Donnell K.<sup>[2]</sup>, Jolicoeur--Martineau A.<sup>[3]</sup>, Szekely E.<sup>[1]</sup>, Wazana A.<sup>[1]</sup>**

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Some children exposed to early life stress (ELS) do not develop negative social-emotional outcomes. The understanding of the mechanism of resilience would be enriched by the use of strength-based outcome measures. Building on previous findings predicting a measure of resilience from child attachment security and serotonergic genotype, we will examine how cumulative ELS may add predictive value to this outcome measure. The study sample (n = 300) will be derived from the

MAVAN (Maternal Adversity, Vulnerability and Neurodevelopment) project which is a prenatally recruited development cohort. Attachment style is evaluated at 18 and 36-months using the Strange Situation procedure. Cumulative ELS is measured prenatally as well as annually using maternal reports of perceived stress, acute stress and chronic stress. Gene variations corresponding to the oxytocin network is available from both candidate gene and GWAS data. Resilience will be measured using the Response to Challenge Puzzles task which captures behavioral patterns and self-reports of hopefulness vs. helplessness in 5-year-old children in the face of an impossible puzzle task. Analysis: A linear regression model will be applied with cumulative ELS as the predictor, hopefulness (resilience) as the outcome variable, oxytocin-network gene scores as the moderator and attachment style as the mediating factor. The moderation of developmental risk (from ELS and oxytocin-related gene variations) by secure attachment in the prediction of hopefulness and higher self-evaluation at 5 years of age will be presented. Preliminary data suggests that being securely attached and possessing the long allele of the 5HTTLPR interact to predict hopefulness in 5-year old children when presented with the task of completing three impossible puzzles. Identifying factors that contribute to resilience may inform strategies for mental health promotion and tools for coping.

### **Symposium S73 - RECOVERY AND RESILIENCE: INNOVATIVE EARLY INTERVENTION INITIATIVES TO ADDRESS PERINATAL AND INFANT MENTAL HEALTH CHALLENGES ACROSS THE STATE OF QUEENSLAND, AUSTRALIA**

**Hoehn E.\***

*AAIMHI (Australian Association for Infant Mental Health) ~ Queensland ~ Australia*

This Symposium will present for discussion three innovative perinatal and infant mental health clinical, and promotion and prevention programs. Birdie's Tree, Together in Mind and e-PIMH were developed to meet the challenges of delivering perinatal and infant mental health services to geographically-dispersed populations, culturally diverse communities, and in extreme environments across Queensland, Australia. The programs aim to enhance social and emotional well-being, support recovery from mental illness and build resilience, in women, and their infants and young children and families.

S73.2

#### **BIRDIE'S TREE: ENGAGING MULTIPLE SERVICE TYPES AND PROVIDERS TO SUPPORT OPTIMAL EARLY CHILD DEVELOPMENT FOLLOWING A NATURAL DISASTER**

**Nepean--Hutchison A.\***

*Brisbane ~ Australia*

This presentation aims to present a suite of resources that have been created to support social and emotional recovery and build resilience following a natural disaster, in infants and young children and their families. During and following a natural disaster, infants and young children may experience considerable emotional distress. Parents and caregivers, overwhelmed by their own experience, may miss these signs of distress, or struggle to know how to support their infants and young children. Disaster first responders are well-placed to start conversations with families regarding the social and emotional impacts of natural disasters, and to support their recovery. Queensland Centre for Perinatal and Infant Mental Health (QCPIMH) has developed resources for first responders and families, that include information for parents; a series of storybooks for 0-4 year olds which follow Birdie and Mr Frog through various natural disasters; and an online game based on the book characters. All are hosted within Birdie's Tree, an interactive webpage, developed to support social and emotional recovery and build resilience in infants and young children following a natural disaster. Early childhood carers and educators are also in a unique position to identify

infants and young children showing signs of emotional distress following a natural disaster, and to refer them for assessment, and further support. QCPIMH has developed an early childhood curriculum for carers and educators supporting infants and young children to process their emotional experience of the natural disaster, and to build their resilience to cope with stressful events in the future.

S73.3

**TOGETHER IN MIND: IMPROVING PERINATAL AND INFANT MENTAL HEALTH THROUGH A COLLABORATIVE DAY PROGRAM FOR MOTHERS WITH COMPLEX MENTAL ILLNESS**

**Irvine A., Morton L., Nepean--Hutchison A.\***

*Brisbane ~ Australia*

This paper reports findings from a research trial of Together in Mind conducted by the Queensland Centre for Perinatal and Infant Mental Health (QCPIMH) across two sites in Queensland, Australia, following a successful pilot project. Perinatal mental health group programs are widely used to support new mothers with a mental illness as they transition to their parenting role. Mothers presenting with complex mental illness can be excluded from these programs, leaving a significant gap in the continuum of care for this vulnerable population. Together in Mind is a perinatal and infant mental health day program with three significant points of difference from similar existing programs: it is specifically designed for mothers with complex moderate to severe mental health issues; the infant attends with the mother, enabling a focus on the parent-infant relationship; and the program is delivered collaboratively by perinatal mental health, infant mental health, and child health services. The program was designed as part of a 'stepped care' model of service, to provide an intermediate level of support between community treatment and inpatient care for mothers with moderate to severe perinatal mental illness and their infants. The important role of fathers and other support persons is also recognized with a session designed specifically for their needs. Program trials indicate that this collaborative, holistic approach improves the emotional and social well-being of mothers with moderate to severe mental illness, and promotes secure mother-infant attachment by encouraging more sensitive and responsive parenting.

S73.4

**E-PIMH: AN INNOVATIVE AND COLLABORATIVE TELEHEALTH MODEL FOR PERINATAL AND INFANT MENTAL HEALTH IN REGIONAL, RURAL AND REMOTE AUSTRALIA**

**Kikkawa N., Hoehn E., Nepean--Hutchison A.\***

*Brisbane ~ Australia*

This paper will discuss the development of a collaborative telehealth model to work across sectors, from early childhood educators and child health, through to mental health clinicians, to deliver a range of perinatal and infant mental health (PIMH) services including awareness raising, training and capacity building, and clinical consultation and liaison. Challenges to health service provision in rural and remote areas in the state of Queensland, Australia, are well known and include geographically-dispersed populations, the transient nature of some populations, culturally diverse communities, extreme environments and natural disasters, economic disadvantage, the difficulty of recruiting to service positions, and a generally sparse service environment. e-PIMH is an innovative telehealth model which works collaboratively across sectors to strengthen relationships with public, private and non-government providers of health and education services across Queensland. Using various modalities of communication and levels of engagement, e-PIMH seeks to develop awareness, knowledge, and clinical skills among the workforce in regional, rural and remote communities, to identify perinatal and infant mental health (PIMH) issues early, intervene

effectively, and refer appropriately. Previous evaluation of the non-clinical component of the model reflected improved awareness of PIMH issues due to engagement with e-PIMH. Respondents believed this improved outcomes for clients as well as clinicians' skills in detecting clients' mental health issues early. Since the evaluation, the model has expanded to include secondary clinical consultation and liaison for adults and infants, in addition to supervision and mentorship.

#### **Symposium S74 - RISK AND INTERVENTION OF EARLY CHILD DEVELOPMENT IN URBAN CHINA: REPORTS AND EXPERIENCES FROM SHANGHAI**

**Zhang Y.\***

*Shanghai Children's Medical Center ~ Shanghai ~ China*

Early childhood is a time of great promise and rapid change, when the architecture of the developing brain is most open to experiences, both risk and risk protection. Studies in early child development (ECD) are mostly done in underdeveloped areas. However, in developed regions, children are facing different challenges during their growth, eg, neglect or insufficient parent-child interactions due to busy work, overwhelming media exposure and etc. In this symposium, we would introduce three studies in Shanghai, one of the most developed and rapidly changing cities in eastern world. The first presentation opens up the symposium with their study that examined early life stress (ELS), an overwhelmingly well studied but rather overlooked robust risk factor for development, in a representative sample of 20,801 3-4y children, Shan's team investigated the prevalence and risk factors of toxic stress in Shanghai. Relationship between exposure to ELS and children's mental health are also investigated. Next, Zhao and her team shed light on the increasing rate of screen exposure from a variety of digital techniques surrounding our lives nowadays, and examined the relationship between this controversial risk factor in early media exposure and children's psychological outcomes. Using a multiple mediation model, they also explore the mechanism underlies the association between screen exposure and poor mental health in children. Third, the latest Lancet series shown that ECD programs are now possible to scale up, during which government leadership is a prerequisite. The last presentation from Zhang's team moves on to demonstrate the effectiveness of an government sponsored age-paced weekly text message program for promoting parenting behaviour in reducing early risks for 0-3y children, which now benefits over 470,000 users per month in Shanghai. Using linear regression and propensity score matching, they explored the effects of such program, and to whom it benefits the most.

S74.2

#### **EVALUATION OF AGE-PACED WEEKLY PARENTING TEXT MESSAGE PROGRAM IN SHANGHAI**

**Zhang Y.\*<sup>[1]</sup>, Zhang D.<sup>[2]</sup>, Jiang F.<sup>[3]</sup>**

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Enormous studies have demonstrated that effective early childhood services can improve life outcomes for children and generate positive returns on social investments. However, most early child development (ECD) programs are costly and only target a small group of families. Facing new challenges of a recent birth peak by the new second child policy along with increase in migrants, a cell phone education program was developed by Shanghai government and launched in 2014. Parents can apply for this service for free and receive weekly messages on nurturing skill tailored to the child's weekly age. Average number of users of this service is now over 470,000 per month. This study is to evaluate the effect of this text message parenting program. This was a cross-sectional study in April 2016. 193 kindergartens with 20,896 3-4 year-old children were randomly selected with stratified cluster sampling. Survey was conducted via online system with school registered

information. 19,239 parents consented and completed the questionnaire within 2 weeks. Reverse probability sampling weight was calculated and applied in analysis. Early Human Capability Index (eHCI), which is a multidimensional population-based outcome indicator was used the measure ECD. Both linear regression and propensity score matching was applied to estimate the effect of text message program on child development. 13% of parents reported of having subscribed for the text message program. Both linear regression and propensity score matching found significant associations between text message program and eHCI scores. The effect size was similar with public or private early education programs. Furthermore, we found that the effect was larger in children with parent have lower education level. The analysis showed that text message intervention improved overall development of Shanghai Children. And parents with low education level benefits most from this program.

S74.3

### **PREVALENCE, RISK FACTORS AND OUTCOMES OF EARLY LIFE TOXIC STRESS: A CROSS-SECTIONAL STUDY WITH LARGE SAMPLE SIZE IN SHANGHAI, CHINA**

**Shan W.\*<sup>[1]</sup>, Zhang Y.<sup>[2]</sup>, Zhao J.<sup>[1]</sup>, Jiang F.<sup>[1]</sup>**

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Toxic stress is strong, frequent, or prolonged activation of the body's stress management system, which can have adverse impact on mental health. Recurrent physical, emotional, or sexual abuse and chronic neglect are among the major risk factors of toxic stress. However, the paucity of empirical data made it difficult to ascertain the prevalence of children who suffered from the toxic stress, particularly in China. This study is to evaluate the prevalence, to find which characteristics of child may increase the vulnerability to toxic stress, and try to analyze the correlation between toxic stress and mental health outcomes. A cross-sectional study was conducted in 2016 among 20801 children from age 3-4 years enrolled in 191 kindergartens, which designed in stratified clustered sampling to represent 167597 children in Shanghai, China. All the investigations were conducted through a network questionnaire, assessed by parental self-report. The outcomes of exposure to toxic stress were measured by The Strengths and Difficulties Questionnaire (SDQ). Univariate and multivariate logistic regression model were carried out to determine which variables can significantly increase the risk of maltreatment, and the correlation between recurrent maltreatment and SDQ results. 2.47% of children reported exposure to some forms of toxic stress (physical abuse, sexual abuse, emotional abuse or neglect) in Shanghai. The risk factors of toxic stress is "Low family income" (OR=1.65, 95%CI:1.21-2.26), "Father as primary caregiver" (OR=1.49, 95%CI:1.06-2.09), "lack of family or social support" (OR=1.73, 95%CI:1.37-2.20), "non-only child" (OR=1.54, 95%CI:1.26-1.88), "preterm" (OR=1.32, 95%CI:1.08-1.63), "hospitalization" (OR=1.65, 95%CI:1.35-2.01), "divorce parents" (OR=4.53, 95%CI:3.38-6.09). The odds ratio for maltreatment is 2.11(95%CI:1.74-2.55), for recurrent maltreatment is 1.85(95%CI: 1.15-2.95). Children suffered from maltreatment are at increase risk for developing mental health problems. Identifying the risk factors and avoiding them as far as possible will probably protect the children away from the shadow of toxic stress.

S74.4

### **SCREEN TIME AND MENTAL HEALTH IN PRESCHOOL CHILDREN: THE MEDIATION ROLE OF BMI, SLEEP DURATION AND PARENT-CHILD INTERACTION**

**Zhao J.\*<sup>[1]</sup>, Zhang Y.<sup>[1]</sup>, Shan W.<sup>[1]</sup>, Zhang Y.<sup>[2]</sup>, Jiang F.<sup>[1]</sup>**

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The relationship between screen time and mental health in preschool children are not consistent. Moreover, the mechanism behind the relationship has not been verified. The current study aimed to assess the situation of screen occupation among preschool children in China, examined the relationship of screen time and mental health, and investigated the mediating effect of putative factors (BMI, sleep duration and parent-child interaction) in this relationship. The current study aimed to assess the situation of screen occupation among preschool children in China, examined the relationship of screen time and mental health, and investigated the mediating effect of putative factors (BMI, sleep duration and parent-child interaction) in this relationship. Cross-sectional study of 20324 children aged 3-to-4 years was conducted in November 2016 in Shanghai. Sample was selected by stratified cluster randomized sampling to ensure representativeness. Data were collected via online investigation system by parents. Shanghai preschool children spent 2.8 (95%CI: 2.9, 2.9) hours in screen viewing. The more time children spent on screen, the more likely they would have mental health problems. Children who exposed to screen more than four hours would have higher incidence of total difficulties (OR[95%CI]: 2.1[1.9,2.3], $P < 0.001$ ), prosocial behavior problems (OR[95%CI]: 1.4[1.3,1.6], $P < 0.001$ ), compared to those who spent less than one hour on screen. The total indirect effect of BMI, sleep duration and Parent-child interaction explained the effect of screen time on total difficulties with 29.5% and on prosocial behavior with 62.1%, among which parent-child interaction plays a dominant role. Preschool children in Shanghai spent longer time in screen exposure than in western countries. And screen exposure could affect mental wellbeing in preschoolers, especially by reducing parent-child interaction. It is important for parents to understand the potential hazards of excessive screen use and to improve the quality and quantity of face-to-face interaction.

#### **Symposium S78 - CHILDREN'S REGULATORY AND EMOTIONAL DEVELOPMENT: ROLES OF EARLY CAREGIVING, FAMILY AND COGNITIVE PROCESSES**

**Lindblom J.\***

*Faculty of Social Sciences / Psychology, University of Tampere ~ Tampere ~ Finland*

Social experiences tune infants' ways of self-regulation, involving multiple processes, such as attention, reactivity and social responsiveness. However, relatively few studies have examined how the early relationships predict children's emotion regulation and related cognitive processes in later developmental phases. The four longitudinal studies presented in this symposium examine the ways early caregiving, family relationships and infant's cognitive processes shape the development of emotion regulation. Focus is on both normative and high-risk groups, the latter involving maternal mental health problems, drug abuse and family dysfunctions. The prospective datasets from different research projects span from infancy to multiple age-groups, involving early childhood, middle childhood and late adolescence. The first study (Hakanen et al.) examines how pre- and postnatal maternal mental health problems interact with the quality of mother-infant interaction ( $n = 182$ ) in predicting children's regulation of positive emotions at the age of 30 months. The second study (Saurio et al.) tests how maternal drug abuse and the quality of mother-infant interaction ( $n = 48$ ) predict children's emotion regulation and emotional attention biases at the age of 8 - 12 years. The third study (Peltola et al.) focuses on infants' ( $n = 73-163$ ) early emotional attention biases as early predictors of emotional reactivity and social behavior at the age of 14, 24 and 48 months. The fourth study (Lindblom et al.) examines how family relationships ( $n = 710$ ) during pregnancy and infancy predict children's executive function and emotion regulation at the age of 7-8 years and 19-21 years. Together, the studies provide important information about how early social relationships and cognitive factors influence children's emotion regulation. Such information is clinically valuable, as it helps to identify the factors relevant for children's emotional well-being and underline targets for therapeutic interventions.

S78.2

**INTERPLAY BETWEEN EARLY MOTHER-INFANT INTERACTION AND MATERNAL MENTAL HEALTH IN PREDICTING CHILDREN'S POSITIVE EMOTION REGULATION AT THE AGE OF 30 MONTHS - FINNBRAIN BIRTH COHORT STUDY**

**Hakanen H.\*<sup>[1]</sup>, Korja R.<sup>[1]</sup>, Sinervä E.<sup>[2]</sup>, Eskola E.<sup>[2]</sup>, Nolvi S.<sup>[2]</sup>, Flykt M.<sup>[3]</sup>, Karlsson L.<sup>[2]</sup>, Karlsson H.<sup>[2]</sup>**

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Early Life Stress such as maternal pre- and postnatal mental health is related to mother-infant interaction and to child's emotion regulation. Little is known about the moderating role of caretaking behavior in the relationship between ELS and child's emotion regulation. In this study the aim was to explore how the maternal pre- or postnatal depression and anxiety (general and pregnancy-related) are associated with mother-infant interaction when the child is 8 months old and to study the moderating role of maternal caretaking behavior in the development of child emotion regulation at 30 months. This study is part of the FinnBrain cohort study and the sample size for this study was 71 families with reported maternal mood disturbances and 111 control families matched for parental age and parental educational level. Mood disturbances were assessed using EPDS, SCL-90 and PRAQ-R at gw 14, 24 and 34 and 3 and 6 months postpartum. Mother-infant interaction was analyzed in the free play situation using Emotional Availability Scale at 8 months (Biringen, 1998, 2008). Child's emotion regulation was analyzed with observational and video-taped temperament measures at 30 months (Lab-TAB: Rothbart & Goldsmith, 1999) and with ECBQ. Preliminary results show that mothers with higher prenatal anxiety (general and pregnancy-related anxiety) showed more intrusive behavior towards their infants compared to control group ( $r_s = -.167$ ,  $r_s = -.186$ ,  $p < .05$ ). Higher maternal postnatal depressive symptoms were associated with child's lower responsiveness ( $r_s = -.163$ ,  $p > .05$ ) and involvement ( $r_s = -.177$ ,  $p > .05$ ). Pre- and postnatal maternal symptoms predict mother-child interaction. Next we combine this data with the temperament assessment of positive emotion regulation at 30 months to find out how these phenomena are associated. This is an important study question as it gives more information about the role of mother-infant interaction in the development of child's emotion regulation.

S78.3

**EARLY EMOTIONAL AVAILABILITY PREDICTING ATTENTIONAL BIASES AND EMOTION REGULATION AT MIDDLE CHILDHOOD IN HIGH RISK FAMILIES WITH MATERNAL DRUG ABUSE**

**Saurio K.\*<sup>[2]</sup>, Lindblom J.<sup>[2]</sup>, Belt R.<sup>[1]</sup>, Peltola M.<sup>[2]</sup>, Punamäki R.<sup>[2]</sup>, Flykt M.<sup>[2]</sup>**

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Emotion regulation consists of automatic and effortful processes allowing individuals to manage emotional experiences and expressions. Maternal substance abuse may alter the early development of these functions through prenatal exposure and disturbances in the mother-infant interaction, leading to dysregulated emotional expression, less adaptive emotion regulation strategies and altered attentional biases to emotional information. However, longitudinal studies on this topic are scarce. This study analyzes, first, whether maternal prenatal substance abuse and mother-infant interaction quality at the age of 4 and 12 months predict children's attentional biases and emotion

regulation at the age of 8–12 years. Second, we test, how children’s emotional attention biases associate with specific aspects of emotion regulation. The study sample consisted of 49 mothers and their children: 19 with a history of drug abuse and 30 medical risk mother-child pairs. The mother-infant interaction was measured with Emotional Availability Scales (Biringen, 2008) when the child was 4 months and 12 months old. At middle childhood (8–12 years) the regulation of anger and sadness was measured with Children's Emotion Management Scales (CEMS) and it’s parent version (Zeman, Shipman, & Penza-Clyve, 2001). Child emotional attention biases were measured using the Dot probe paradigm, incorporating both happy and angry stimulus faces at the stimulus onset asynchrony (SOA) of 500 ms and 1250 ms. Early substance exposure predicted children’s dysregulated expression of emotions and less adaptive emotion regulation strategies at school age. The quality of mother-infant interaction did not predict children’s emotion regulation over the substance abuse status. Results concerning emotional attention biases will be presented at the conference. Our results offer further understanding regarding the development of emotion regulation and attentional biases. This knowledge can contribute to the development of interventions for high risk families.

S78.4

#### **INFANTS’ ATTENTION BIAS TO FACES AS AN EARLY MARKER OF REACTIVITY AND REGULATION IN INTERACTION WITH OTHERS**

**Peltola M.\*<sup>[1]</sup>, Yrttiaho S.<sup>[2]</sup>, Puura K.<sup>[3]</sup>, Leppänen J.<sup>[2]</sup>**

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Infants have a strong tendency to look at faces. The attentional bias to faces emerges early in development and it is regarded as a central and evolutionary conserved component of infant social engagement, and a prerequisite for the acquisition of more complex capacities, such as the ability to represent others’ thoughts and emotional states. The aim of the current analyses was to estimate the scope of the associations between attention to faces in infancy and early childhood social and emotional development. In the context of a longitudinal study spanning from infancy to 4 years of age, we examined individual variations in the attentional bias to faces in 7-month-old infants and tested whether these variations were associated with outcomes ranging from relatively reactive and emotional tendencies (attachment behavior toward the mother, spontaneous prosocial behavior, and callous-unemotional traits) to more complex and language-dependent processes (understanding of emotional situations and Theory-of-Mind) at 14, 24, and 48 months of age (N = 73-163). We predicted that greater attention bias to faces at 7 months would be broadly associated with more optimal developmental outcomes across early childhood. The results showed a robust and distinct attention bias to faces at 7 months, particularly when faces were displaying a fearful expression. Individual variations in attention to faces were not associated with emotion understanding or Theory-of-Mind abilities. Yet, increased attention to faces (particularly fearful faces) at 7 months predicted secure attachment to the mother at 14 months, more frequent helping responses at 24 months, and reduced callous-unemotional traits at 48 months of age. The results are consistent with a model whereby increased attention to faces in infancy is linked with the development of affective empathy and the ability to regulate emotions and behavior in close relationships.

S78.5

**EARLY FAMILY DYNAMICS PREDICTING CHILD'S EXECUTIVE FUNCTION AND EMOTION REGULATION - LONGITUDINAL STUDY FROM INFANCY TO LATE ADOLESCENCE**

**Lindblom J.\*<sup>[1]</sup>, Flykt M.<sup>[1]</sup>, Vänskä M.<sup>[1]</sup>, Tiitinen A.<sup>[2]</sup>, Punamäki R.<sup>[1]</sup>**

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Family relationships are important for children's early development of self-regulation, involving executive functions (EF) and emotion regulation (ER). Developmental studies have demonstrated the importance of both the parent-infant and marital relationships. However, families have rarely been considered as a whole, comprising of dynamics between these family relationships. We examine the long-term effects of early family system types on children's self-regulation. We model how early family types, comprised of parental and marital dynamics during pregnancy and infancy, predict children's EF and ER in middle childhood and in late adolescence. We test how self-regulation in middle childhood links early family relationships to later ER in late adolescence. The study sample consists of 710 families, followed from pregnancy to late adolescence. First, the parents reported their family relationships during pregnancy, and at the child's age of 2 months and 12 months. Second, at the child's age of 7-8 years, the parents reported their child's EF (CBQ; Putnam & Rothbart, 2006; FTF; Kadesjö et al., 2004) and ER (EQ; Rydell et al., 2003). Finally, at the age of 18-19 years, the children reported their ER, involving reappraisal, suppression, rumination and catastrophizing (ERQ; Gross & John, 2003; CERQ; Garnefski & Kraaij, 2007). Response rates were 60% to 94% during pregnancy and infancy and 69% in middle childhood. The adolescence data is being collected. In previous studies, we have identified Cohesive, Disengaged, Enmeshed and Authoritarian family system types (Lindblom et al., 2014), and found the more dysfunctional family types to predict inefficient ER in middle childhood (Lindblom et al., 2017). Our preliminary analyses indicate similar effects on children's EF. The final results based on the adolescence data will be presented at the congress. The study illuminates the long-term significance of early family dynamics on emotional development and helps to identify potential targets of therapeutic interventions.

**Symposium S82 - BEYOND BLAME: MENTALIZING INTERVENTIONS WITH MALTREATING PARENTS AND MALTREATED CHILDREN**

**Motz A., Byrne G.\***

*Oxford Health NHS Foundation Trust ~ Oxford ~ United Kingdom*

Instances of severe child abuse and neglect can only occur in the midst of catastrophic, parental failures in mentalizing and/or in families in which non-mentalizing modes of thinking and behaving predominate, often as a result of the parents themselves having childhood histories of maltreatment and neglect. One can construe severe child abuse and neglect as arising from either a deficit in mentalizing (contributing to a pattern of consistent emotional and or physical neglect), or failures of mentalizing in situations of high arousal (non - accidental injury) in which a parent momentarily mis-sees the child or through the mechanism of projective identification mistakes the child for a something or someone else – in short, the child is to 'blame'. Maltreating parents resist acknowledging their role in the abuse and therapeutic work with this population has to be sensitive to issues of blame and shame. In this symposium, a mentalizing framework for understanding child maltreatment will be explored, qualitative and quantitative data from MBT Parenting interventions (specifically the Lighthouse Mentalization Based Treatment Parenting Programme which works with maltreating parents and the Reflective Fostering Programme, working with foster carers caring for maltreated children) will be presented, as will results from a study exploring the discursive strategies

used by therapists for managing and negotiating 'blame' attributed to the child (+ video). The Lighthouse MBT-Parenting programme aims to promote mentalizing in parents where the children are identified as 'at risk' of maltreatment. The model aims to reduce the risk of maltreatment, disorganized attachments and transgenerational cycles of attachment difficulties/ psychopathology. The Reflective Fostering Programme (RFP) is a new group-based programme aiming to support foster carers of children aged 4-11. This innovative development follows calls by NICE and other organisations to help improve outcomes for children in care, by providing better support to their carers.

S82.2

### **CHILD MALTREATMENT; A MENTALIZING FRAMEWORK AND TREATMENT MODEL: THE LIGHTHOUSE MBT-PARENTING PROGRAMME**

**Byrne G.\***

*Oxford Health NHS Foundation Trust ~ Oxford ~ United Kingdom*

In this presentation, a mentalizing framework for understanding child maltreatment will be explored and core elements of the treatment model will be illustrated by clinical material (including video). Instances of severe child abuse and neglect can only occur in the midst of catastrophic, parental failures in mentalizing and/or in families in which non-mentalizing modes of thinking and behaving predominate, often as a result of the parents themselves having childhood histories of maltreatment and neglect. It seems reasonable to construe severe child abuse and neglect as arising from either a deficit in mentalizing (contributing to a pattern of consistent emotional and or physical neglect), or failures of mentalizing in situations of high arousal (non - accidental injury, physical chastisement) in which a parent momentarily mis-sees the child or through the mechanism of projective identification mistakes the child for a something or someone else. The Lighthouse© MBT-Parenting programme was developed specifically to promote mentalizing in parents where the children have been identified as 'at risk' of maltreatment by the parent. The model aims to reduce the risk of maltreatment, disorganized attachments and transgenerational cycles of attachment difficulties/ psychopathology. It is underpinned by current theoretical and empirical work in attachment and developmental psychopathology. The programme aims to improve parental functioning and strengthen the parent-child relationship through a combination of psycho-education, and individual and group-based MBT treatment.

S82.3

### **PARENTS EXPERIENCES OF COMPLETING THE LIGHTHOUSE MBT PARENTING PROGRAMME - QUALITATIVE STUDY**

**Grocutt E.\***

*Oxford Health NHS Foundation Trust ~ Oxford ~ United Kingdom*

Parents' accounts of how they hope to translate their personal insights from the group programme to enrich and inform their current and future identity and role, as a parent, are discussed. This qualitative research study explored the personal experiences of eight parents' who completed the Lighthouse MBT-Parenting Programme and whose children were permanently removed from their care. In this paper, the impact and processes of parents retrospectively mentalizing the relationship with their child is explored. Current and past relational insights and reflections between parent and child are discussed alongside future hopes and expectations. The activation of feelings of envy, sadness and loss are explored alongside the enhancement of empathy, curiosity and understanding. Shifts in relational representations of the child and parent relationship are captured. The complexities of emotionally connecting with past and current relational patterns, as a parent and

child, are conceptualised within a mentalization based framework. Parents' accounts of how they hope to translate their personal insights from the group programme to enrich and inform their current and future identity and role, as a parent, are discussed.

S82.4

**THE 'VICTIM-VICTIMIZER GAME': DISCOURSE ANALYSIS OF PARENTS' AND THERAPISTS' NEGOTIATION OF BLAME IN A MENTALIZATION-BASED PARENTING PROGRAMME FOR HIGH-RISK PARENTS (LIGHTHOUSE)**

**Caliskan H.I.\***

*University College London ~ London ~ United Kingdom*

Studies report that the vast majority of child abuse and neglect happens within conflictual parent-child relationships, where there is a tendency for parents to blame the child. Mentalization-Based Parenting Intervention aims to manage high-risk parents' blaming descriptions of their children and transform these into difficulties that can be understood through mentalizing. The current qualitative study used discourse analysis to investigate how 'blame' is ascribed and negotiated in MBT-P (Lighthouse). The study focused on naturally occurring therapeutic dialogue in two videotaped parenting sessions in which 'blame' was the dominant discourse. Parents and therapists engaged in what could be seen as a 'victim-victimizer' blame game. A high-risk parent constructed the parent-child relationship as a "battle" where she was the 'victim' and the child was the 'victimizer', while group members and therapists deconstructed this positioning through (1) using other parent's traumatic childhood experiences to bring in the absent voice of the child (2) constructing the reported behaviour as unintentional acts driven by forces beyond the child's control (3) simultaneously siding with the parent and the child. These discursive contributions were followed by therapeutic progress for the high risk parent-child dyad. An important aspect of clinical work with maltreating parents lies in deconstructing the dominant 'victim-victimizer' positioning. In deconstructing this discourse, using other group members' difficult experiences as children – by positioning them as the child they used to be – is an effective vehicle for understanding the child who is the subject of blame in therapy.

S82.5

**REFLECTIVE FOSTERING PROGRAMME – SUPPORTING FOSTER PARENTS CAPACITY TO MENTALIZE MALTREATED CHILDREN**

**Redfern S.\***

*Anna Freud National Centre for Children and Families ~ London ~ United Kingdom*

This presentation sets out the rationale for the RFP, and outlines its key elements, and then sets out the protocol for an initial feasibility study examining this approach and reports on preliminary findings. Looked After Children (LAC) represent a vulnerable group, many of whom are exposed to maltreatment, particularly in the form of relational trauma, prior to placement with a foster family. Challenging behaviours can place foster placements at risk and LAC often confront the possibility of placement breakdown. A carer's capacity to reflect on the children in their care as autonomous individuals with needs, feelings and thoughts may be crucial in order for them to understand why a child may be displaying some of the worrying or disruptive behaviour witnessed. Whilst it is well known that early trauma and abuse leads to compromised mentalizing in the child, the impact on the carer of their capacity to mentalize in the face of this trauma is only recently being understood (Ensink et al, 2015, 2017). Programmes and interventions therefore need to focus on improving and enhancing the carer's mentalizing capacity, both self mentalizing and child. The Reflective Fostering Programme (RFP) is a new group-based programme aiming to support foster carers of children aged

4-11. RFP is based on evidence from the field of contemporary attachment and mentalizing approaches, which indicates that children who have a carer high in reflective functioning have more favourable outcomes in terms of social-emotional well-being.

### **Symposium S17 - MULTIPLE PERSPECTIVES ON RISK AND RESILIENCE IN LONGITUDINAL CHILD OUTCOMES OF FETAL AND EARLY LIFE EXPOSURES RELATED TO DEPRESSION IN WOMEN**

**Oberlander T.\*<sup>[1]</sup>, Goodman S.<sup>[2]</sup>**

*<sup>[1]</sup>University of British Columbia ~ Vancouver ~ Canada, <sup>[2]</sup>Emory University ~ Atlanta ~ United States of America*

It is estimated that 10 to 15% of women suffer from a perinatal depression. Much research has focused on the impact of these illnesses on the developing fetus, infant, and child. To date, most efforts have been directed to short-term outcomes such as perinatal morbidity (e.g. preterm birth, low birthweight) and problems with infant and early child development. When longer-term outcomes are addressed, it is almost always risk, and not resilience that is investigated. It is difficult to study risks and benefits simultaneously, and difficult to disentangle complex relationships – especially with outcomes distal to the fetal and early childhood stage. We propose three talks, each presenting a different perspective, with a focus on creative methods for exploring longer-term child outcomes related to maternal mental illness. Dr. Oberlander (Canadian; developmental pediatrician and neuroscientist) will present data from a longitudinal birth cohort to explore how the relation between maternal prenatal depression and use of antidepressants and child outcomes at age 6 years (self-regulation) may be exacerbated or lessened dependent on the level of household confusion. Drs. Goodman and Dimidjian (American; developmental psychopathologist and psychologist/neuroscientist and women’s mental health expert, respectively) will present findings from a consideration of how clinical intervention studies to prevent or treat depression in pregnant women provide tests of mechanisms of risk and resilience regarding infant and later childhood functioning. Mina Park (Canadian; Population and public health with expertise in maternal mental health and child development; public health analytics) will describe a longitudinal study, examining pregnant and postpartum women’s trajectories of depression symptoms and how they relate to children’s emotional and behavioral problems and executive functions at 3 and 6 years of age. Together, these presentations will provide ideas and frameworks for addressing the mechanisms and processes that influence developmental pathways in children related to fetal and early life exposure to depression in mothers. We plan to end with a brief statement of conclusions from the talks and suggestions for discussion that cut across the three talks, leaving ample time for discussion with the audience.

S17.2

#### **HOUSEHOLD CONFUSION, MATERNAL DEPRESSION AND PRENATAL SSRI EXPOSURE AND SELF-REGULATION FROM INFANCY TO 6 YEARS**

**Oberlander T.\*<sup>[1]</sup>, Dhaliwal G.<sup>[1]</sup>, Weikum W.<sup>[1]</sup>, Jolicoeur--Martineau A.<sup>[2]</sup>, Brain U.<sup>[1]</sup>, Grunau R.<sup>[1]</sup>**

*<sup>[1]</sup>University of British Columbia ~ Vancouver ~ Canada, <sup>[2]</sup>McGill University ~ Montreal ~ Canada*

Long after birth, maternal mood during and following pregnancy still shapes self-regulation in childhood. Regression models examined the impact of maternal depressed mood symptoms (3rd trimester and at 6 years), infant temperament (IBQ 6 mo) and household confusion (Confusion, Hubbub, and Order Scale [CHAOS]) on child self-regulation (Behaviour Rating Inventory of Executive Function [BRIEF]) at age 6 years (N=118 [47 prenatally SSRI exposed, 71 nonexposed]). Confirmatory regression models were also conducted to examine if children were susceptible to household CHAOS or were positively influenced by lower household CHAOS. Prenatal SSRI exposure, 3rd

trimester maternal depressed mood and home chaos predicted measures of self-regulation when CHAOS scores were low, and children of non-prenatally depressed mothers had better self-regulation than children of prenatally depressed mothers, regardless of whether they were treated with an SRI, or were depressed at study day. However, when home confusion was high, SRI-exposed children whose mothers were not prenatally depressed (their symptoms had remitted) had poorer self-regulation than children of prenatally depressed mothers. Infant temperament did not add to 6-year behavior in the model. Susceptibility to household chaos depended on whether mothers were prenatally depressed and whether mothers were SSRI treated. Children of prenatally symptomatic mothers were not affected by chaos, whereas children of not particularly symptomatic mothers were affected by chaos, but the degree to which they were affected depended on prenatal SRI exposure status. In low levels of confusion SRI-exposed children had better self-regulation compared with non-exposed children. Prenatal depressed maternal mood may “buffer” a child against a subsequently chaotic home environment, whereas prenatal SRI exposure increased a susceptibility to home chaos.

S17.3

### **OPENING WINDOWS OF OPPORTUNITIES: EVALUATING THE IMPACT OF PRENATAL INTERVENTION TO SUPPORT MATERNAL MOOD TO CHANGE DEVELOPMENTAL TRAJECTORIES OF PSYCHOPATHOLOGY RISK AMONG INFANTS**

**Goodman S.\*<sup>[1]</sup>, Dimidjian S.<sup>[2]</sup>, River L.<sup>[3]</sup>, Cullum K.A.<sup>[1]</sup>, Kim C.Y.<sup>[1]</sup>**

*<sup>[1]</sup>Emory University ~ Atlanta ~ United States of America, <sup>[2]</sup>University of Colorado Boulder ~ Boulder ~ United States of America, <sup>[3]</sup>University of Denver ~ Denver ~ United States of America*

Although animal models and correlational studies support a model of fetal programming as a mechanism in the transmission of risk for psychopathology from parents to children, experimental studies are required with the human prenatal dyad to empirically test the model. Yet experimental studies of putative mechanisms of risk transmission processes with humans are scarce. We conducted a systematic review of the literature in which researchers manipulated maternal mood during pregnancy and measured offspring neurobiological and behavioral outcomes. After registering our review (PROSPERO), we conducted a literature search; 33 articles met inclusion criteria. We found support for interventions designed to change maternal prenatal mood being associated with changes in infants’ birth outcomes, lower levels of internalizing and externalizing problems (12 to 49 months), and lower rates of insecure attachment (12 to 18 months). Effect sizes ranged broadly, within and across offspring functioning domains, reflecting variability in timing and nature of intervention and other study design features. Several key infant vulnerability indices are associated with experimental manipulation of maternal mood during pregnancy, with a broad range of effect sizes. We detail implications for understanding putative mechanisms in the transmission of risk from women’s prenatal depression to infants’ vulnerabilities to, and early signs of, the development of psychopathology and for clinical practice. We note limitations of the literature and suggest solutions to advance understanding of how preventing or treating depression in pregnant women might disrupt the transmission of risk to the infants.

S17.4

### **MATERNAL DEPRESSION TRAJECTORIES AND THEIR ASSOCIATION WITH CHILDREN’S BEHAVIOR AND EXECUTIVE FUNCTIONS AT 3 AND 6 YEARS**

**Park M.\*, Brain U., Grunau R., Diamond A., Oberlander T.**

*University of British Columbia ~ Vancouver ~ Canada*

Accumulating evidence suggests early life exposure to maternal depression adversely affects child development. However, maternal depressive symptoms do not follow a linear course and are heterogeneous in their timing, severity, and chronicity. Identifying the impact of longitudinal patterns of maternal depression on child development is a priority. This study sought to identify trajectories of maternal depressive symptoms from mid-pregnancy to 3 years postpartum and study their associations with children's behavior at ages 3 and 6 years, and executive functions (EFs) at 6 years. Maternal depression was measured from mid-pregnancy to 3 years postpartum. Growth mixture modelling was used on standardized maternal depression scores (n=147) to identify trajectories. Children's internalizing and externalizing behaviors were obtained at 3 and 6 years. EFs were assessed by a laboratory-based computerized task and maternal-report at 6 years. Multivariable linear regressions of children's outcomes against maternal depression trajectories were conducted (n=103). Three distinct patterns of maternal depression trajectories were identified: low (n=105), increasing (n=27), and decreasing (n=15). Women in the increasing trajectory had moderate depressive symptoms prenatally with increasing symptomatology over time, while those in the decreasing trajectory had the most depressive symptoms prenatally that subsequently abated. Relative to children of low-depression mothers, children of increasing-depression mothers had more internalizing and externalizing behaviors at 3, but not 6 years, and poorer EFs at 6 years. However, despite being exposed to the highest levels of depressive symptoms prenatally, children of decreasing-depression mothers had comparable behaviors and EFs at ages 3 and 6 as those of low-depression mothers. Improvements in mothers' depressive symptoms over time may benefit child development.

#### **Symposium S92 - THE ROLE OF COPARENTING AND FAMILY-LEVEL RISK FACTORS IN CHILD AND FAMILY FUNCTIONING**

**Kuersten--Hogan R.\*<sup>[1]</sup>, Mchale J.<sup>[2]</sup>**

<sup>[1]</sup>*Assumption College ~ Worcester ~ United States of America*, <sup>[2]</sup>*University of South Florida St. Petersburg ~ St. Petersburg ~ United States of America*

Over the past two decades, researchers have uncovered interconnections between various environmental risk factors and children's functioning. Previous studies focused predominantly on associations between children's internalizing and externalizing behaviors and problems with mothers' mental health or parenting quality (Foster et al., 2008; Reupert et al., 2015). Far less is known about the impact of fathers' characteristics and family-level risk factors on children's functioning. Evidence suggests that marital and coparental conflicts have detrimental effects on children's functioning, (Gable et al., 1995; Mangelsdorf et al., 2011; Teubert & Pinquart, 2010), though the majority of studies relied on parental reports of family risk and child adaptation rather than on observations of problematic family dynamics. This symposium integrates observational studies involving children from high-risk families across two continents and family life cycles spanning from pregnancy through the preschool years. Specifically, this symposium explores the roles of maternal and paternal depression as well as marital and coparental conflict in child and family functioning in Canada, the US and Switzerland. The first presentation in this symposium explores prenatal risk factors including parental depression, coparenting expectations, and marital dissatisfaction for postpartum coparenting dynamics and infant functioning at 3 months. The second presentation focuses on the interrelationship between coparenting and marital satisfaction in the first two postpartum years and their impact on children's wellbeing. The third presentation focuses on family and child risk factors in two preschool samples— one from the US and the second from Switzerland— on coparenting dynamics and illustrates that parental depression and child behavior problems predict coparenting cooperation and warmth. Finally, the fourth presentation provides a clinical perspective and reports on the effectiveness of family-level over dyadic interventions for

child and family functioning. Clinical implications will be discussed with respect to bidirectional and dynamic interrelationships between parental depression, coparenting, family dynamics and child functioning.

S92.2

### **PRENATAL RISK FACTORS FOR COPARENTING DYNAMICS AND INFANT FUNCTIONING AT 3 MONTHS POSTPARTUM**

**Kuersten--Hogan R.\*<sup>[1]</sup>, Charbonneau J.<sup>[1]</sup>, Shea A.<sup>[1]</sup>, Tortora D.<sup>[1]</sup>, Kalpidou M.<sup>[1]</sup>, Deligiannidis K.<sup>[2]</sup>**

<sup>[1]</sup>*Assumption College ~ Worcester ~ United States of America*, <sup>[2]</sup>*University of Massachusetts Medical School ~ Worcester ~ United States of America*

Past research has identified maternal depression, marital conflict, and difficult infant temperament as postpartum risk factors to coparenting dynamics and infant functioning. However, relatively little is known about the role of prenatal parental depression and other prenatal risk factors to postpartum adjustment. Furthermore, coparenting studies regularly failed to consider the impact of fathers' depression on family functioning during the transition to parenthood. The present study aimed to assess whether prenatal parental depression, negative coparenting expectations, unsupportive coparenting dynamics, and marital dissatisfaction predict coparenting and child functioning at 3 months postpartum. A sample of 80 couples was assessed during pregnancy and at 3 months postpartum. The Coparenting Interview (McHale et al., 2004) measured each partners' prenatal expectations of their future coparenting relationship. Partners' prenatal depression (CES-D, Radloff, 1977), marital satisfaction (Locke-Wallace, 1959) and coparenting dynamics were also assessed (Prenatal Lausanne Trilogue Play, Carneiro et al., 2006). At 3 months postpartum, parental depression, perceptions of coparenting, and coparenting dynamics were again assessed and parents were asked to tell the story of their child's birth (Birth Narrative). Infant functioning at 3 months was assessed using the Ages and Stages Questionnaire (ASQ-3, 2009). Findings indicated that mothers' and fathers' prenatal depression predicted more pessimistic views of the postpartum coparenting relationship. Mothers' prenatal depression also predicted less supportive postpartum coparenting and less coherence, triadic quality, harmony, and positive expressiveness during birth narratives. Greater parental pessimism about future coparenting predicted lower infant functioning, though less supportive coparenting dynamics observed during pregnancy predicted higher infant functioning. Finally, greater parental prenatal marital dissatisfaction predicted more pessimistic views of the coparenting relationship, less supportive coparenting dynamics and lower coherence and coparental harmony during birth narratives at 3 months. In conclusion, prenatal family risk factors set the stage for the development of unsupportive postpartum coparenting dynamics and impact infant functioning.

S92.3

### **COPARENTING AND MARITAL RELATIONSHIPS IN THE FIRST TWO YEARS AND THEIR LINKS WITH INFANT WELL-BEING**

**Frascarolo F.\*<sup>[1]</sup>, Lapalus N.<sup>[1]</sup>, Favez N.<sup>[2]</sup>**

<sup>[1]</sup>*UR-CEF, IUP, CHUV ~ Lausanne ~ Switzerland*, <sup>[2]</sup>*University of Geneva ~ Geneva ~ Switzerland*

Studies have shown that marital distress may invade the coparental relationship and reciprocally (Fainsilber Katz & Gottman, 1996; Van Egeren, 2004; Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004). The coparenting quality has an impact on child's development (Favez & Frascarolo, 2013; McHale, 2007). The aim of this research is to study longitudinally the interplay between coparenting and marital relationships during the first two years after the birth of a baby, and to

assess their link with the infant well-being. 67 volunteer families with at least one child have been seen longitudinally when the target child was 3, 9 and 18 month old. Coparental and marital interactions were observed and assessed in the PicNic Game situation (PNG), which is a pretend play of having a picnic including all family members. Parents completed questionnaires concerning their marital satisfaction (Marital Adjustment Test) and their infant's well-being (Symptom Check List). Results indicate strong links between coparenting and marital relationships at each time points. Results also show that coparenting at 18 month is predicted by coparenting at 3 and 9 month, which is not the case for marital relationships. Some aspects of infant well-being (e.g. sleep disturbances) are predicted by the parents' relationship quality. Our results will be discussed in developmental and clinical perspectives, in terms of articulation between these two dimensions of the couple inside the family and their impact on the infant.

S92.4

#### **PARENTAL PERCEPTIONS OF INDIVIDUAL AND DYADIC ADJUSTMENT AS PREDICTORS OF OBSERVED COPARENTING COHESION: A CROSS-NATIONAL STUDY**

**Tissot H.\*<sup>[1]</sup>, Frascarolo F.<sup>[2]</sup>, Kuersten--Hogan R.<sup>[3]</sup>, Favez N.<sup>[1]</sup>, Mchale J.<sup>[4]</sup>**

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Over the past 20 years, systemically-guided approaches to understanding early family processes have helped to provide greater clarity concerning the interplay among individual, dyadic, and family-level processes. Parental depression, marital functioning, and child adjustment in particular appear to be reliable predictors of coparental and family-level functioning. Indeed, cohesion at the level of the family group covaries in theoretically-meaningful ways with these indicators of individual and dyadic adjustment. In this study, two collaborating research groups (one in Switzerland, the second in the U.S.) partnered to examine whether similar patterns of relationships exist among individual and marital adjustment and coparenting process in families of 4-year-old children. Using similar constructs but disparate and occasionally dissimilar measures, both groups measured parent-reported depression, marital satisfaction, and child behavior problems. Coparenting cooperation and warmth were observed during family interactions. Despite differences between samples and evaluation tools, similar results were found for the Swiss and U.S. samples. A model with depression, marital satisfaction, and child symptoms as predictors of a latent factor of observed coparenting cooperation and warmth showed good fit to data in both samples, suggesting the model was relevant for each. Parameter estimation showed that higher coparenting cooperation and warmth was predicted by lower maternal depression and higher child internalizing symptoms. The common significant effects despite differences in assessment paradigms and instrumentation are of substantive interest. Future directions pertinent to the coparenting questions addressed in this research are discussed.

S92.5

#### **EXPLORING THE FEASIBILITY AND ACCEPTABILITY OF REFLECTIVE FAMILY PLAY COMPARED TO A TRADITIONAL DYADIC INTERVENTION: A CARE SERIES DESIGN**

**Philipp D.\*<sup>[1]</sup>, Hayos C.<sup>[1]</sup>, Cordeiro K.<sup>[2]</sup>**

<sup>[1]</sup>Sick Kids Centre for Children's Mental Health ~ Toronto ~ Canada, <sup>[2]</sup>York University ~ Toronto ~ Canada

Reflective Family Play (RFP) is a family-based intervention developed to move beyond dyadic treatments and provide family therapy for the infant and preschool population. The approach

targets parental reflective function and is founded in practices already used in attachment-based dyadic treatments. However, RFP also focuses on the family as an emergent system and the struggles of early coparenting. The aim of this report is to explore the feasibility and acceptability of Reflective Family Play compared to a traditional dyadic intervention. In this brief multi-person family treatment, parents are asked to engage in a semi-structured play task with their infant or children, if there are siblings. The therapist does not participate in the play but simply observes. The play sequence is then followed by a reflective discussion with the therapist. Video clips of the play can be used to support the discussion. In a recent retrospective case series, we compared this approach to a dyadic approach involving only a single parent and infant or preschooler. Referral characteristics were compared between the families who engaged in RFP versus a traditional dyadic approach. The chart review also included session by session qualitative analyses of themes that emerged during RFP, shifts in the coparenting, as well as outcomes noted in the final feedback session, and the disposition of clients post-treatment. This pilot study points toward the feasibility and acceptability of RFP as an approach for the infant and preschool population. Clinical implications will be discussed.

### **Video Presentations V15 - PARENTING AND COPARENTING IN PARENT-INFANT THERAPY**

**Beauquier--Maccotta B.\*<sup>[1]</sup>, Velasquez P.<sup>[1]</sup>, Metou--Lopez T.<sup>[1]</sup>, Stora E.<sup>[1]</sup>, De Witt J.<sup>[1]</sup>, Golse B.<sup>[1]</sup>, Missonnier S.<sup>[2]</sup>**

<sup>[1]</sup>Hopital Universitaire Necker ~ PARIS ~ France, <sup>[2]</sup>Université Paris Descartes ~ PARIS ~ France

Referring to three clinical situations, we propose to consider the impact of marital separation in the context of parent-infant therapy. In our practice, in which we receive patients ages 0-2 years with functional disorders, this type of situation is especially recurrent. Can we offer the same type of therapy to families in which parents are already separated as to those in which they are still together? How can we preserve the specificity of therapeutic consultations in relation to family mediation? How can we address the generational aspects in separated married couples when both parents are present? How can we welcome questions about the practical organization of joint custody without letting them become an obstacle to the semiological and psychopathological exploration of the child and his/her family? In our consultations, families are received by two therapists. What is the impact of this setting on transference and countertransference movements?

### **Video Presentations V16 - MOVING FROM THE ACTUAL SPACE OF THE OUTER WORLD TO THE INNER SPACE OF SYMBOLS THROUGH PLAY**

**Vig A.\***

*Simaney Keshet Clinic ~ Har Adar ~ Israel*

To promote understanding of anticipatory mechanisms in the development of internal representation and symbolism. The DIR Model revolutionized the concept of development by integrating psychodynamic theories and neurodevelopmental differences of the individual with emotional developmental capacities mature through interactive and affective relationships. This presentation focuses on DIR (Wieder and Wachs 2012) and Winnicott (1971) concepts of space and "potential space". It emphasizes three zones: • Space in Real World - This zone may include visual spatial capacities such as body awareness, location of body in space, relation of objects / self / others, and visual logical reasoning. • Personal and Psychic Space –Internal zone that includes subjective reality of the individual such as wishes, dreams, and anxieties. • Potential Space – Winnicott describes it as the "in-between space" which is between the first two zones - the Real and Psychic zones. This is the zone where symbolism develops. Many have doubted children with ASD can play or engage in creative activities, develop the "potential space" and symbolism. This

presentation asserts that by embracing in a meaningful way the three zones - helping the child process and master the Real Space in addition to the Psychic one in a playful manner, child with ASD can also develop mechanisms of symbolism and creativity. With such intervention the child can move from perceptions and action in the real world to first internal representations (1), build basic or episodic symbols (2) and later elaborated symbols and abstract thinking (3). The evolution of symbolism will be illustrated using a case study, animations and video clips in a comprehensive developmental and dynamic setting.

## **Brief Oral Presentations BOP27 - HOME VISITING PROGRAMME - PART II**

### **BOP27.1**

#### **PROMOTING INTERSUBJECTIVE INTERACTION BETWEEN YOUNG MOTHERS' AND THEIR TODDLERS: THE IMPACT OF AN INTENSIVE HOME-VISITING INTERVENTION.**

**Waters C.\*, Channon S., Lugg--Widger F., Cannings--John R., Paine A., Curtis M., Robling M.**  
*Cardiff University ~ Cardiff ~ United Kingdom*

Intersubjective interactions are bidirectional and mutually regulated exchanges of interaction characterised by shared affect, intention and attention (Trevarthen & Hubley, 1978). Such interactions are thought to be essential for a child's capacity to self-regulate and make sense of the world in a way that facilitates healthy psychological development (Hughes, 2009; Trevarthen & Aitken, 2001). We asked whether one of the UK Government's efforts to support vulnerable young mothers and their first-born children (the Family Nurse Partnership, FNP), impacts on mother-child intersubjective interaction. The FNP entails specialist home visiting that began during pregnancy and continued during the first 2 years postpartum (Olds et al., 2010). Our Building Blocks randomized controlled trial investigated the impact of the FNP in England (Robling et al., 2016). In the original study, 823 women were randomly assigned to FNP and 822 to usual care, with data collected during late pregnancy and at 6, 12, 18 and 24 months postpartum. The present sub-study includes a sample of mother-child dyads who were video-recorded for 3 minutes during a free play interaction session at the 24-month assessment (n = 476). Intersubjective mother-child interactions were coded using an age-adapted version of an established coding scheme (Murray & Trevarthen, 1986; Murray et al., 1993). Within this unique sample of first-time young mothers we will: (1) determine the impact of FNP on mother-child intersubjective interaction; and (2) identify the maternal pre-childbearing (e.g. history of adverse childhood experiences), perinatal (e.g. psychopathology, antenatal fetal attachment, pregnancy/childbirth complications), environmental e.g. housing problems, social support, exposure to domestic violence) and within child (e.g. gender, preterm birth) predictors of mother-child intersubjective interaction across both the FNP and control group conditions. Our findings will demonstrate the effectiveness of the FNP and determine the factors that impact upon mother-child interactions in the toddler years.

### **BOP27.2**

#### **THE EFFECTS OF PARENTING INTERVENTIONS FOR AT-RISK PARENTS WITH INFANTS: A SYSTEMATIC REVIEW AND META-ANALYSES**

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Infancy is a critical stage of life, and a secure relationship with caring and responsive caregivers is crucial for healthy infant development. Early parenting interventions aim to support families in

which infants are at risk of developmental harm. We conducted a systematic review where publications were extracted from 10 databases in June 2016, and supplemented with grey literature and hand search. We assessed risk of bias, calculated effect sizes, and conducted meta-analysis. Inclusion criteria were: 1) Randomized controlled trials of structured psychosocial interventions offered to at-risk families with infants aged 0–12 months in Western OECD countries, 2) Interventions with a minimum of three sessions and at least half of these delivered postnatally, and 3) Outcomes reported for child development or parent–child relationship. Sixteen studies were included. Meta-analyses were conducted on seven outcomes represented in 13 studies. Parenting interventions significantly improved child behavior ( $d=0.14$ ; 95% CI: 0.03 to 0.26), parent–child relationship ( $d=0.44$ ; 95% CI: 0.09 to 0.80), and maternal sensitivity ( $d=0.46$ ; 95% CI: 0.26 to 0.65) post-intervention. There were no significant effects on cognitive development ( $d=0.13$ ; 95% CI: -0.08 to 0.41), internalizing behavior ( $d=0.16$ ; 95% CI: -0.03 to 0.33), or externalizing behavior ( $d=0.16$ ; 95% CI: -0.01 to 0.30) post-intervention. At long-term follow-up we found no significant effect on child behavior ( $d=0.15$ ; 95% CI: -0.03 to 0.31). Interventions offered to at-risk families in the first year of the child’s life appear to improve child behavior, parent–child relationship, and maternal sensitivity post-intervention, but not child cognitive development, internalizing, or externalizing behavior. Future studies should incorporate follow-up assessments to examine long-term effects of early interventions.

BOP27.3

**DOES A UNIVERSAL PARENTING INTERVENTION IMPROVE THE PARENT-INFANT RELATIONSHIP? – A RANDOMIZED CONTROLLED PILOT TRIAL OF THE INCREDIBLE YEARS PARENTS AND BABIES PROGRAM IN DENMARK**

**Pontoppidan M.\***

*VIVE - Danish Centre for Applied Social Research ~ Copenhagen ~ Denmark*

There is a growing interest in early universal intervention for parents of newborn infants. The aim of this pilot trial was to evaluate the effects of the Incredible Years Parents and Babies program (IYPB) on child and parent well-being on a universal sample of parents. IYPB is a group-based programme for parents with infants 0-1 year old. The goals are to strengthen parenting competencies, parenting confidence, and parent-infant attachment. In the eight-week programme, six to eight parents attend with their babies and participate in hands-on role plays and exercises with their own babies. Usual Care consists of five home visits by a health visitor. Parent and child outcomes were assessed by interviewers at home visits at baseline (T1), post intervention (T2), and when the child was 18 months old (T3). The primary outcome was parenting confidence measured at T2 by the Karitane Parenting Confidence Scale and Parental Stress Scale. Secondary outcomes include measures of parent health, reflective functioning, and child development. Parent-infant relationship was measured post-intervention by a 5 minute video coded with the Coding Interactive Behavior (CIB) developed by Ruth Feldman. Health visitors in two municipalities recruited 112 families (IYPB:75; Usual Care:37). For all parent report outcomes we find no difference between the two groups at T2 and T3. At T2 we find that intervention mothers with the lowest scores at baseline may experience negative effects. Preliminary analysis of the parent-infant relationship shows a borderline significant medium-sized positive effect on maternal sensitivity and dyad reciprocity at post-intervention.

BOP27.4

**INVESTIGATION OF THE PROCESSES UNDERLYING EARLY HOME INTERVENTION EFFICIENCY: A COLLABORATION BETWEEN CLINICIAN AND RESEARCHERS**

**Max A. \*, Favez N.**

*University of Geneva ~ Geneva ~ Switzerland*

Many studies have highlighted the efficiency of early home intervention (EHI). However, the underlying processes explaining this efficiency are difficult to study. First, home intervention may take different forms to adapt to the variability of the factors involved in the psychological and social difficulties of the families, which makes difficult to isolate or identify ingredient involved in a successful intervention. Second, mistrust of the clinicians toward research, which they often judge as not reflecting the reality of their everyday work, increase the difficulty to investigate this field. One pathway to overcome this difficulty is to work in collaboration with the clinicians using a grounded theory approach. 16 psychologists of the Service Educatif Itinérant (SEI) in Geneva, Switzerland, took part to the construction of the study from the beginning This service offers home-based psycho-educational interventions for developmentally delayed or vulnerable children (N=341 during the year 2016) aged from birth to six years old, in order to sustain parenting in a safe environment. Focus groups and individual interviews of the clinicians were conducted in a grounded theory approach, to explore their needs and the factors implied in their efficiency feeling. Qualitative analysis were performed using Nvivo software. 7 main categories of indexes indicating good efficiency for the clinicians emerged from preliminary analysis, which are of two kinds: External Efficacy Indexes (EEI : Answer to the needs of the family, Create or maintain a cohesive network, and Observe change) vs Internal Efficacy Indexes (IEI: Feeling of we-ness, Feeling of congruence, and Adaptability). The amount of speech dedicated to EEI and IEI seems to indicate that these two kinds of categories are of equal importance to the clinicians. This qualitative research will guide future qualitative and quantitative researches to improve knowledge about those processes in early intervention and consequently improve their efficacy.

BOP27.5

**THE ROLE OF A COMMUNITY HEALTH VISITOR IN PROMOTING CHILD HEALTH & MENTAL HEALTH: A PILOT PROGRAMME IN SINGAPORE**

**Govindarasu B.\*, Ow I., Yang W., Goh Hwee Suat W.**

*KK Womens and Children Hospital ~ Singapore ~ Singapore*

Introduction: Zero to three is the period of critical brain development. It is strongly influenced by the environment and immediate care response. Research findings indicate that a home visitation programme by Community Health Visitors (CHVs) is an effective intervention strategy to mitigate against the impact of ACES on child development and prevent child neglect and abuse. The key worker in the trans-disciplinary approach provides support, monitors child development and is the key point of contact for families. Description: The Kids Integrated Development Service 0-3(KIDS0-3) is a pilot home visitation programme targeting vulnerable families. Our service delivery adopts a trans-disciplinary key worker approach. Presenters will highlight the roles of CHVs and describe how the trans-disciplinary key worker approach and practice is implemented among different professionals in the team to promote child health, parent child interaction and protect the child from neglect and chaotic situations. Standardised tools for developmental screening and maternal mental health issues will be described. Furthermore, research literature involving home visitation programmes for vulnerable families in an Asian context will be discussed. Conclusion: Trans-disciplinary key worker approach is effective and sustainable in achieving children's developmental outcome and family wellness.

BOP27.6

## **HOME VISITING PROGRAMS AND CHILDREN'S DEVELOPMENT: PROFESSIONALS VERSUS NON-PROFESSIONALS**

**Aracena M., Narea M.\*, Bussio M.**

*Pontificia Universidad Católica de Chile ~ Santiago de Chile ~ Chile*

Although every time more research focuses on studying the role of home visiting programs in children's development, just a few studies deepen into the effect of home visits during pregnancy and the first year of life considering who is performing the visits. This study analyzes the effect of home visiting programs but considering a separation between professionals and non-professionals and comparing the results in variables that involve both mothers and the development of the child. A randomized study was carried out on home visiting programs implemented in 24 public healthcare facilities in Santiago de Chile. Visits were performed to a total of 303 mother-child dyads. Two districts were randomly chosen for receiving home visits performed by professionals and other two districts for receiving home visits performed by non-professionals (community monitors). All visitors in the experimental group received 20-chronological hours of training additional to the regular training program offered in healthcare centers in Chile. After 1 year of intervention, the children of mothers accompanied by non-professionals showed better results in psychomotor development and better indicators in physical environment organization compared to the children of mothers accompanied by professionals. All other variables under evaluation showed no statistically significant differences. Non-professional accompaniment showed to significantly improve child development in all areas. When home visits are performed by professionals some indicators in the organization of physical environment show improvement. Accompaniment performed by non-professionals could be of special benefit for caregivers/mothers who don't use to visit regularly healthcare systems. Although home visiting protocols in Chile involve the participation of non-professional staff, their participation is still low (Ministry of Health, Arriet, 2017). Policies regarding children should pay more attention to the concept of home visitors considering the impact in children's development variables and also the potential savings for healthcare systems.

### **Brief Oral Presentations BOP30 - EXPERIMENTAL PSICOLOGY AND INFANT MENTAL HEALTH**

BOP30.1

## **REDUCED FACE/VOICE PREFERENCE IN NEWBORNS: EVIDENCE FOR THE DETECTION OF MATERNAL SYMPTOMS OF DEPRESSION**

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Newborns show visual preference for their mother's face/voice to strangers. Maternal depression during the pregnancy period could result in disorder of Hypothalamic -Pituitary -Gonadal Axis function and the change of the stress hormone cortisol. Prolactin is linked to maternal behaviors and maternal symptoms of depression. Interview and the 24-item Hamilton Rating Scale for Depression (HAM-D) were used to assess the hospitalized pregnant women waiting for delivery at 37-42 weeks of gestation. A total of 255 subjects were recruited, diagnosed with depression (n=135), and control group (n= 120). 255 mothers – newborns pairs were included. Within the postnatal 2 weeks, Neonatal Behavioral Assessment Scale (NBAS) was administered to assess the social

interactive behavior in newborns. The dependent variables were the duration of the infant's looking (measured in seconds) at the mother's face (sum of seconds of looking on the 2 trials) and at the female stranger with happy and warm face and soft voice. Serum prolactin in mothers and cortisol in mothers were measured. The scores of social interactive behavior in newborns of depression group were lower than that in control group ( $p < 0.01$ ); The duration of the newborns' preference for the mother's face/voice was shorter than the female stranger ( $p < 0.01$ ) associated with higher serum cortisol and lower prolactin in depression group mothers ( $p < 0.01$ ). Newborns could detect maternal symptoms of depression associated with increased serum cortisol and decreased prolactin in mothers.

BOP30.2

### **CAREGIVERS' BEHAVIORS MODERATE INFANTS' CALM STATE IN A PRIMATE MODEL: TOWARDS AN EARLY AND OBJECTIVE EVALUATION OF CAREGIVER-INFANT INTERACTIONS**

**Truzzi A.\*<sup>[1]</sup>, Shinozuka K.<sup>[2]</sup>, Yano--Nashimoto S.<sup>[2]</sup>, Shindo S.<sup>[2]</sup>, Saito A.<sup>[2]</sup>, Esposito G.<sup>[3]</sup>, O Kuroda K.<sup>[2]</sup>**

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Caregiver-infant interactions' adaptiveness is mandatory for infants' development. However, we still lack knowledge about how to operationalize caregivers' core behaviors, in order to better evaluate them. One important caregivers' behavior is the carrying which elicits a calm state in the infant. The present project aims to investigate how caregivers' behavioral patterns differently moderate the carrying-elicited calm state in common marmosets (*Callithrix jacchus*). In each session ( $N=261$ ) a marmoset pup was put in a cage and one caregiver was allowed to reach the pup carrying it away. Behaviors and vocalizations were observed and coded (Cohen's  $K=.87$ ). Typically marmoset pups' distress calls ceased at the rescuing. However, a few pups kept crying during carrying. This difference was dependent on caregivers' identity. In response to more neglectful and rejective caregivers infants showed lower soothing levels. This was not an individual's predisposition since a same pup may behave very differently in response to its mother or father accordingly to caregivers' own behavioral pattern. Findings reveal the possibility to evaluate caregiver-infant interactions' style and quality starting from individuals' key behaviors measured through early and objective assessment. If found also in humans, these key behaviors would open the door for earlier and finer assessments of parent-infant bonding.

BOP30.3

### **MODULATION OF RESPONSES TO INFANT VOCALIZATION BY CONTEXT AND GENDER**

**Rigo P.\*, Azhari A., Esposito G.**

*Nanyang Technologica University ~ Singapore ~ Singapore*

Adults' attention and sensitive response to infant vocalizations is critical for child development. This study utilized Near-infrared Spectroscopy (NIRS) and Electrocardiogram (ECG) to examine how contextual information modulates men's and women's peripheral and central nervous responses to baby laughter (BL) and infant cry (IC). 76 undergraduate students were instructed to either imagine (explicit task) or look (implicit task) at visual contextual stimuli from two categories: domestic environment (DE); outside the domestic environment (OE), while being presented with BL and IC auditory stimuli. From ECG findings: only BL elicited increased sympathetic arousal in OE than DE condition, independent of task. From NIRS findings: In the OE condition, explicit attention to context extensively activated the left dorsolateral prefrontal cortex (DLPFC), ventrolateral PFC (VLPFC), inferior frontal cortex (IFC) and frontal pole, suggesting an attempt to understand and regulate

emotions towards IC. Significant gender differences were observed. When context was not factored into the analysis, women showed greater prefrontal activation to IC than men. However, in the OE condition, men, but not women, exhibited greater right OFC activation to IC. These findings highlight the involvement of different regions underlying emotional regulation processes in response to infant vocalizations, as well as modulation by gender and contextual information. Results from this study contribute to advancing our understanding of how the evolutionarily salient infant cry elicits sensitive caregiving behaviors.

BOP30.4

#### **A MULTI-LEVEL APPROACH TO UNDERSTANDING VARIABILITY OF MOTHER-CHILD INTERACTION AS A FUNCTION OF LANGUAGE DURING BILINGUAL PLAY**

**Raghunath B.L.\*<sup>[1]</sup>, Del Carmen Rostagno M.<sup>[2]</sup>, Setoh P.<sup>[1]</sup>, Bornstein M.H.<sup>[3]</sup>, Esposito G.<sup>[1]</sup>**

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Language is the most immediate and relevant means to convey affect and information. Most children in Singapore are brought up bilingual. Little is known about how mothers' use of different languages towards children will influence mother-child interaction, accounting for the child's language dominance. This study investigated mother-child interaction variability as a function of language during bilingual play using multi-level approach, with behavioural and physiological measures. This study assessed the effect of the child's language dominance on mother-child emotional availability and the dyad's heart rate variability (HRV) synchrony. Eighteen Singaporean-Chinese mother-child dyads, child aged 16 – 20 months, were asked to play at their homes naturally with standard set of age-appropriate toys while the mother spoke in Mandarin or English for 10 minutes each. Electrocardiography and video recordings were obtained. rMSSD synchrony scores (SS) were computed and mother-child emotional availability was assessed using Emotional Availability (EA) Scales. Mothers filled up questionnaires about child's language usage, from which a dominance score (DS) was obtained with high positive score indicating high dominance in English and vice versa. Children with higher dominance in English (DS > 21) showed higher responsiveness and involvement during the English play session. This was only seen in the subset of mother-child dyads with lower HRV synchrony (rMSSD SS = 0.515). Similarly, a higher dominance in English (DS > 29.5) predicted higher mother-child HRV synchrony when maternal sensitivity was low (<=6.5) during English play session. Furthermore, children with higher dominance in Mandarin (DS < -5) showed higher mother-child HRV synchrony during Mandarin play session. Overall, language dominance seems to act like a protective buffer to enable optimal emotional availability in children and mother-child physiological synchrony. Findings have practical applications about maternal language and its contribution to promote an optimal environment for child's development.

BOP30.5

#### **CONNECTING MOTHERS' IN-THE-MOMENT AFFECT WITH FEELINGS ABOUT THEIR TODDLERS: MODERATIONS WITH ATTACHMENT ANXIETY**

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Attachment has been linked to emotions and behaviors in the context of parenthood (Jones, Cassidy, & Shaver, 2015), but little work has focused specifically on how attachment influences parents' in-the-moment affective experiences. Here we examine how mothers' real-time affect predicts how they feel about their child at the same moment, and whether those associations vary as a function of maternal attachment insecurity. Data were collected from 145 mothers of 18-to-27 month-olds using experience sampling methodology across a ten-day period. Participants reported on their traitlike attachment avoidance/anxiety (ECR-R, Fraley et al., 2000) and then completed five surveys per day rating their affective valence and arousal (alert/drowsy; happy/unhappy), and feelings about their child (close to/distant from; friendly toward/angry with; in control of/controlled by) on 5-point semantic differential scales. Results from multilevel linear models revealed that attachment anxiety moderated several associations between mothers' affect and child-directed feelings. For example, there was a negative within-person association between mothers' arousal and feeling more anger toward the child,  $B=-0.07$ ,  $SE=0.01$ ,  $p<.001$ , and this association was stronger for mothers higher in attachment anxiety,  $B=-0.05$ ,  $SE=0.01$ ,  $p<.001$ . For associations between greater arousal and child-directed feelings, moderations with attachment anxiety also emerged for feeling more distance,  $B=-0.05$ ,  $SE=0.01$ ,  $p<.001$ , and feeling more controlled by,  $B=-0.04$ ,  $SE=0.01$ ,  $p<.001$ . For affect valence, moderations with attachment anxiety only emerged for feeling distance,  $B=-0.03$ ,  $SE=0.01$ ,  $p=.001$ , and anger,  $B=-0.02$ ,  $SE=0.01$ ,  $p=.026$ , toward child. No significant interactions emerged for attachment avoidance. These results suggest that parents' real-time affect is related to their child-directed feelings in the same moment, particularly for parents higher in attachment anxiety. For parents higher in attachment anxiety, a greater proportion of their emotional states may be comprised of feelings about their children. We will discuss the implications of our findings for parental sensitivity and infant outcomes.

### **Workshop WS58 - GUIDING INFANT AND TODDLER BEHAVIOR TO SUPPORT SOCIAL-EMOTIONAL DEVELOPMENT IN CULTURAL CONTEXT**

**Valotton C. \*, Diaz M., Graham D., Linscott L., Ndlovu N.**

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Through this interactive workshop, we teach a 5-step model to relationship-based infant/toddler guidance: (1) structuring environment, (2) consistent and flexible routines, (3) simple, positive rules, (4) mind-minded behavior reflections, and (5) positive behavior guidance. This model can be used in training infant/toddler practitioners – or parents – in principles of positive behavior guidance. In discussion with participants, we use a cultural adaptations lens (e.g., Castro, Barrera, & Martinez, 2004) to consider the implications of teaching this model to infant/toddler practitioners outside of the United States. We apply this lens in two different culture and care contexts: teaching pre-service early childhood educators in Taiwan, and training caregivers in an orphanage in South Africa. Babies have big feelings and little self-control. They need support to understand emotions and regulate behavior, especially in group care. Effective guidance of infant/toddler behavior builds adult-child relationships, supports children's security, and development of empathy and Theory of Mind. Infant/toddler practitioners need skills to guide behavior to reinforce positive relationships and support development (CUPID, 2017). As babies spend substantial time in group care, caregiver training in positive guidance becomes paramount. Strategies to guide behavior in group care have focused on 3-5 year olds, relying on verbal strategies, and is misapplied to infants and toddlers without considering their developmental skills and emotional needs. We adapt for infant/toddler practitioners the principles of positive guidance taught in *Guiding Children's Social Development and Learning: Theory and Skills* (Kostelnik et al., 2016), a popular U.S. text for training early childhood practitioners.

## **Workshop WS59 - 'THE TIMES THEY ARE CHANGING': MATERNAL IDENTITY BETWEEN RISKS AND RESILIENCE**

**Rottenberg B.\*<sup>[1]</sup>, Hatzor T.<sup>[2]</sup>, Masarwi M.<sup>[3]</sup>**

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The fate of mothers determines the fate of children. Mothers provide the holding environment, creating the necessary secure base children need in order to grow. Refugees and immigrants all over the world are facing rapid, ongoing, social and political changes, some life shattering. This new reality is especially trying for mothers. Mothers are the 'place' where nature and nurture meet, the place children lean on as a secure base. But, what happens to those mothers when the reality outside is unstable, and even dangerous? How do these experiences shape the experience of motherhood and their identity as such? In this workshop we will present different case studies from the therapeutic and educational field, examining the questions we raised above, sharing with the audience some of our insights in working with refugees and immigrant mothers. Maram Masarwi will present her interviews with mothers at a Greek refugee camp showing their attempt to weave their trauma with their identity as mothers. Biri Rotenberg will present 'the wild narrative of motherhood', a dyadic case of a 2nd generation holocaust mother with her three-year-old toddler via bibliotherapy. Talia Hatzor will present the work of students of parent-infant psychotherapy who provide dyadic therapy to parents and babies who are immigrant living in NYC under traumatized environment. We intend to create an open dialogue with the audience and share our professional knowledge in this subject of maternal changing realities.

## **Workshop WS64 - TREATING EARLY SIGNS OF AUTISM: ADDRESSING PARENTAL SENSITIVITY TO SENSORY PROCESSING DIFFERENCES**

**Kalmanson B.\*<sup>[1]</sup>, Baratelli S.<sup>[2]</sup>**

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The aim of this workshop is to present a new intervention for infants and toddlers showing early signs of Autism. The presenters will demonstrate therapeutic intervention that integrates infant mental health and autism treatment. This intervention focuses on promoting interactional synchrony to facilitate a well-attuned infant-parent relationship. The basis for intervention is formed using insights about the infant's unique sensory motor processing and how it affects the parents' thoughts and feelings about their parenting. We will describe the therapeutic process we use to help parents make sense of their baby's experience, support attunement and co-regulation, and empower the parents to mobilize their baby's sensory motor and affective reciprocity. Infants showing prodromal signs of Autism fail to elicit or respond to early forms of social interaction dependent upon preverbal systems of sensory – motor responses. These are evident in the choreography of communication through affect cueing, vocalizing, movement, use of space, intensity, timing and intention. Research supports teaching parents social communication skills, often focused on frequency or duration counts of symptomatic behaviors of the baby, (Green, et al 2017; Rogers, et al 2014; Rozga, et al 2011.) This workshop shifts the focus to interactional synchrony, and therapeutic intervention to facilitate a well-attuned infant-parent relationship, integrating infant mental health and autism treatment. Insights about the infant's unique sensory motor processing and the parents' thoughts and feelings form the basis for intervention. We identify a trajectory that often leads to later diagnoses of Autism. Observations reveal a baby who is

behaving self-protectively against unmanageable stimuli. This explanation is rarely obvious to the parent who feels emotionally rejected and confused, and unintentionally tends to over stimulate (Cohen, et. al. 2012) or withdraw from contact the moment the infant needs parental co-regulation. We illustrate the treatment process with video vignettes from family sessions with infants and toddlers. Parental sensitivity is enlivened through dynamic therapeutic interventions, enabling parents to become aware of the effects their infant's neurobiological constrictions on their feelings as parents and on their caregiving. The therapist transforms disorienting interactive patterns by supporting attunement and co-regulation, empowering parents to mobilize their baby's sensory motor and affective reciprocity.

### **Workshop WS65 - "LIKE AN ACROBAT ON A TIGHT ROPE" PARADOXICAL THEMES IN THE EXPERIENCE OF PARENTING A CHILD WITH AUTISM – A MODEL FOR PARENTAL THERAPY**

**Ginossar N.\***

*ALUT-The Israeli Society for Autistic Children ~ Givataim ~ Israel*

Parenting a child in the autistic spectrum is highly stressful and challenging. The interaction with their child often involves much anxiety, helplessness and frustration. These factors put parents of autistic children at high risk for depression, anxiety and other mental health problem, as well as physical health problems. Parental therapy is a form of therapy that helps parents make a change in their experiences of parenthood. A mental health practitioner becomes an attachment figure for the parents, supporting emotional regulation and metallization. Processing the parent's experiences helps the parent find useful ways to cope with both their children's needs and their own needs, and to change their own feeling about their "parental self". The workshop will provide a model for conceptualizing parental therapy with parents of autistic children. We will focus on five paradoxical themes that parents face when raising a child with Autism, and demonstrate how each paradox is inherent under such circumstances; The paradoxical themes of responsibility, recognition, capability, mentalizing and progress. We will describe the way the clinician can recognize the active paradox in the parent's experience at a specific time, and her role in helping the parent to find a better balance of his/her experience while accepting the inherent paradox. This process serves the parent to attain better equilibrium, reduce anxiety and promotes self-compassion and greater sense of efficacy and worth. We will discuss theoretical consideration for the choice points for intervention for the clinician, and demonstrate the work through clinical examples.

### **Brief Oral Presentations BOP33 - FOLLOW-UP OF PREMATURELY BORN BABIES**

BOP33.1

#### **BEHAVIOURAL PROBLEMS AT AGE OF 3 IN VERY PRETERM INFANTS: EPICE-PORTUGAL STUDY**

**Rodrigues C.\*, Costa R., Barros H.**

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This analysis included 263 VPT children (<32 gestational weeks), born in Portugal (North region and Lisbon and Tagus Valley region), in 2011-2012, and enrolled in the EPICE cohort. At the age of 3, behavioural problems were measured using the Child Behaviour Checklist (CBCL) 1.5-5 years, which was completed by parents. The seven syndrome scales scores were subdivided into normal (P<93), subclinical (P93-P97), and clinical (P>97). The scores for internalising, externalising and total problems, were also classified as normal (P<83), subclinical (P83-P90) and clinical (P>90). The prevalence of total behavioural problems was 19.4%, 7.6% in subclinical range (SCR) and 11.8% in clinical range (CR). The prevalence of internalizing problems was higher than externalizing problems

(21.7% vs. 15.2%). Internalizing score was in SCR for 8.0% and in CR for 13.7% of children. Externalizing score was in SCR for 6.1% and in CR for 9.1%. Regarding emotionally reactive score, 7.6% of children were in SCR and 6.1% in CR. The score on anxious/depressed was 5.7% for SCR and 4.2% for CR. 6.1% of children presented somatic complaints problems in SCR and 4.9% in CR. Withdrawn problems were in SCR for 1.9% of children and in CR for 7.2%. Subclinical sleep problems were observed in 1.9% and clinical in 3.4% of children. On attention problems, 2.7% of children were in SCR and 4.2% in CR, and on aggressive behaviour 4.9% were in SCR and 3.4% in CR. Parents reported more internalizing than externalizing problems in Portuguese VPT children. Withdrawn scale presented the higher prevalence in clinical range. Early screening and intervention should be provided to VPT children to prevent long-term adverse outcomes.

BOP33.2

### **THE SWEDISH NATIONAL FOLLOW-UP PROGRAMME FOR EXTREMELY PRETERM AND HIGH RISK INFANTS**

**Månsson J.\*<sup>[1]</sup>, Stjernqvist K.<sup>[2]</sup>**

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The survival rates of extremely preterm (EPT) infants are increasing. Still, a significant number of children born EPT are at risk for developmental deficits. Cognitive disability is the most common consequence. The World Health Organization is emphasizing the need to reduce the health problems caused by preterm birth and calls for updated clinical guidelines on follow-up care and assessments of the quality of care. In Sweden, a national follow-up programme started in 2015 on infants born EPT and/or with severe neonatal morbidity, aiming at early identification of deficits and intervention planning. This multidisciplinary programme includes routine examinations by psychologists, paediatricians, physiotherapists, and ophthalmologists at two time points. The psychological follow-up at 2 years (corrected age) includes a developmental assessment with the Bayley Scales of Infant and Toddler Development - 3rd edition and an autism screening using the Modified Checklist for Autism in Toddlers. At chronological age 5.5 years, the children are examined by the Wechsler Primary and Preschool Scale of Intelligence – 4th edition and screened for behaviour problems using the Strengths and Difficulties Questionnaire. In developed countries, follow-up for high-risk neonates, focusing on long-term effects of certain medical conditions and/or neurodevelopmental outcomes, is commonly performed at large research centres. The Swedish programme is standardized, with harmonized guidelines for follow-up at all clinics. The current presentation provides a description of the follow-up, especially the parts performed by psychologists. It illustrates what we have experienced so far, implementing the program, and in contact with the patients and their families.

BOP33.3

### **NEGATIVE DEVELOPMENTAL OUTCOMES IN VERY PRETERM INFANTS WITH NEONATAL MORBIDITY AT 12 MONTHS OF CORRECTED AGE: EPICE -PORTUGAL RESULTS**

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Risk of developmental delay, motor and cognitive impairment is higher in preterm infants than among term infants. Developmental outcomes of very preterm infants are a concern for families and health professionals, and yet in Portugal this is still an under analysed issue. Data was collected as part of the EPICE project (Effective Perinatal Intensive Care in Europe), which includes a

population-based prospective cohort of all births between 22+0 and 31+6 weeks of gestational age in nineteen European regions. In the current analysis, the study population included all live births born between June 2011 and May 2012 in two regions of Portugal (Northern and Lisbon and Tagus Valley (n=974)). At hospital discharge, the follow-up was proposed to the parents of 607 very preterm infants surviving at discharge and 540 informed consents were obtained. At 1 year of corrected age, 456 questionnaires were completed. Data on maternal and infant characteristics, complications of pregnancy, delivery and clinical outcomes were collected using a standardized questionnaire, completed by healthcare professionals. Information on the psychomotor developmental outcomes was obtained using a structured questionnaire (phone interview) and completed by the parents or legal guardians when the infants were 12 months of corrected age. Worse developmental outcomes were observed among infants with neonatal morbidity, namely bronchopulmonary dysplasia (t=4.059, p<0.001), periventricular leukomalacia (t=2.720, p=0.014), late infection (>72 hours of life) (t=2.930, p=0.004), patent ductus arteriosus (t=2.596, p=0.010) and retinopathy of prematurity (t=1.315, p=0.031), severe brain injury (t=3.140, p=0.004) and severe morbidity (t=4.003, p<0.001). Very preterm infants with neonatal morbidity are at higher risk of poor developmental outcomes. The early detection of developmental problems among these infants is crucial for the implementation of effective intervention programs.

BOP33.4

#### **ACADEMIC ACHIEVEMENT IN VERY PRETERM CHILDREN AT THE END OF PRIMARY SCHOOL**

**Guarini A.\*, Bonifacci P., Bonifacci V., D'Antuono M., Trambagioli N., Roga F., Barbieri M., Sansavini A.**

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Very preterm birth (VPT) can affect academic achievement (Aarnoudse-Moens et al., 2009; Guarini et al., 2010; Kovachy et al., 2015; Sansavini, et al., 2011). However, to our knowledge, it is not clear whether the profile of VPT children could be considered delayed or atypical and how it is different from other populations with atypical development, showing deficits in reading, spelling and maths, such as children with specific learning disorders (SLD). We aimed at comparing reading, spelling and math skills among VPT children, SLD children and typically developing (TD) children. Thirty-five VPT monolingual Italian children (gestational age <32 weeks), without any history of major cerebral damage, were compared to 28 SLD children and to 105 TD children attending the fifth year of primary school. The groups were comparable for age and gender. Reading and spelling skills were evaluated in text, word and non-word tasks; maths was evaluated taking into account number knowledge, calculations and problem solving. ANOVAs were carried out to compare the three groups; Bonferroni were used for post-hoc analyses. SLD children had lower scores than TD children in all skills, whereas difficulties in VPT children were more specific. Concerning reading, the profile of VPT children was similar to that of TD children in accuracy, whereas VPT were slightly slower than TD children in text reading, but faster than SLD children. Concerning spelling, VPT children made more errors in the non-word task, with a performance similar to that of SLD children. Concerning maths, VPT children showed more errors than TD children in number knowledge, written calculations and problem solving. The results allow to outline the peculiarity of the profile of VPT children revealing important considerations for improving follow-up programs, as well as effective interventions.

BOP33.5

#### **EVALUATION AND COMPARISON OF COGNITIVE DEVELOPMENT IN PREMATURE INFANTS AND FULL-TERM INFANTS DURING EARLY CHILDHOOD**

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Premature infants have an increased risk of having long-term learning problems. However there is little information about the impact of prematurity on early cognitive development. Early detection of children with increased cognitive risk is relevant to prevent learning problems at more advanced ages. The aims of this research were to study delay in cognitive development in preterm infants and to compare cognitive development between premature and full-term infants during early childhood. Cross-sectional descriptive study design. Argentine scale of sensory motor intelligence (EASIS) was administered to assess cognitive development. Frequency of cognitive delay was studied in preterm and full term infants. The risk of cognitive difficulties by degree of prematurity, compared with term infants was calculated. A total of 232 preterm and 214 term infants, were evaluated. The frequency of cognitive impairments in premature infants was higher (26.7%) than in term infants (14.5%). This difference was statistically significant ( $p$  value=0.004). The risk of delay in cognitive development increases with decreasing gestational age, but late preterm infants also are at higher risk of cognitive delay than those born at term. Gestational age (GA), birth weight (BW), intrauterine growth retardation (IUGR) and neonatal complications are risk factors for early cognitive development. We found that preterm infants have almost 3 times more chance of retarded cognitive development than a full-term infants (OR=2.80 [IC95% 1.56-5.0];  $p$ <0.001). This probability tends to increase as gestational age decrease. Premature infants less than 32 weeks of gestation are almost 5 times more likely to have a delay in cognitive development than those born at term (OR=4.88 [IC95%:2.36-10.09];  $p$ <0.001). Prematurity produces an impact on cognitive development that can be detected during early childhood. The difficulties are greater with decreasing GA, BW, IUGR and with neonatal complications, without neglecting the importance of monitoring also late preterm.

BOP33.6

#### **NEUROBEHAVIORAL DEVELOPMENT AND EARLY REGULATORY PROBLEM IN VERY PRETERM AND VERY LOW BIRTH WEIGHT INFANTS**

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Children born preterm have more neurodevelopmental difficulties compared with full-term peers, including difficulties with cognitive function, self-regulation, attention, executive function, and emotional regulation. Children born preterm have also been found to have regulatory difficulties (defined as excessive crying, sleeping, or feeding problems) in early childhood, which in turn are early warning signs of future problems. The aims of the study are 1) to investigate the specificity of neurobehavioral profile in very preterm/very low birth weight (VP/VLBW) and full-term (FT) infants; 2) to explore differences in regulatory problems expressed by infants born very preterm (VP; <32 wk gestation) or with very low birth weight (VLBW; <1500 g) and infants born at full term (FT) during the first month of life, and 3) to determine the influence of preterm neurobehavioral features at 36 wk gestation, and parental stress experienced in the NICU, on infant regulatory problems in the first month. This prospective longitudinal study will involve 40 VP/VLBW and 30 FT infants recruited in the Hospital Policlinico Umberto I of Rome, Sapienza University. Neurobehavioral features (orientation, habituation, hypertonicity, hypotonicity, excitability, arousal, lethargy, nonoptimal reflexes, asymmetric reflexes, stress, self-regulation, quality of movement, handling) will be

assessed at 36 w gestational age for PT infants and at term for the FT infants with the NICU Network Neurobehavioral Scale (Lester & Tronick, 2004). Maternal and Paternal stress will be assessed with the Parental Stressor Scale: Neonatal Intensive Care Unit (Miles, Funk, Carlson, 1993). Regulatory Problem will be assessed at term and at 1 month of age (corrected age for PT) with a standard interview of mothers (Cry, Feed and Sleep Interview). Results will be discussed, with a specific focus on the neurobehavioral factors that might be associated with regulatory problems at birth and at 1 month. Clinical implication and future direction will be presented, also concerning early intervention for high risk infants and families in the NICU.

### **Symposium S86 - GLOBAL ACTION TO CHANGE OUTCOMES FOR MOTHERS AND INFANTS: WHY AND HOW? THE GLOBAL ALLIANCE FOR MATERNAL MENTAL HEALTH**

**Gregoire A.\***

*Global Alliance for Maternal Mental Health ~ London ~ United Kingdom*

We are proposing this as a SYMPOSIUM containing the other submitted abstracts, in order: 1. The effects of prenatal stress, depression and anxiety on child development, including infant mental health: a global perspective, Vivette Glover, Imperial College London 2. Vulnerable babies: intervening with the infant-parent relationship through linking adult mental health and infant mental health services, Associate Prof Campbell Paul, The Royal Children's Hospital Melbourne, Australia 3. Development of a peer delivered psychosocial intervention to reduce the burden of perinatal depression in Nigerian mothers, Dr Kike Olajide, Prof Paul Ramchandani, Dr Cornelius Ani, Imperial College London – UK; Prof Oye Gureje, University of Ibadan - Nigeria 4. Refugee women's maternal mental health experiences, what do we know? Brigid McConville, White Ribbon Alliance UK 5. The Global Alliance for maternal mental health. Dr Alain Gregoire  
JOINT CHAIRS: Dr Alain Gregoire And Professor Campbell Paul

S86.2

### **VULNERABLE BABIES: INTERVENING WITH THE INFANT-PARENT RELATIONSHIP THROUGH LINKING ADULT MENTAL HEALTH AND INFANT MENTAL HEALTH SERVICES**

**Paul C.\***

*The Royal Children's Hospital ~ Melbourne ~ Australia*

The child health system can provide an essential portal for responding to mothers with serious mental illness. Infants whose parents have major mental illness are very vulnerable to experiencing ongoing emotional distress in infancy, and have a higher prevalence of developing mental illness themselves. This paper will describe a service network based within the context of the paediatric hospital which is designed to respond to infants whose parents have serious mental illness. The Parent Infant Mental Health Initiative, PIMHI, provides a limited state-wide resource for direct therapy and secondary consultation regarding parents of babies and toddlers who have established mental health disorders such as schizophrenia, bipolar disorder and personality disorders. PIMHI is funded by government mental health services to bring an understanding of the infant's situation when their mother or father experience profound psychiatric illness and have limitations in being able to respond to the social, emotional and developmental needs of their baby. Conversely, infants may present to child health services with somatic or developmental problems as a consequence of their parent's mental illness. Hospital-based infant mental health services can provide assessment, liaison and treatment to enable relationship-based care of troubled parents which often involves coordinating acute adult mental health services, child protection services and child health within the hospital and the community at large. Clinical examples and some service response data will be

presented.

S86.3

### **DEVELOPMENT OF A PEER DELIVERED PSYCHOSOCIAL INTERVENTION TO REDUCE THE BURDEN OF PERINATAL DEPRESSION IN NIGERIAN MOTHERS**

**Olajide K.\*<sup>[1]</sup>, Ramchandani P.<sup>[1]</sup>, Ani C.<sup>[1]</sup>, Gureje O.<sup>[2]</sup>**

<sup>[1]</sup>Imperial College ~ London ~ United Kingdom, <sup>[2]</sup>University of Ibadan ~ Ibadan ~ Nigeria

Perinatal depression (PND) is a major cause of disability amongst women, with potential consequences for children's growth and development. Despite evidence to support the effectiveness of psychosocial interventions for PND, the scarcity of human and financial resources for mental health care in low-and-middle-income countries has led to a treatment gap. It is estimated that 90% of people with a mental illness in Nigeria, go untreated. A key strategy in addressing this has been to train 'non-specialist health-workers' to deliver mental health interventions. This study seeks to understand the preferences of the target population in order to designing an effective and sustainable intervention for PND. Aims: 1. Explore Nigerian attitudes to PND. 2. Identify barriers and facilitators to help-seeking. This qualitative cross-sectional study included 39 participants. Results: Relationships and poverty were the two key themes raised by study participants. High conflict relationships between a mother and her husband or mother-in-law and poverty were viewed as key causal explanations of PND. Supportive relationships were thought to promote help-seeking, whilst poverty was felt to act as a barrier to help-seeking. Addressing these two key themes was viewed as a key component of treatment. CONCLUSION: Interventions and public health prevention strategies for perinatal depression need to consider local social contexts in order to provide effective, sustainable & culturally relevant treatment. We propose Group Support Psychotherapy (GSP) is a suitable intervention for this population because it adequately addresses the two key themes of poverty and relationships.

S86.4

### **REFUGEE WOMEN'S MATERNAL MENTAL HEALTH EXPERIENCES, WHAT DO WE KNOW?**

**Mcconville B.\***

*White Ribbon Alliance UK ~ London ~ United Kingdom*

There is anecdotal evidence and a growing bank of personal testimony about the impact on the mental health of women and girls who arrive in Europe as refugees. However, given that many of these are officially undocumented and living in fear of detection and deportation, their experiences remain largely underground and unheard, their numbers uncounted and their sufferings untreated. Yet these women and girls are likely to be amongst the most vulnerable in any society. All too often they have fled their own countries after violence and violations of their sexual and reproductive rights including trafficking, rape and forced marriage - only to find their rights to health care violated in European countries during pregnancy and childbirth. Many are already carrying a heavy burden of trauma and may come from cultures in which mental ill health is a matter for shame and concealment. In interviews, these women speak of high levels of depression and self-harm. Attempted suicide is a common theme. Studies are rare, but Canadian researchers found that Syrian refugee women were five times more likely to develop post-partum depression than Canadian born women. Meanwhile refugees are arriving in European countries which are restricting the access of the most vulnerable to maternity and mental health services. We urgently need to document the hidden experiences of migrant women - but also to initiate a research agenda to study their health and rights, and to conduct scientifically sound investigations about the extent, nature, sequelae and implications of migrants reproductive health.

S86.5

**UNITING TO CHANGE OUTCOMES FOR MOTHERS AND INFANTS: THE GLOBAL ALLIANCE FOR MATERNAL MENTAL HEALTH**

**Gregoire A.\***

*Global Alliance for Maternal Mental Health ~ London ~ United Kingdom*

The Global Alliance for Maternal Mental Health (GAMMH) is a coalition of international organisations committed to improving the mental health and wellbeing of women and their children in pregnancy and the first postnatal year (the 'perinatal period'). Our goal is to prevent the avoidable suffering experienced by women and their families, ensuring child development does not continue to be compromised by a global failure to provide appropriate support and services for mothers' mental health. Worldwide, maternal depression is the most common serious health complication of maternity. This and other mental health problems in pregnancy and postnatally result in huge documented human and economic costs for this generation and the next – yet they are a neglected area of investment in services and research. If the United Nations Sustainable Development Goals are to be achieved by 2030, maternal mental health must be prioritised. Our aim is to foster the translation of research in perinatal and maternal mental health into better care and outcomes for women and their families wherever they live. This acknowledges the extensive evidence that better mental health in the perinatal period can have a dramatic impact on outcomes for mothers, partners, children, families and society. The Chair and Founder of GAMMH will draw on experience of a highly successful national coalition in the UK to demonstrate how ambitious objective can be achieved through united action.

S86.6

**THE EFFECTS OF PRENATAL STRESS, DEPRESSION AND ANXIETY ON CHILD DEVELOPMENT, INCLUDING INFANT MENTAL HEALTH; A GLOBAL PERSPECTIVE**

**Glover V.\***

*Imperial College ~ London ~ United Kingdom*

There is clear evidence that the mother's stress, anxiety or depression during pregnancy can alter the development of her fetus and her child, with an increased risk for a range of problems including worse infant mental health and later psychopathology. Several studies have shown an increased probability for a difficult temperament in the infant, with more dysregulated sleeping and feeding, more crying and being harder to soothe. Effects can be different on boys and girls. We are starting to understand some of the underlying mechanisms including the role of the placenta, gene-environment interactions, epigenetics, and specific systems including the HPA axis and cytokines. These effects may be different, and potentially exacerbated, in different parts of the world. There can be many reasons for elevated prenatal stress, as in communities at war. There may be raised pregnancy specific anxiety in regions with high levels of maternal and infant death. There can be raised interpersonal violence. There may be interactions with nutritional deficiencies. Genetic differences in different ethnic groups may make some more vulnerable or more resilient, to the effects of prenatal stress on infant neurodevelopment. Most research on these questions has been in predominantly Caucasian samples from high-income countries. We now need to understand more about prenatal stress and psychopathology, and the role of both social and biological differences, in the rest of the world.

## Brief Oral Presentations BOP36 - THE DAILY LIFE OF THE INFANT DAY CARE AND INSTITUTIONS

BOP36.1

### **SUPPORTING YOUNG CHILDREN'S DEVELOPMENT WITHIN THE DAYCARE: THE KIBBUTZ HOLISTIC APPROACH TO EARLY CHILDHOOD EDUCATION**

**Dolev S.\***

*Haifa University ~ Haifa ~ Israel*

Daycares face the challenge of creating environments in which young children will be able to develop and learn with the support of positive relationships with caregivers. The KHA to early childhood education integrates several developmental concepts and relates them to the daycare context: Caregivers should strive to create secure relationships that will allow children to develop basic trust; They should provide consistent caregiving, thereby creating a holding environment for the child's developing self; Caregivers should support the child's exploration, but also comfort the child when needed; They should hold the child's inner thoughts and feelings in their minds, give meaning to their actions, and respond sensitively to their needs; Finally, daycares should support children's sensory-motor learning, and their need for autonomy and reciprocity. This presentation will show how the KHA to early childhood education translated these concepts into the day-to-day practice of the daycare: in what way can daycares respond to children's needs through the organization of the daycare environment (the quantity, complexity and responsivity of objects and play centers); and how can the physical and socio-emotional needs of young children be addressed through various activities in the daycare (e.g. circle time, meal time, activity boxes, the yard, and the field trip).

BOP36.2

### **EMOTIONAL STATES, PARENTING HASSLES OF RUSSIAN MOTHERS AND THEIR PRESCHOOL CHILDREN BEHAVIOR**

**Anikina V.\*, Suvorova A., Meldo E.**

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After the birth of a child parents may feel stressed due to the adaptation to the new role (Solmeyer A. R., Feinberg M.E, 2011), child emotional or physical state (Kochanska , et. al. 2004; Nam , et. al. 2014), daily parental hassles (Gray, et.al., 2012). Mothers may feel anxious (Cooklin , et. al.2013; Bhat , et. al. 2015; Nicol-Harper , et. al. 2007) and even depressed (McMahon C.A. , et. al.,2015; Harmeyer , et. al. 2016; Gray , et. al. 2012; Bhat , et. al. 2015; McGrath J. M. , et. al. 2008). In turn, children of depressed mothers are more tense, less happy, show more negative emotions and behavior, more depressed, aggressive or withdrawn (Moehler, et.al., 2006; Stanley, et.al., 2004; Gray, et.al., 2012; Harmeyer, et.al., 2016). The aims of this study was to assess emotional states of Russian mothers from normative population, their stress of taking care of a preschool child and find how these are connected to their children behavior characteristics. The sample consisted of 42 normative Russian mothers of age 27-35 raising children 2-6 years old. We used State-Trait Anxiety Inventory, BDI II, Parenting Daily Hassles, BASC-2. The level of anxiety of 30% and of depression of 10% mothers is above clinical level. Their emotional states are mostly connected to the frequency and intensity of stress of their parenting hassles and child age. The stress level is correlated both to mothers' emotional states and children behavioral characteristics. The latter are mainly connected to the number of hours they spend in daycare, and not that much to mothers' emotional states. The emotional states of Russian mothers should be taken into deeper consideration, as well as it seems that daycare services influence negatively on children behavior and have a greater impact than mothers' emotional states.

BOP36.3

### **HOT EXECUTIVE FUNCTIONING IN YOUNG CHILDREN WITH THE HISTORY OF INSTITUTIONALIZATION**

**Vasilyeva M.\*<sup>[1]</sup>, Korshina J.<sup>[1]</sup>, Lind T.<sup>[2]</sup>, Vershinina E.<sup>[3]</sup>, Chernego D.<sup>[1]</sup>, Muhamedrahimov R.<sup>[1]</sup>, Dozier M.<sup>[2]</sup>**

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Executive functions refer to higher order cognitive processes involved in conscious control of thoughts, actions and emotions. In recent research a distinction was made between the «cool» and «hot» aspects of executive functions with hot (affective) subcomponent predominantly engaging motivation/emotion regulation skills. The cool-hot distinction has important implications for research into child development, particularly for populations with early life adversity (e.g. reared in institutional care), as hot executive functions were found to be a strong predictor of child's social-emotional adjustment, later behavior problems and further risk for psychopathology, than were cold executive functions. Severe impairments in executive functioning were well documented in school-aged children with a history of institutionalization. Significant deficits are apparent in this population even after years of adoption and persist into adolescence. The information concerning executive functioning in young children experienced institutional care is limited. Questions about the degree of reversibility of postinstitutional problems in those skills at early ages remain open. The objective of the study was to evaluate the hot executive functions development in young children with the history of institutionalization. Subjects were 3 groups of children (22 - 48 months) from: baby homes, substitute and biological families. Hot tasks were administered: snack delay, gift wrapped and gift delay. Children from institutions demonstrated deficits in hot executive functions when compared to their peers from biological and substitute families, whereas children from substitute families performed at intermediate level and showed more specificity on hot executive function measures. Results advance our understanding of the specific affective cognitive processes that may be dramatically impaired by early life adversity. Those deficits in early hot executive functioning couldn't be completely ameliorated by child's placement to family care. Subsequent family-based interventions are needed to initiate a cascade of beneficial events for children and their parents.

BOP36.4

### **ATTACHMENT SECURITY AT 24 MONTHS AND ASSOCIATION WITH CURIOSITY AT KINDERGARTEN IN A NATIONALLY REPRESENTATIVE SAMPLE**

**Shah P.E.\*, Rosenblum K., Richards B., Kaciroti N.**

*University of Michigan ~ Ann Arbor ~ United States of America*

Curiosity is the desire for new information that motivates knowledge acquisition and exploration. In young children, curiosity is largely characterized by an exploratory drive. In infancy, one factor associated with the quality of early exploration is a child's attachment classification, with secure attachment associated with more active exploration. It is unknown whether infant attachment security is also associated with higher curiosity in early childhood. Sample included 4950 children in the ECLS-B. Attachment classification (secure, avoidant, ambivalent, disorganized) and a continuous measure of attachment security were assessed at 24 months using the Toddler Attachment Q-Sort. A 6-item measure of curiosity at kindergarten was generated from a parent-report questionnaire of behavior using confirmatory factor analysis ( $\alpha = 0.74$ ). Mean curiosity scores in each attachment

group were examined with univariate t-tests with pairwise comparisons testing for group differences. Multivariate linear regression examined the association between attachment security and curiosity in categorical and continuous models after controlling for potential confounders. Standardized curiosity scores ranged from -4.87 to 1.43 (M= 0.01, SD= 0.87) Mean curiosity scores differed by attachment classification: Secure: M= 0.07 SD= 0.80; Avoidant: M= 0.02, SD= 0.90; Ambivalent: M= -0.04, SD=0.90, Disorganized M= -0.19 SD=0.90 After controlling for potential confounders, secure attachment classification continued to be significantly associated with curiosity ( $\beta = 0.11$   $p = .01$ ). In continuous models, higher attachment security was associated with higher curiosity in adjusted models ( $\beta = 0.18$   $p < .001$ ). Secure attachment classification at 24 months was associated with higher curiosity at kindergarten in adjusted analyses, with higher attachment security associated with higher curiosity. Fostering infant attachment security may be one potential way to optimize curiosity in early childhood.

BOP36.5

### **CHILDREN AT RISK EVALUATION (CARE) – ROUTINE ASSESSMENT OF HEALTH AND CARE NEEDS IN CHILDREN ENTERING CARE**

**Heiervang E.<sup>[1]</sup>, Sarfi M.\*<sup>[1]</sup>, Christiansen Ø.<sup>[2]</sup>, Lehmann S.<sup>[2]</sup>, Ullebø A.K.<sup>[3]</sup>, Myrvoid T.<sup>[4]</sup>**

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Children entering out-of home care represent a high-risk group, where 50-75% meet criteria for mental disorders. Guidelines recommend routine trauma-informed assessment of their health and care needs, as a starting point for offering evidence-based services to the child and supervision of carers. Few models exist to date for how this assessment should be performed. The aim of the study is to evaluate a model for routine assessment of health and care needs in children entering care. Evaluation will include acceptability of the assessment for children, carers and services, as well as one-year outcomes regarding service satisfaction, mental health, quality of life, and placement stability. Children of mothers in opiate maintenance treatment (OMT) will also be offered this assessment, as they also represent a high-risk group for mental disorders. Children entering out-of-home care (N=200) and children of mothers in OMT (N=40) will be assessed by two dedicated multi-professional teams, trained in trauma-informed assessment procedures. One team situated within state child welfare will assess children aged 0-6 years, while a team within county child and adolescent mental health services will assess youth aged 7-17 years. The assessment will be performed on a single day on an outpatient basis. Preliminary results indicate that the assessment is well received by carers and municipal child protection workers in charge of offering services to the child and supervision of carers. Written reports with results presented according to the DC:0-5 framework, and suggestions for services and supervision, are found to be helpful. Some challenges regarding resources and logistics are reported when team members have been asked to give testimony to the court. The proposed model seems promising regarding how to offer routine assessment of needs in children entering care, and in other high-risk groups including children of mothers in OMT.

BOP36.6

### **INHIBITED AND DISINHIBITED ATTACHMENT BEHAVIOR IN ADOPTED CHILDREN: THE ROLE OF EARLY ADVERSITY AND POST-ADOPTION ENVIRONMENTAL FACTORS**

**Bovenschen I.\*, Hornfeck F., Heene S., Zimmermann J., Braenzel P., Kappler S., Zwoenitzer A., Kindler H.**

*German Youth Institute ~ Munich ~ Germany*

Due to early adversity and disruptions in caregiving, adopted children often show developmental delays and are at risk for developing a variety of social, psychological, and behavioral problems (van den Dries et al., 2009), especially disorganized attachment and attachment disturbances. Emerging evidence indicates that quality of caregiving conditions in adoptive family can present protective factors which help to buffer the negative effect of preadoptive adversity (Brodzinsky, 2005; Groza & Ryan, 2002; Simmel 2007). Recent studies have been investigating mainly intercountry adoptees, and the present study is the first study investigating inhibited and disinhibited attachment behavior in both domestic and intercountry adoptions. The sample comprises 206 adopted children between 12 and 145 months (150 domestic adoptions and 56 intercountry adoptions) which have been adopted within the last two years. Children's attachment disturbances were measured with the Relationships Problem Questionnaire and the Disturbances of Attachment Interview. Child factors (age, age at adoption, gender), pre-adoptive stressors (e.g., experiences of maltreatment and neglect, placement changes) and family-related factors (reflective functioning, parenting, parenting stress, family characteristics) were included as potential predictors of children's attachment disturbances. The results show that 15% of adopted children (domestic: 11%, intercountry: 25%) scored in the clinical level when screening for symptoms of inhibited and/or disinhibited attachment behavior. Multiple regression analyses revealed that the severity of maltreatment and neglect as well as adoptive parents' self-reported parenting stress and self-efficacy significantly predicted inhibited symptoms whereas disinhibited symptoms were solely predicted by adoptive parents' self-reported parenting stress. The present study confirms results of international studies as early adversity was found to predict the occurrence of reactive disorder symptoms. Moreover, our results highlight the role of family-related factors beyond sensitivity, especially when developing interventions for adoptive families.

#### **Workshop WS70 - THE MEANING OF THE CHILD INTERVIEW: ASSESSING RISK AND RESILIENCE IN PARENT-CHILD RELATIONSHIPS THROUGH THE WAY PARENTS SPEAK ABOUT THEIR CHILD**

**Grey B.\*<sup>[1]</sup>, Kesteven J.<sup>[2]</sup>**

*<sup>[1]</sup>University of Roehampton ~ London ~ United Kingdom, <sup>[2]</sup>Cambridge Centre for Attachment ~ Cambridge ~ United Kingdom*

The Meaning of the Child Interview (MotC: Grey and Farnfield 2017a, 2017b) is a recently validated procedure for assessing problematic parent-child relationships. It is based upon the insights of attachment theory into how parents defensively distort information when threatened, and the impact of trauma upon the meaning parents give to their relationships and experience. The MotC was developed out of work in the UK family court system, and now is being increasingly used in working with 'at risk' families in child-protection, adoption, and infant mental health settings. Its distinctiveness lies in its power to distinguish between and shed light on the nature of different kinds of 'at risk' relationships, rather than simply identifying or scoring them. The workshop will compare extracts of parental discourse with clips of videoed parent-child play to explore links between how parents speak about their child with the relationship observed in face-to-face interaction. Participants will have the opportunity to actively engage making sense of some of the ways endangered parents defensively distort the meaning of their child's experience, the impact of this on the relationship, and developmental risk to the child. Dr Grey and Juliet Kesteven run Cambridge Centre for Attachment, which seeks to integrate the use of procedures that assess attachment and caregiving in assessment and intervention with 'at risk' families in the UK. They are Visiting Lecturers at the University of Roehampton, teaching on the MotC and other aspects of parent-child relationships.

## **Workshop WS71 - CARO CHILD AND ADULT RELATIONSHIP OBSERVATION - MAKING SENSE OF PARENT-CHILD INTERACTION**

**Puckering C.\*<sup>[1]</sup>, Thompson L.<sup>[2]</sup>, Hauskov Graungaard A.<sup>[3]</sup>**

<sup>[1]</sup>*Mellow Parenting ~ Glasgow ~ United Kingdom*, <sup>[2]</sup>*Centre for Rural Health, University of Aberdeen ~ Inverness ~ United Kingdom*, <sup>[3]</sup>*Københavns Universitet ~ København ~ Denmark*

Parent or caregiver and infant interaction is very fast, fluid and variable. There are many tools for practitioners and researchers but there remains a need for a reliable and valid tool that can be used in everyday practice. CARO is streamlined version of the Mellow Parenting Observation System (MPOS), which has proven predictive validity (Puckering et al, 2014). CARO has been developed to make the best of the qualities of MPOS, but in a more streamlined and user-friendly way. CARO has also been designed to allow video-recorded interaction to be coded on an app, which is run on a smart phone and analysed immediately. This allows a rapid and responsive system of triage, so that findings can be shared with parents/carers and fellow professionals and further detailed investigations follow if indicated. Session 1 of this workshop (CP) will describe the background and development of the CARO system, with video material to demonstrate the concepts. Session 2 of this workshop (LT) will describe the research findings to date using CARO, including how well it aligns with MPOS ratings and inter-rater reliability data from two training sessions with primary care professionals. The app will be demonstrated. Finally, Session 3 (AHG) will focus on reflections on the process of training and using CARO in general practice.

## **Workshop WS77 - FOUNDATIONAL IMH TRAINING: EVALUATION OF A RELATIONSHIP-BASED PRACTICE SERIES FOR EARLY CAREER INFANT-FAMILY HOME VISITORS**

**Shea S.\*<sup>[4]</sup>, McCormick A.<sup>[1]</sup>, Wilson K.<sup>[2]</sup>, Ulrich J.<sup>[3]</sup>**

<sup>[1]</sup>*Michigan Association for Infant Mental Health ~ Southgate, Michigan ~ United States of America*, <sup>[2]</sup>*Starfish Family Services ~ Michigan ~ United States of America*, <sup>[3]</sup>*Private Practice ~ Michigan ~ United States of America*, <sup>[4]</sup>*Eastern Michigan University ~ Ypsilanti, Michigan ~ United States of America*

An innovative, 9-month, relationship-based, foundational practice training series was piloted by an infant mental health (IMH) association for early career infant-family home visitors. The training project team used a relationship-based approach in their collaborative efforts to pilot and evaluate this training series. This workshop will illustrate the ways in which the relational nature of the training series and the trainer-evaluator partnership paralleled home visitor-parent relationships as well as the important findings that emerged from the training model evaluation. Aims include: 1) Assess the training series' design and implementation to explore how the training series supports IMH practice competencies; 2) Examine the training series' impact on participants' reflective practice skills, IMH core relationship-based practice behaviors, and IMH knowledge. Using training series' participants' (N=24) pre, interim, and post-test data, including reflective practice measures, home visit attendance, and IMH practice knowledge tools, paired-samples t-tests measured changes in participants' IMH reflective practice skills and IMH practice knowledge. Thematic analysis of nine, monthly feedback sessions with trainers using a reflective supervision approach and a post-test qualitative survey of participants provided greater context for the training series development and implementation. Results include significant increases in participants' confidence in their reflective practice skills following the training series ( $t(17)=3.88$ ,  $p=.001$ ,  $d=.91$ ). Qualitative results indicate that the trainers' relational approach supported a parallel process experience for participants who were able to thoughtfully engage in the experiential training material and enhance their IMH core practice competencies. In addition to enhancing IMH professionals' reflective practice skills, the training series participants began to use a relational approach in their interface with the training

content, the trainers, and one another. The findings speak to the power of fostering a holding environment in a professional development context that nurturers and supports the home visitor, providing real examples of relationship-based work with parents and infants.

## **Symposium S19 - PARENTING IN THE CONTEXT OF TRAUMA**

**Jones Harden B.**

*University of Maryland ~ College Park, M D ~ United States of America*

The experience of trauma in the early years places children on a compromised developmental path (Yoches et al., 2011). Maternal past and/or current trauma may adversely affect maternal parenting (Dube et al., 2002), which places children at developmental risk (Jaffee & Christian, 2014). This symposium will address the relation of trauma to parenting behaviors and/or child outcomes in three studies of young children from low-income families. The first paper examines the complex relation between maternal experience of intimate partner violence and childhood maltreatment, parental stress, parenting, and child reactivity and behavior problems. In the second paper, researchers document that exposure to past trauma was related to adverse birth outcomes among low-income, African American women. In the third paper, the authors find that later child neglect is associated with the parental behaviors of early detachment and negative regard, and child abuse with early intrusiveness. The results of these three studies converge to confirm past research on the complex relation between trauma, parenting and child outcomes (Jaffee et al., 2012). Each study fills a unique gap in the research by documenting: 1) the interactive effect of IPV and past maltreatment on parenting and child outcomes; 2) the impact of maternal trauma on birth outcomes; and 3) the contribution of early parenting to later maltreatment. Taken together, these findings underscore the need to examine trauma in the context of parenting behaviors and children's developmental outcomes.

S19.2

### **TRAUMA, EARLY PARENTING, AND TODDLER EMOTION REGULATION AND BEHAVIOR PROBLEMS**

**Jones Harden B.**<sup>[1]</sup>, **Martoccio T.**<sup>[2]</sup>, **Berlin L.**<sup>[2]</sup>, **Cannon E.**<sup>[3]</sup>

*<sup>[1]</sup>University of Maryland ~ College Park, M D ~ United States of America, <sup>[2]</sup>University of Maryland ~ Baltimore, MD ~ United States of America, <sup>[3]</sup>U.S. Department of Health and Human Services ~ Washington, DC ~ United States of America*

Victims of childhood maltreatment are at increased risk for intimate partner violence and for problematic parenting behaviors. There is limited research on how these trauma experiences may interact to affect parenting behavior and child outcomes among Latino families. The aim of this study was to examine the interactive influence of intimate partner violence and childhood maltreatment on parenting stress, parenting behaviors, and children's emotion regulation and behavior problems. Participants were 169 Latino mother-infant dyads. Mean maternal age was 31.0 years (SD=6.2); mean infant age was 12.9 months (SD=4.2); 54% of the infants were male. Data were collected at baseline and approximately 3 months later, in participants' homes, in Spanish or English. Time 1 parent-report instruments were: Childhood Trauma Questionnaire; Hurts, Insults, Threatens, and Screams; Parenting Stress Index; and a demographic questionnaire. Parenting behaviors were coded from video-recordings of the Three Bag assessment. At time 2, child reactivity was assessed via the LabTAB, and parents reported on children's behavior problems via the Brief Infant-Toddler Social Emotional Assessment. 39% of mothers experienced childhood maltreatment and 21% endorsed exposure to intimate partner violence (IPV). Controlling for demographic variables, regression analyses indicated that: mothers' experience of IPV was related to child behavior problems ( $\beta = 0.18, p = 0.03$ ); parenting stress was related to child behavior problems ( $\beta = 0.14, p <$

0.001) and child reactivity ( $b=.01$ ;  $p=.03$ ). Mothers who had experienced maltreatment and IPV displayed more sensitive parenting ( $\beta = 0.19$ ,  $p < 0.03$ ); mothers with histories of maltreatment and high levels of parenting stress displayed less sensitive parenting ( $\beta = -0.18$ ,  $p < 0.03$ ). Maternal history of trauma affects maternal functioning, which in turn affects parenting and child outcomes. These findings will be considered in the context of research and interventions regarding this population.

### S19.3

#### **EXPOSURE TO TRAUMA AND ADVERSE BIRTH OUTCOMES IN LOW-INCOME AFRICAN AMERICAN WOMEN**

**Morrison C.<sup>[1]</sup>, Brown S.<sup>[2]</sup>, Jones Harden B.\*<sup>[2]</sup>**

<sup>[1]</sup>*JBA and Associates ~ Washington, DC ~ United States of America*, <sup>[2]</sup>*University of Maryland ~ College Park, MD ~ United States of America*

African American women are more likely to deliver infants who are born too early, have lower birth weights, and die within their first year of life when compared to infants of other races and ethnicities born in the US. Researchers have hypothesized that differential stress exposure (e.g., trauma) may contribute to the existing perinatal health disparities. The goal of this study is to examine the relationship between exposure to trauma, adverse birth outcomes, and maternal functioning in low-income, African American women. Participants are African American pregnant women recruited from WIC clinics in their third trimester and their newborns. For the first 56 participants, mean maternal age was 25.6 years ( $SD=4.7$ ), and 94.6% had at least a high school education. Data collection takes place during the third trimester of pregnancy; one month postpartum; and four months postpartum. Prenatal data collected include measures of lifetime exposure to trauma (Trauma History Questionnaire), depression (Edinburgh Prenatal Depression Scale), and health practices during pregnancy (Health Practices in Pregnancy Questionnaire). Postnatal data collected include measures of depression and birth outcomes and an observational assessment of the maternal-infant relationship (Still Face; free play). 87.5% of mothers have been exposed to at least one traumatic event, and 14.3% of infants had an adverse birth outcome (prematurity, low birthweight). A logistic regression analysis examining the abuse subscale indicates that the odds of having an adverse birth outcome increase by 1.16 for every traumatic experience in a participant's lifetime ( $\chi^2 = 6.69$ ,  $df = 2$ ,  $p < .05$ ). Additional analyses will examine data from 4 months post-partum to assess how exposure to trauma impacts the mother-infant relationship. Maternal exposure to trauma during pregnancy affects birth outcomes. It is important to address trauma in prenatal services to African American women.

### S19.4

#### **ASSOCIATIONS BETWEEN EARLY PARENTING, PARENT WELL-BEING, AND MALTREATMENT IN AN EARLY HEAD START SAMPLE**

**Chazan Cohen R.\*<sup>[1]</sup>, Ayoub C.<sup>[2]</sup>, Von Ende A.<sup>[3]</sup>, Paschall K.<sup>[4]</sup>**

<sup>[1]</sup>*University of Massachusetts ~ Boston, MA ~ United States of America*, <sup>[2]</sup>*Harvard University ~ Boston, MA ~ United States of America*, <sup>[3]</sup>*Boston Children's Hospital ~ Boston, MA ~ United States of America*, <sup>[4]</sup>*Child Trends ~ Minneapolis, MN ~ United States of America*

Children are at the highest risk of being abused and neglected when they are very young, and most frequently are maltreated by a parent. Thus, understanding how early parenting is associated with child maltreatment is key to developing effective prevention programs. We will address two primary research questions:

1) Are early parenting behaviors (supportiveness, intrusiveness, detachment and negative regard)

associated with experiences of maltreatment and types of maltreatment?

2) Does parent-well being context (depression, parenting stress, family conflict) influence the associations between parenting and maltreatment?

The Early Head Start Child Welfare study videotaped mother-child interactions during play when children were 14- 24- and 36- months of age. Interactions were coded for maternal supportiveness, intrusiveness, detachment and negative regard. At all ages mothers also reported on their depression, parenting stress and family conflict. To date, we have run preliminary analyses on data from 7 of the 16 EHS-CW sites. Fourteen percent, n=173, had at least one substantiated report, with 65 only abuse, 88 only neglect, and 20 both abuse and neglect. Analyses utilized multinomial logistic regression. Data from all 16 sites will be available for final analyses. Preliminary results show that early parenting is associated with maltreatment in expected ways, neglect with detachment and negative regard, and abuse with intrusiveness. See Table 1. It is interesting to note that the positive aspect of parenting, supportive parenting, was not associated with maltreatment. Final data analyses using all 16 sites will allow us to verify the current findings with a larger sample, important with these low frequency outcomes, and also allow us to look at interactions with contextual factors such as maternal depression, maternal parenting stress, and family conflict. We will present the study findings and discuss implications for policy and practice.

## 15:15-16:45 Plenary Interface

### Plenary Interface PI2-FATHERS AND SONS

Hiram Fitzgerald (USA) Miri Keren (Israel)

Father involvement in child development: Why do so many sons grow up to be violent? Research on father involvement can be compartmentalized into two main domains: the effects of father presence and the presumed effects of father absence. We will provide an overview of theory and research on fathers in the context of the development of children's behavioral undercontrol and aggression during infancy and early childhood. Paternal psychopathology will be connected to epigenetically organized set points that influence mental representations of self, other, and self-other relationships presumed to underlie aggression and violence in males.

Fathers' psychological presence as related to their Co-parenthood Constellation: Clinical reflections. Two clinical families will be described, one about an extremely passive father who refuses to take his role as an authority figure for his 3 boys and adopts an extremely passive aggressive position towards his borderline personality disordered wife, the other about a father who insists taking an active role, in spite of his wife's wish to be the only caregiver for their daughter. We will show the link between these opposite paternal behaviors and the way they have internalized the co-parenting style of their own parents (what I name co-parenthood constellation) in their respective childhoods. In the first case, the father experienced a total lack of co-parenting alliance, in the second case, at the opposite, the father had experienced a balanced co-parenting and could not understand his wife's lack of trust in his parenting capacities.

## 17:15-18:45 General Sessions

### **Symposium S59 - CULTURALLY DETERMINED VARIATIONS IN PERINATAL CARE AND CHILD REARING STRATEGIES: FEEDING, SLEEPING, CRYING AND DISCIPLINE. IS THERE A “BEST PRACTICE”?**

**Maldonado--Duran J.\*<sup>[1]</sup>, Chandra P.<sup>[2]</sup>**

*<sup>[1]</sup>Baylor College of Medicine ~ Houston ~ United States of America, <sup>[2]</sup>University of Missouri Kansas City ~ Kansas City ~ United States of America*

The perinatal period and child rearing are determined by culture. Yet, the literature on child development, has tended to emphasize “Westernized styles” as the model of proper, “scientific” and optimal way to deal with those issues. This symposium explores the different practices in dealing with pregnancy and the care of young children in different societies and presents “prototypes” that question the common wisdom of the ideal Western practices. 1) The first section reviews the available evidence on cultural strategies to promote an optimal course of the pregnancy. The importance of traditional support systems is emphasized, remedies to soothe the mother and promote a healthy infant, the multiple magical beliefs involved in avoiding negative outcome, and protective strategies to avert delivery complications and congenital conditions are described. 2) We review the scientific literature on feeding practices and discusses issues involved in determining breast-feeding, its duration and effects on the parent child relationship. Other strategies of feeding, dealing with food selectivity, misbehavior during meals, obesity and failure to thrive are examined from this perspective.. 3) Cultural variations in sleep and management of sleep problems. The sleeping arrangements for infants and young children are influenced by cultural beliefs. The debate on co-sleeping and sudden infant death is explored as well as dangers to the infant who sleeps alone, and also different beliefs and practices dealing with dysomnias and parasomnias in young children. 4) The issue of “limit setting” and discipline of young children is influenced by transgenerational beliefs and the concept of an Ideal child, what parents want for their children in the short and long term depends on what each culture values as best traits for a child. Some cultures emphasize shaming and inducing fear or guilt, others corporal punishment and distancing techniques like “time outs” and ignoring young children.

S59.2

### **CULTURAL VARIATIONS IN CARE DURING PREGNANCY AND THE IMPORTANCE OF CULTURALLY SENSITIVE PRACTICES IN A MULTICULTURAL CONTEXT**

**Maldonado--Morales M.\*, Johnson--Cardona S.**

*Texas Childrens Hospital Womens Place ~ Houston Texas ~ United States of America*

Pregnancy is a period of ‘psychological vulnerability’ for the woman and family. Cultural practices to promote a good outcome for the mother and the baby are strongly adhered to. We consider different cultural beliefs relevant to promote a practice of respect of different views, particularly in a multicultural context. A review of the scientific literature in several languages was undertaken on transcultural issues, protective rituals, perceived risks, perinatal mortality and perinatal health practices. Findings were grouped in various tracks and examined for differences and similarities. Several major strands were encountered. Traditional versus modern societies, cultures that promote dependency versus Westernized ones that promote self-reliance, aversion to dependency and trying to be a “super mother”, and magical/shamanic strategies, in contrast to “scientific” ones (vitamins, exercise and imaging, genetic studies) which are psychologically equivalent. The acceptance of interdependence was found an important protective factor. The expecting woman requires psychosocial support, often traditionally provided by other women and relatives, and in

“modern societies” by the partner and institutions Risks and protective factors vary in different cultures. The practice of culturally informed and respectful health and mental health care require an awareness of each person “ in context” not only socioeconomically, and but culturally. Practices that may seem “backwards” or superstitious may be very important for women, promoting a state of calmness and confidence, while in other women, the support and dependency may need to be provided by health care providers and agencies in the absence of an extended family

S59.3

### **TRANSCULTURAL ISSUES IN THE SLEEP OF INFANTS AND YOUNG CHILDREN**

**Farhan M.\***

*UNIVERSITY OF MISSOURI KANSAS CITY ~ KANSAS CITY MISSOURI ~ United States of America*

The question of where “should “ the baby sleep is a very emotional one and there are multiple opinions and recommendations that may be confusing to new parents. Also, how to deal with common sleep issues such as difficulties falling asleep, waking during the night and the child going to the parental bed are strongly determined by culture, but often described as purely “scientific issues’ without taking into account the parental beliefs and their fears regarding sleep, which re determined by transgenerational patterns. Also, how parasomnias manifest in different cultures is an area of much interest and little research, yet parents request advice on how to deal with them To explore what is “biological “ about the sleep of young children, which is also strongly determined by the “scientific culture” of each country, Wht is considered natural or optimal sleep practices, and the advice pediatricians and mental health professionals give on how to deal with common sleep problems is determined by cultural beliefs. We reviewed the scientific literature in several languages regarding: sleep physiology, development of patterns, the practice of cosleeping and breastfeeding, sleep onset problems, waking during the night, and multiple parasomnias. The impact of culture was emphasized in the search. There is scarcity of scientific studies on sleep physiology and development in traditional societies. However, in those areas, there is little concern about sudden infant death and cosleeping is considered natural and desirable. There are multiple variations in how parents deal with sleep onset, interruption and parasomnias. There are multiple cultural beliefs about the nature of parasomnias, from physiological ones to magical explanations (penetration by spirits, departure of the soul, etc.). Sleeping arrangements are very important for parents and other relatives. Advice given by health professionals should be seen from the perspective of culture, which influences not only the practices but also scientific studies. There are multiple prejudices and contradictory advice. Traditional practices may have protective elements and the health professional should be sensitive to these in a multicultural context.

S59.4

### **SETTING LIMITS AND DISCIPLINING OF INFANTS AND YOUNG CHILDREN. HOW DOES CULTURE DETERMINE PARENTAL BELIEFS?**

**Maldonado--Duran J.\*<sup>[1]</sup>, Chandra P.<sup>[2]</sup>**

*<sup>[1]</sup>Baylor College of Medicine ~ Houston ~ United States of America, <sup>[2]</sup>University of Missouri Kansas City ~ Kansas City ~ United States of America*

Parents have unconscious mental constructs about what is desirable behavior in young children, what they should do and not do, and what are “optimal” character traits. The presentation highlights controversies on different disciplinary practices and their meaning, including the implications on parental advice. The scientific literature was reviewed in several languages regarding: parental opinions regarding discipline, the practice of spanking and physical punishment, the use of distancing techniques, and others like shaming, ignoring, and inducing guilt. The impact

of these in the short and long term development of the child are explored, as well as the contrast between “traditional cultures’ and modern societies. The scientific literature was reviewed in several languages regarding: parental opinions regarding discipline, the practice of spanking and physical punishment, the use of distancing techniques, and others like shaming, ignoring, and inducing guilt. The impact of these in the short and long term development of the child are explored, as well as the contrast between “traditional cultures’ and modern societies. Clinicians need an awareness of the cultural dimension of parental advice and child rearing suggestions in different cultural contexts, understanding the value of different character traits in different societies rather than “importing” wholesale practices that are culturally based in highly industrialized societies.

S59.5

### **THE TRANSCULTURAL DIMENSIONS OF FEEDING AND EATING IN INFANTS AND YOUNG CHILDREN. WHAT, WHEN, WHERE AND HOW?**

**Karacostas V.\***

*Private Practice and Cincinnati Institute for Psychoanalysis ~ Cincinnati Ohio ~ United States of America*

We aim to describe the importance of cultural variations in what is considered normative, desirable and optimal to promote the healthy development of the baby. Breastfeeding, weaning, when the baby starts eating solid foods, what to eat and how to behave during meals. There are strong cultural influences failure to thrive and obesity. We examined the scientific literature on feeding of infants in various languages on issues like breastfeeding, feeding of toddlers, feeding difficulties in infants (excessive selectivity, poor appetite, self feeding skills vs being fed, the emotional climate during meals) and the possible cultural determinants of undernutrition and obesity in toddlers. The issue of “independence” versus acceptance of dependency influence strongly the feeding practices of infants and young children. Breastfeeding can cause multiple inconveniences in “modern” societies and it can be prolonged for a very long time in very poor countries. The medical establishment is crucial in its initiation and maintenance. How when and what the baby should be fed are dependent on cultural beliefs: whether the baby should eat a variety of foods, when he should “feed himself”, what behaviors are expected or acceptable during mealtimes, and how to deal with selectivity, spitting of food, force feeding, and refusal behaviors by the toddler. Obesity in infants and toddlers is a new phenomenon, dependent in part on the abundance of cheap fatty food in many industrialized cultures and among immigrants. Clinicians working in multicultural context need to take into account the cultural meaning of food, the feeding situation and the role of parents and infant during feeding, and be aware of traditional and modern practices for families from different social backgrounds

### **Symposium S60 - WHAT HAVE WE LEARNED FROM THE FOLLOW-UP OF EARLY EATING DISORDERS?**

**Lucarelli L.\*<sup>[1]</sup>, Ammaniti M.<sup>[2]</sup>**

<sup>[1]</sup>*Department of Pedagogy, Psychology, Philosophy-University of Cagliari ~ Cagliari ~ Italy,*

<sup>[2]</sup>*Sapienza University of Rome ~ Rome ~ Italy*

Various perspectives on the longitudinal course and treatment of early eating disorders will be presented. The interplay among the child affect regulation and eating/appetite self-regulation, maternal attachment and psychopathology will be addressed with a special consideration of the clinical evolution of the disorder connected to the age. The first presentation will describe a study of mothers screened and diagnosed with eating disorders (ED) during gestation. They were followed to detect feeding difficulties with their infants after delivery. Mothers suffering from ED showed

more difficulty in dyadic reciprocity when feeding their babies and expressed feeling dissatisfaction and uneasiness during feeding compared with healthy controls. This study points to the need of screening mothers during pregnancy for ED and supporting them feeding their new-born infants. The second presentation will describe a study of children diagnosed with eating disorder at 2 years and followed up to 11 years by exploring the impact of the children's severity of malnutrition, maternal psychopathology and dysfunctional eating attitudes on the children's emotional development, and the different trajectories of these risk factors related to the age/sex of the children. This study points out that the course of children, who received limited psychosocial treatment, is characterized by an enduring risk of malnutrition and psychopathology in children and their mothers, up to the sensitive period of pre-puberty. The third presentation will describe the treatment outcome of children diagnosed with early eating disorder. The child's eating behavior, growth, emotional/cognitive functioning were reevaluated five to ten years after treatment. This study demonstrates that early treatment facilitated self-regulation of eating and emotional development in two thirds of the children. However, one third of the children continued to present ongoing eating and emotional difficulties, underlining the multifactorial contribution of child and parent characteristics which impact the severity of early eating disorders and treatment outcome.

S60.2

#### **THE INFLUENCE OF EATING DISORDERS AND/OR OBESITY ON MOTHER'S SENSITIVITY AND ADAPTATION DURING FEEDING**

**Squire C.\*<sup>[1]</sup>, Murday N.<sup>[2]</sup>, Chetioui S.<sup>[3]</sup>**

<sup>[1]</sup>University Paris-Diderot, Hopital de Cochin-Port-Royal ~ Paris ~ France, <sup>[2]</sup>Hôpital de Melun (77) ~ Paris ~ France, <sup>[3]</sup>Hôpital Jean Verdier (93) ~ Paris ~ Italy

Parents with past and current eating disorders have been shown to report difficulties nourishing their infants. This can increase the risk of infant feeding problems. We examined to specify the impact of eating disorders (ED) on mothers' adaptation and sensitivity to their offspring during feeding, by comparing a population of mothers with eating disorders with healthy controls. 39 women agreed to be interviewed and filmed while feeding their infants. These women were first seen during pregnancy and then for follow up at an obstetric unit where they were screened for symptoms of eating disorders with the Eating Disorders Examination Questionnaire (EDEQ) and Interview. Infants' functional difficulties and mothers' sensitivity were investigated with the simplified Symptom Check List (Robert-Tissot, 1989). Interactions during feeding with their new-borns were filmed and analysed with the Chatoor Infant Feeding Scale. Before pregnancy, from the eating disorders group, twelve mothers were identified as obese, two women suffered from anorexia, four suffered from bulimia, five had binge eating symptoms and three were diagnosed with EDNOS. Mothers suffering from ED showed less dyadic reciprocity when feeding their babies compared with mothers with no ED symptoms. During the interviews, ED mothers expressed feeling more dissatisfaction and uneasiness during feeding. We will compare the EDEQ scores and the different characteristics measured with the Feeding Scale of the obese, overweight and low or normal weighting mothers. This study points to the need of screening mothers during pregnancy for eating disorders and supporting them feeding their newborn infants.

S60.3

#### **AN ITALIAN LONGITUDINAL STUDY OF INFANTILE MALNUTRITION FROM INFANCY TO PRE-PUBERTY**

**Lucarelli L.\*<sup>[1]</sup>, Sechi C.<sup>[2]</sup>, Speranza A.M.<sup>[3]</sup>**

<sup>[1]</sup>Department of Pedagogy, Psychology, Philosophy-University of Cagliari ~ Rome ~ Italy, <sup>[2]</sup>~ Cagliari ~ Italy, <sup>[3]</sup>Sapienza University of Rome ~ Rome ~ Italy

The long-term outcome of infantile malnutrition is still poorly understood. We aimed to expand longitudinal research by exploring the interplay among the child characteristics (affect regulation, eating self-regulation), maternal attachment and psychopathology. 278 children were diagnosed at two years with malnutrition and “apparent lack of interest in eating or food” (based on: DC:03R, DC:0-5, ARFID/DSM-5). At the Diagnostic Assessment, children’s emotional functioning, maternal attachments and psychopathology were also evaluated. 113 children (58 boys, 55 girls) and their mothers of the original sample, who received limited psychosocial treatment, were followed-up at five, seven, and eleven years; children’s growth and level of malnutrition, mothers’ psychopathological symptoms and eating attitudes, as well as their children’s emotional functioning were evaluated over time. At the Diagnostic Assessment, children exhibited different degrees of acute and/or chronic malnutrition; their mothers showed anxiety, depression and dysfunctional eating attitudes; insecure and unresolved maternal attachments with respect to Loss/Trauma were found a significant predictor of the severity of children’s malnutrition. Longitudinal trends showed an improvement in the severity of malnutrition, but 73% of children still had ongoing mild to moderate to severe malnutrition at 11 years. The children showed increasing emotional problems, and their mothers’ psychopathological and eating symptoms worsened as well. At 11 years of age, the girls’ emotional problems and their mothers’ psychopathology and disturbed eating attitudes were more severe than that of the boys and their mothers. At the last follow-up, a significant effect of the mothers’ psychopathology, as well as the severity of the children’s malnutrition on their emotional problems emerged. This study points out that the course of children, who received limited psychosocial treatment, is characterized by an enduring risk of malnutrition and increasing psychopathological risk factors in both, the children and their mothers, up to the sensitive period of pre-puberty.

S60.4

#### **AN AMERICAN FOLLOW-UP STUDY OF TODDLERS TREATED FOR AN EARLY EATING DISORDER**

##### **Chatoor I.\***

*Department of Psychiatry and Behavioral Sciences, Children’s National Medical Center, The George Washington University School of Medicine ~ Washington DC ~ United States of America*

Although different feeding disorders in infancy and early childhood have been identified, little is known about specific treatments for specific eating disorders in young children. This presentation will focus on the treatment and follow-up of toddlers who were diagnosed with “apparent lack of interest in food” (DSM-5, 2013) or Infantile Anorexia (DC: 0-3 R, 2005). This eating disorder becomes evident in the first 3 years of life and is characterized by poor weight gain and malnutrition. Diagnostic studies revealed that these children present with irregular feeding and sleeping patterns, heightened physiological arousal and poor physiological down regulation, which seems to facilitate excellent learning, but makes it difficult for these children to relax during meals and to settle down to sleep. Parents of 42 children ranging in age from 1 to 3 ½ years participated in the treatment study. The treatment model “facilitating internal regulation of eating” was done through parent training, by helping parents establish regular mealtimes, refrain from distractions and coaxing the children to eat, and to set limits to inappropriate mealtime behaviors. Five to ten years later, when the children were between 7 and 13 years of age, a follow-up study of 32 children and 30 matched controls of healthy children was conducted. The follow-up study demonstrated that 2/3 of the children had outgrown their eating and growth problems, whereas 1/3 continued to show poor appetite, lack of interest in eating, poor growth and had developed sleep and anxiety disorders. None of the children showed any symptoms of Anorexia or Bulimia Nervosa. There was no effect of their malnutrition at the time of diagnosis or at follow-up on their cognitive development. Family dinners and eating their lunch at school were significant findings which differentiated the children

who did well from those who did poorly.

### **Symposium S63 - THE POWER OF RELATIONSHIPS IN THE NICU: MENTALIZATION AND MEANING MAKING**

**Chapman M.\*<sup>[1]</sup>, Schechter D.<sup>[2]</sup>**

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A neonatal intensive care unit (NICU) is a place that holds babies through the rockiest start to life. Within it, individuality can sometimes feel lost to role or label: The mother, the father, the nurse, the neonatologist, the psychologist, the baby. How do we hold the whole within the NICU? This symposium will explore the relational world of the NICU from a number of different perspectives, drawing on both clinical experience and clinical research. It will examine how psychologists, psychiatrists and psychotherapists working within the NICU can draw the threads of relationships together, using the concept of nested mentalization to hold not only babies and families, but also their treating teams, in an environment that often gives rise to moral distress and ethical questions. This symposium will consist of three speakers from three different continents. The three papers "Meeting the Emotional Needs of Infant, Parent and Staff in the NICU", "Reflecting on Mentalization and Reflective Functioning in the NICU: Findings from the ROBIN study", and "Code Blue for Psychic Space: The Role of the Psychologist in the NICU", will weave a picture of working within the NICU, and how we understand what occurs within this complex environment. There will be opportunity for discussion and contemplation of the material that has been presented, and the Discussant will provide thoughts and insights on the material presented.

S63.2

### **REFLECTING ON MENTALIZATION AND REFLECTIVE FUNCTIONING IN THE NICU: FINDINGS FROM THE ROBIN STUDY**

**Chapman M.\*, Gunn J., Vicki A., Paul C.**

*Melbourne Children's ~ Melbourne ~ Australia*

Mentalization, and parental reflective functioning, are concepts clinically well employed within Infant Mental Health, including within Neonatal Intensive Care (NICU). A parent's capacity to hold the mind of their very sick infant in mind, through often previously unimagined circumstances, is thought to be protective for both parent and infant. The ROBIN (Reflecting on Babies in NICU) study aimed to examining the nature of Parental Reflective Functioning (PRF) with very sick infants hospitalised in a medical/surgical NICU, and its relationship to the formation of infant-parent relationships within this challenging environment. The ROBIN study is a longitudinal cohort study of 87 infants and their families, who were current inpatients of a medical/surgical NICU, and by 21 days, had never been home. The study examined measures of mentalization and PRF, and through a series of parent-rated questionnaires, its relationship to psychosocial functioning, the emerging parent-infant relationship, and the perception of their baby's development. Further data related to the infant's medical status was collected from electronic medical record, and via clinician-rated scales of illness severity. This paper will report the ROBIN findings garnered from the Parental Reflective Functioning Questionnaire (Luyten et al, 2009), with data from 67 mothers and 39 fathers, and the specific NICU modified Parent Development Interview (PDI NICU, Slade, Chapman & Paul, 2012) which was used with a subset of 19 mothers. In addition to exploring the concept of PRF, and what the ROBIN data has shown, it will discuss the challenge of both objectively measuring it within the NICU, and its measurement being a clinically acceptable practice on the NICU. Finally, we will reflect on how the ROBIN findings are being translated back in to clinical practice within the neonatal

intensive care unit, how they can be applied in other NICU's, and be generalised to other hospitalised, very sick infants.

S63.3

### **CODE BLUE FOR PSYCHIC SPACE: THE ROLE OF THE PSYCHOLOGIST IN THE NICU**

**Steinberg Z.\***

*Columbia University ~ New York ~ United States of America*

It is well documented that mothers and fathers in the neonatal intensive care unit – an environment saturated with a sense of uncertainty and trauma – experience high levels of anxiety, even panic, depression and acute stress disorder that often becomes post traumatic stress disorder. When a parent has had other trauma in his/her life – and many have suffered perinatal difficulties, even poignant losses – the risk of experiencing trauma with this birth is great. Further, these emotional states have a potentially devastating effect on the cognitive and emotional development of the baby. In addition, we are beginning to appreciate the toll working in a NICU takes on staff: burn-out, secondary trauma, compassion fatigue, moral distress. Known too, is that relationships are a bulwark against trauma. Yet, with the increased specialization and siloing in medicine exemplified in our modern, hi-tech, critical care NICUs, attention to relationships is too often sidelined though they are a natural resource for bettering outcomes for babies and for mitigating burn-out for staff. We present our model of psychological intervention in the NICU which puts the central focus on relationships, mentalization and meaning-making. Vignettes of work with parents, both individually and in groups and consultation with medical staff that exemplify this will be discussed. Finally, we assert that putting relationships front and center in NICU care is essentially an ethical issue.

S63.4

### **MEETING THE EMOTIONAL NEEDS OF INFANT, PARENT AND STAFF IN THE NICU**

**Twohig A.\*<sup>[3]</sup>, McCarthy A.<sup>[4]</sup>, Smyke A.<sup>[5]</sup>, Underdown A.<sup>[6]</sup>, De Camargo A.P.<sup>[2]</sup>, McNicholas F.<sup>[2]</sup>, Molloy E.<sup>[1]</sup>**

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Attachment relationships have a profound influence on infant development. Physical closeness, emotional attunement and sensitivity of the caregiver to communications and expressions provides the optimal environment for the infant's developing capacity for emotional regulation, particularly for sick or preterm babies where their own capacities for early relational experiences may be challenged. Babies born very ill or preterm begin life in the NICU, their parents contend with a range of traumatic and stressful experiences, potentially impacting the early relationship. Staff members of the NICU play a crucial role in supporting babies and parents during the first weeks and months of the infant's life however encounter emotionally challenging situations on a daily basis often leading to their own stress and vicarious trauma. The presentation will describe a body of work conducted in a NICU in Ireland which aimed to understand and explore the early parent-infant attachment relationship in the NICU. The presenter draws on the internal experiences of mothers in the form of attachment representations, the observable interactions between babies and their mothers using Video Interaction Guidance and also the experiences of staff, and the links between these to illustrate the complexity of the matrix within which this sensitive work in the NICU evolves.

## **Symposium S64 - SENSORIMOTRICITY AND MULTISENSORIALITY IN HIGH RISK NEONATES: HOW TO INTERVENE?**

**Borghini A.\***

*Liaison child psychiatry ~ Lausanne ~ Switzerland*

Newborns can be hospitalized at birth for several reasons. Besides the medical conditions and the painful procedures that can affect infant development and comfort, some direct consequences of the hospitalization contribute to generate a very special sensorial experience for the hospitalized baby. For instance, immobilization, lack of movement, lack of early interactive behaviors and physical contact may affect the general amount of vestibular, tactile, visual, auditory, olfactory and proprioceptive stimulation that occur normally within the early interactive behaviors when infants born at term without particularities. In other terms, the opportunity to generate a multisensorial and affective experience can be temporarily affected by hospitalization conditions. This lack of experience during a crucial period of brain growth can affect sensorimotor development as well as early affective relationships. This would be of particular importance concerning oral difficulties that represent one of the major challenges for health professionals as well as for parents during and after a hospitalization. The present symposium would therefore be dedicated to several early interventions that aim to alleviate sensorial impediment, to support sensorial exploration and early interaction in order to offer to the infant the most appropriate amount of sensorimotor and affective experience. The first communication from Paris will report a program for neonates born with severe congenital malformations based on preventive care for orality disorders with sensorimotor's approach and Individualized Developmentally Supportives Cares. The second communication from Italy will focus on Early Vocal Contact as a way to enhance closeness between preterm infants and their caregivers, principally through the medium of the voice. The third communication from Switzerland will show how a birth of an infant with a cleft lip and palate can affect both sensorimotor development as well as parent-infant early relationship. The main objective of the symposium is to generate innovating recommendations as extensively as possible for early interventions during neonates' hospitalization in order to prevent some developmental difficulties such as orality disturbances, and to enhance early interactions between the neonate and the caregivers.

S64.2

### **PREVENTION OF ORALITY DISORDERS AND INDIVIDUALIZED DEVELOPMENTALLY SUPPORTIVES CARES (IDSC) IN SEVERE SOMATIC NEONATAL PATHOLOGIES**

**Viaux--Savelon S.\*, Claire J., Mitanchez D.**

*Dept. Neonatology Hospital Trousseau ~ Paris ~ France*

Neonates, born with severe congenital malformations, often require a high level of surgical and medical care. They often stay a long time in neonatal intensive care unit (NICU) with deep sedation and present delayed oral nutrition. For this population orality disorders are among the main short-term complications after the acute period in the NICU and they will move on long-term disorders if not prevented. The association of postnatal discovery of the diagnosis, the complex technical care (often pain full) and the prolonged stay in NICU has important consequences for the infant's development and for the parenthood in short and long term outcomes. In this session, we aim to report our program for this specific neonatal population based on preventive care for orality disorders with sensorimotor's approach of A. Bullinger and Individualized Developmentally Supportives Cares (IDSC). We will present the different stages of this program through the clinical course with videos of a newborn who is suffering from an oesophagus' atresia, diagnosed at birth and the course of his family. Such malformation as oesophagus'atresia precludes the newborn to

swallow his saliva. Oral feeding is avoided until restorative surgery and oesophagus' healing. In most of these cases, the postoperative course is uneventful, even if acquisition of autonomous feeding is more difficult. In some situations, the postoperative course gets complicated and the avoidance of oral feeding can be prolonged for a longtime. This case illustrates how the sensori-motor's approach of A.Bullinger, and especially, individualized developmentally supporting cares (IDSC), allow progressing together with the infant towards a positive investment of the orality' sphere. Parents and professionals should always focus attention on the global development of the infant. According to the capacities of the baby observed daily, the developmental temporality will be a guide for all caregivers. The early oral support is one of the basic subjects of a global approach that we set up in this program for neonates with severe somatic pathologies where the parents can take an essential active role in the cares of their newborns.

S64.3

### **EARLY VOCAL CONTACT: DIRECT TALKING AND SINGING TO PRETERM INFANTS IN THE NICU**

**Filippa M.\*, Borradori--Tolsa C., Hüppi P.**

*Division of Development and Growth, Department of Child and adolescent, University Hospital, Geneva, Switzerland ~ Italy ~ Italy*

Defining the optimal sensory experience for preterm infants in the NICU is complex and challenging. However, some information can be evinced by observing some particular characteristics of the infant's prenatal and postnatal sensory and brain development. Preterm birth imposes significant modifications in the infant's sensory experience reducing, for example, the amount of tactile and vestibular stimulation, and increasing amounts of other types of stimulation not present in the uterine environment. Early Vocal Contact aims to enhance closeness between preterm infants and their caregivers, principally through the medium of the voice. The specific aims of this presentation are (1) to systematically review the literature of the effect of the maternal voice on the preterm infant in the neonatal intensive care unit (NICU), with specific attention to the effects of such interventions on infant oral feeding; (2) to identify and to describe the pathways through which Early Vocal Contact acts as a multisensory and "redundant" intervention for preterm infants in the NICU; (3) to suggest some recommendations for further studies. Encouraging Early Vocal Contact between preterm infants and their mothers can activate a number of related and consequential behaviors (intuitive parenting, multimodal co-regulation, reciprocal synchronization, unconscious mimicry). These behaviors, that are usually present at term birth, are at the foundation of bonding and attachment processes and can lead to long-term and sustained positive effects on the development of preterm infants. The link between EVC and specific sensory and linguistic development of children born preterm will be discussed.

S64.4

### **INFANTS BORN WITH A CLEFT LIP & PALATE (CLP): DISENTANGLING ATTACHMENT DIFFICULTIES AND SENSORIMOTOR INTEGRATION**

**Borghini A.\*<sup>[1]</sup>, Despars J.<sup>[1]</sup>, Monnier M.<sup>[2]</sup>, Muller--Nix C.<sup>[1]</sup>**

*<sup>[1]</sup>Liaison child psychiatry ~ Lausanne ~ Switzerland, <sup>[2]</sup>Developmental Unit, Pediatric Department, ~ Lausanne ~ Switzerland*

Children born with a cleft lip or palate (CLP) malformation display frequently emotional and behavioral difficulties during their development, which could be related to the relationships with their affective entourage but also to developmental particularities. The present study has been dedicated to the assessment of the quality of the parent-infant relationship but also according to the sensorimotor particularities presented by these children. The attachment quality in children has

been measured at 12 months with the Strange Situation Paradigm (Ainsworth et al, 1978) and at 4 y.o. with the Attachment Story Completion Task (Bretherton et al, 1991). The sensorimotor assessment has been made according to the sensorimotor approach of A. Bullinger, using one part of the items proposed in the evaluation tool he has developed (Sensorimotor assessment, Bullinger, 2004; 2014). The children born with a CLP are less secure than the controls. Moreover, this insecurity tends to increase across development. Concerning the sensorimotor approach, particularities can be observed in children with CLP but they are not pervasive. These children are slightly clumsy; having sometimes difficulties to feel the space around them, showing awkward movements and body representations that can be slightly impeded. The session will focus on the link between these particularities and the attachment quality. These results give an opportunity to show how the sensorimotor approach can support development in children with such malformation, particularly around the surgery procedures.

### **Symposium S67 - INFANT SLEEP SYMPOSIUM: CARE OF THE INFANT AT SLEEP TIME**

**Mckenna J.<sup>[1]</sup>, Field T.<sup>[2]</sup>, Middlemiss W.<sup>[3]</sup>, Stevens H.\*<sup>[4]</sup>**

<sup>[1]</sup>. Edmund P Joyce C.S.C. Endowed Chair in Anthropology. Director, Mother-Baby Behavioral Sleep Laboratory. Department of Anthropology. University of Notre Dame ~ Indiana ~ United States of America, <sup>[2]</sup>Director Touch Research Institute, University of Miami/Miller School of Medicine, Miami ~ Florida ~ United States of America, <sup>[3]</sup>Educational Psychology, University of North Texas, Denton, TX 76205 ~ Texas ~ United States of America, <sup>[4]</sup>Parent Infant Consultants. ~ Melbourne ~ Australia

The four presenters from a range of academic, clinical and research backgrounds will present different papers and research on infant sleep, what the literature reveals, studies and research into the biological, biosocial and emotional needs of the infant and sleep interventions. Symposium abstract. The recurring theme of infant sleep concerns, be it in social media, parent groups, consulting rooms or research, is one familiar to those either working or living within the early parenting sphere. This symposium provides four different ways to consider how the infant can access their parent so their biosocial-emotional and biological needs can be met at sleep time. Given the lack of consensus in infant sleep literature, findings from a review of literature with an eye toward finding common threads as they impact infants' development, including differing sleep interventions will be discussed. Developmental effects, risks factors and aspects influencing how infant sleep will be discussed. An anthropological perspective will present on promoting mother-infant connectedness. Following which the mothers' perceptions of importance of responsiveness during infant sleep, will be examined via mothers' sensitivity, and, infants' hours of sleep and the positive relation between hours of sleep and mother sense that their children may lose trust in parents if left to cry. Concluding discussions review sleep interventions promoting parental attunement and responsiveness to support increased infant sleep without encouraging parental absence. A recent study identifying increased infant sleep hours in the context of parents contingently responding to cues and behaviours.

S67.2

#### **INFANT SLEEP PROBLEMS AND INTERVENTIONS**

**Field T.\***

*University of Miami ~ Miami ~ United States of America*

Infant sleep problems have been noted to affect 15-25% of infants and have been major management problems for parents as reported to pediatricians. These are notably problematic as individual stability has been noted for sleep patterns across at least the first 6 months of infancy. This is a review of findings from infant sleep research focuses on understandings of sleep problems.

This review is based on literature searches of Pubmed and PsycInfo for studies published the last few years including randomized controlled trials, systematic reviews and meta-analyses on sleep problems and resulting developmental effects, risk factors and interventions. Infant sleep problems affect 15-25% infants and pediatricians report these as major management problems for parents. These are problematic as individual stability is noted for sleep patterns across the first 6 months of infancy. Negative effects of sleep problems have been reported for physical, cognitive and social-emotional development. Several risk factors for sleep problems have been identified including feeding, close contact and arousing activities at bedtime, intolerance for infant crying, co-sleeping, maternal depression and infant temperament. Cross-cultural differences have been noted both for infant sleep problems and parents' perceived distress by those problems. A number of interventions have been tried to ameliorate infant sleep problems including consultations, teaching sessions on extinction and bedtime fading, internet-based interventions and nighttime massages by parents. Some of these studies have shown improvements and others have suggested only short-term or negligible effects. Significant methodological problems exist with this literature including the almost sole use of parent report, as well as the mixed age samples and the potential confounding variables. Very little attention has been given to the different sleep states, i.e. deep (restorative/quiet) sleep, active sleep, REM sleep and indeterminate sleep states in this literature. This is problematic given that critical differences have been noted between the organized sleep states and indeterminate (disorganized) sleep. Finally, indeterminate sleep has been identified as one of the most significant newborn variables for predicting cognitive development at 12 years of age. Understanding what are infant sleep problems is an essential first step in supporting infant development during this period.

S67.3

### **RETURN OF BREASTSLEEPING TO WESTERN INDUSTRIALIZED SOCIETIES, HUMANKIND'S OLDEST AND MOST SUCCESSFUL ALEEP AND FEEDING ARRANGEMENT**

**McKenna J.\***

*University of Notre Dame ~ Notre Dame ~ United States of America*

With millions of western mothers adopting it, here I describe the legitimacy of a new term and concept, breastsleeping, a recently proposed new epidemiological category (see McKenna and Gettler, 2016). It refers to breastfeeding mothers who co-sleep on the same or different surface with their infants in the absence of all known hazardous factors. Our aim is to call attention to this acceptably safe form of bedsharing that within the human lineage evolved as one single bio-behavioral system specifically to buffer and protect the highly neurologically immature human neonate. Based on substantial research, we argue that breastsleeping represents a predictable and expectable form of cosleeping (whether bedsharing or not) reflecting powerful evolved maternal and human infant needs and underlying emotions and behaviors that will not, cannot and should not be ameliorated by "safe-to-sleep" campaigns. These campaigns not only have proven unsuccessful but force mothers to lie to their health practitioners about their true sleeping arrangements, leaving them uneducated as to how to how to maximize safety. First and foremost this concept acknowledges: 1) the important role of, and need for, sustained maternal-infant contact at birth needed to promote and help establish more optimal nightly breastfeeding sessions stretched out over a greater number of months in the first year of life; 2) the extent to which breastsleeping provides on going maternal- infant sensory exchanges induced by breastmilk delivery, ingestion and metabolism that change in positive, clinical ways practically every maternal-infant sleep variable, suggesting that the breastsleeping context is the only environment within which species-wide (normal) human infant sleep and breastfeeding patterns can be documented and: 3) that the breastsleeping mother infant dyad exhibits such vastly different behavioral and physiological characteristics including safer maternal-infant sleep architecture and arousal patterns

that it must be differentiated altogether from the less positive outcomes associated with formula or cows-milk fed bedsharing mother-infant dyads. Infant sleep cannot be considered outside the context of infant feeding as is evidenced in the role of breastfeeding and sleep for establishing species-wide, normal patterns that support infants' development.

S67.4

#### **CAREGIVER PERCEPTIONS OF WHERE INFANTS SLEEP**

**Middlemiss W.\*<sup>[1]</sup>, Stevens H.<sup>[3]</sup>, Ridgway L.<sup>[2]</sup>, Mcdonald S.<sup>[2]</sup>, Koussa M.<sup>[1]</sup>, Lopez M.<sup>[1]</sup>**

<sup>[1]</sup>University of North Texas ~ Denton ~ United States of America, <sup>[2]</sup>La Trobe University ~ Melbourne ~ Australia, <sup>[3]</sup>Parent Infant ~ Melbourne ~ Australia

With current research literature and focus on infant sleep problems, how mothers' perceive of the role of responsiveness during infant sleep routines is an important part of the puzzle of infant sleep recommendations. The relation between mothers' agreement with statements of infants' needs for responsiveness during sleep routines and mothers' sensitivity with infant, infants' total sleep time, and mothers' emotional well-being are presented. Mothers and infants (4 to 10 months old) attending residential infant sleep program participated in research encouraging responsiveness to infant cues. Measures included infants total sleep time, mother and infant cortisol levels, and mothers' ratings of agreement with questions asking about responsiveness in sleep routines as they impact infant development (Germo, Goldberg Keller, 2009). Mothers' sensitivity with infants was observed (Waters Maternal Sensitivity Scales). Observed ratings of mothers' maternal adaptation were statistically significantly positively related to mothers' agreement with statements indicating importance of responsiveness. Mothers' comfort with bedsharing, irrespective of current practice, was statistically significantly negatively associated with mothers' maternal adaptation ( $r = .561$ ,  $p = .01$ ,  $n = 19$ ) and approached significance with mothers' awareness of infant ( $r = -.436$ ,  $p = .06$ ). Infants' total sleep time was significantly positively correlated with mothers' agreement with the statement, "Children will lose trust in their parents if they cry at night and their parents do not respond, and significantly negatively associated with mothers rating of the statement, "Children have a hard time sleeping alone, as reflected in their bedtime struggles." Mothers' perceptions of responsiveness as important during infant sleep routines was related to infants' hours of sleep and mothers' sensitivity. These analyses provide a starting point for discussion of recommendations for sleep practices and infant and mother sleep beliefs or practices

S67.5

#### **CONTINGENTLY RESPONSIVE CARE TO INCREASE INFANT TOTAL SLEEP TIME**

**Stevens H.\*<sup>[1]</sup>, Middlemiss W.<sup>[2]</sup>, Ridgway L.<sup>[3]</sup>, Mcdonald S.<sup>[3]</sup>, Koussa M.<sup>[2]</sup>**

<sup>[1]</sup>Parent Infant Consultants ~ Melbourne ~ Australia, <sup>[2]</sup>University of North Texas ~ Denton ~ United States of America, <sup>[3]</sup>La Trobe University ~ Melbourne ~ Australia

Consistent, predictable and contingent caregiving are major components of infant self-regulation, including at sleep times (Cierpka 2015). A common Western expectation is for infants to separate for sleep, which often leads parents to seek 'solutions' when infants struggle to regulate when alone. Parents help seeking behaviours are activated when the parent becomes exhausted and the infant continues to struggle to sleep apart from the caregiver. When seeking support, parents are often offered 'solutions' that come in the form of interventions that restrict parental response, referred to as controlled crying, modified controlled comforting, and limit setting for example. These interventions are designed to promote infant sleep with limited caregiver attention and have been shown to be successful in extinguishing the infants' signalling at sleep time. However, research has shown that although the infant has longer total hours of sleep, the infant continues, during the

intervention, to have increased salivary cortisol levels (Middlemiss, Granger et al. 2012). Thus, it remains contentious what is helpful and what it not. Of concern is what in these interventions considers the mental health and wellbeing of the infant. Noting the importance of responsiveness to cues, a recent study (Middlemiss, Stevens, Ridgway, McDonald, & Koussa, 2017) explored whether encouraging and increasing parental awareness of infant cues and contingent responding when infants were transitioning to sleep would increase infant total sleep time. Noting the importance of responsiveness to cues, a recent study (Middlemiss, Stevens, Ridgway, McDonald, & Koussa, 2017) explored whether encouraging and increasing parental awareness of infant cues and contingent responding when infants were transitioning to sleep would increase infant total sleep time. Report of response-based, residential sleep intervention protocol based on 34 mother-infant dyads in a larger research study. The researchers found that this approach increased total sleep time even though infants (4-10 months of age) in the study had been identified as resisting sleep and reported to wake up to 10 or more times overnight. Facilitating awareness of infant cues helped establish infant sleep patterns without the necessity of limiting responsiveness to infants.

## **Symposium S70 - MOTHER, FATHER AND INFANT MENTAL HEALTH: FROM GESTATION TO TODDLERHOOD**

**Figueiredo B.\***

*University of Minho ~ Braga ~ Portugal*

Family psychology and developmental psychopathology literature has been showing that adverse environments have negative impact on child development and mental health. Mother mental health during pregnancy and the postpartum period, and more recently father mental health as well, were found to adversely affect the child environment (from gestation to toddlerhood) and to be associated with negative outcomes and developmental trajectories. This symposium was designed to present and discuss recent empirical results from 4 different studies conducted in 3 different countries (France, Finland and Portugal), showing the longitudinal effect of maternal and paternal mental health on child mental health and development. These studies address several gaps found in the previous literature by (1) presenting a longitudinal design from gestation, (2) considering simultaneously depression, anxiety, and stress, (3) including the father, and not only the mother, (4) and including families who conceived through assisted reproductive treatments, not only families who conceived spontaneously. New empirical evidences with relevant implications for clinical practices, namely to infant mental health prevention, are presented. Namely, possible moderator (possible protective factors) and mediator factors (possible explaining mechanisms) of the mother and father mental health adverse effect on the child mental health and developmental trajectory, from gestation to toddlerhood.

S70.2

### **DEVELOPMENTAL IMPACT ON INFANTS AT 18 MONTHS OF MATERNAL PRENATAL DEPRESSION, ANXIETY AND STRESS**

**Wendland J.\*<sup>[1]</sup>, Apter G.<sup>[2]</sup>, Cohen D.<sup>[3]</sup>, Bodeau N.<sup>[4]</sup>, Galin A.<sup>[4]</sup>, Bialobos S.<sup>[4]</sup>, Tordjman S.<sup>[5]</sup>, Podlipski M.A.<sup>[6]</sup>, Mazet P.<sup>[4]</sup>, Dommergues M.<sup>[7]</sup>, Gerardin P.<sup>[6]</sup>**

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Beyond increased obstetric risks, early exposure to maternal stress, depression and anxiety may affect the biobehavioral development of the fetus and the newborn. Although worldwide research suggests gender differences related to socioemotional and behavior symptoms in childhood, it is noteworthy that only a few studies on perinatal effects have reported gender effects, in particular for infants. As a follow-up to a previous evaluation at 12 months, the present study assessed prospectively, simultaneously but separately, the impact of maternal prenatal depression, anxiety and stress on infant characteristics at age 18 months, taking into account the infant's gender, while excluding confounding variables. The study was a 20-month prospective longitudinal case-control study, which included several assessment points from the third trimester of pregnancy up to age 18 months ( $\pm 1$  month) for a total of 205 low-risk pregnant women and their infants. At 18 months, infants whose mothers had been depressed from pregnancy onwards presented significantly higher scores on externalizing symptoms of the ITSEA scale (Impulsivity, Activity/Impulsivity, Relational Aggression, and Aggression towards their peers), and were perceived as having lower competencies on Attention and Mastery Motivation. Female infants of non-depressed mothers showed higher scores than female infants of prenatally depressed women on Mastery Motivation and Social Relatedness. Maternal prenatal anxiety and reactivity to stressful events and sensations were associated with lower social and cognitive competencies in infants. Maternal prenatal distress is liable to have lingering adverse effects on a child's social-emotional outcome, by heightening the prevalence of negative behavior symptoms and, at the same time, reducing social and cognitive skills.

S70.3

### **PARENTAL PRE- AND POSTPARTUM MENTAL HEALTH PREDICTS CHILD MENTAL HEALTH AND DEVELOPMENT**

**Vänskä M.\*<sup>[1]</sup>, Punamäki R.<sup>[1]</sup>, Lindblom J.<sup>[1]</sup>, Flykt M.<sup>[1]</sup>, Tiitinen A.<sup>[2]</sup>**

*[1]University of Tampere, Faculty of Social Science ~ Tampere ~ Finland, [2]1.Helsinki University Central Hospital; 2.University of Helsinki ~ Helsinki ~ Finland*

Research on family mental health has largely excluded fathers, although the well-being of both parents is likely to be important for child development. In this study, we analysed (a) intrafamilial dynamics between mothers' and fathers' early mental health symptoms, and (b) the importance of separate (mother and father) and joint (additive, hierarchical, and buffering) theoretical models of parental mental health for predicting child mental health and development. To identify interplay of early maternal and paternal mental health symptoms for predicting child mental health and development. Finnish mothers and fathers (N = 763), half having conceived through assisted reproductive treatments (ART), reported their symptoms of psychological distress and depression from the pregnancy to 2 months and 12 months postpartum. Later, when the child was 7–8 years of age, they (N = 485) reported the child's internalizing and externalizing symptoms and social and cognitive developmental problems. We identified both co-occurrence and compensation in intrafamilial early parental mental health. Further, mothers' symptoms alone (separate mother model) predicted child internalizing symptoms, whereas joint parental symptoms (additive model) predicted problems in executive function. The pre- and postnatal mental health of both mothers and fathers is important for later child development. To support healthy child development, both parents need to be screened for early mental health problems and psychological help should be

offered to families across the pre- and postpartum period.

S70.4

#### **FATHER POSTPARTUM DEPRESSION MODERATED THE EFFECT OF MOTHER PRENATAL DEPRESSION ON TODDLERS' PSYCHOLOGICAL PROBLEMS**

**Figueiredo B.\*<sup>[1]</sup>, Pinto T.M.<sup>[1]</sup>, Rocha M.<sup>[1]</sup>, Field T.<sup>[2]</sup>**

*<sup>[1]</sup>School of Psychology, University of Minho ~ Braga ~ Portugal, <sup>[2]</sup>University of Miami School of Medicine ~ Miami ~ Portugal*

Maternal and paternal prenatal and postpartum anxiety and depression were found to negatively affect child development. This raised the question of possible interactive effects of maternal and paternal anxiety and depression during the prenatal and the postpartum period. The present study explored the effects of maternal and paternal prenatal, postpartum and concurrent anxiety and depression symptoms on toddlers' emotional and behavioral problems at 30-months postpartum. The sample comprised 115 mothers and fathers (N = 230) recruited during the first trimester of pregnancy. The mothers and fathers individually completed measures of anxiety (STAI-S) and depression symptoms (EPDS) during the first trimester of pregnancy, and at 3- and 30-months postpartum, and they completed the Child Behavior Checklist 1.5–5 (CBCL) at 30-months postpartum. Maternal depression symptoms during the first trimester of pregnancy and paternal depression symptoms at 3-months postpartum were significant predictors of toddlers' internalizing, externalizing, and CBCL total scores at 30-months postpartum, independently of concurrent maternal and paternal anxiety and depression. Paternal depression at 3-months postpartum moderated the effect of maternal depression symptoms during the first trimester of pregnancy on toddlers' internalizing, externalizing, and CBCL total scores at 30-months postpartum. Toddlers' emotional and behavioral problems at 30-months postpartum were predicted by maternal depression symptoms during the first trimester of pregnancy and paternal depression symptoms at 3-months postpartum, independently of the parents' concurrent anxiety and depression symptoms. Paternal depression symptoms at 3-months postpartum moderated the effect of maternal depression symptoms during the first trimester of pregnancy on toddlers' emotional and behavioral problems at 30-months postpartum.

S70.5

#### **ASSOCIATION BETWEEN ANTENATAL AND POSTNATAL PARENTAL DEPRESSION SYMPTOMS ON MATERNAL, PATERNAL AND INFANT BEHAVIORS DURING EARLY INTERACTIONS**

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Disturbances of dyadic interaction in the case of maternal postpartum depression are well documented. Depressive mothers' behavior towards their infants is often described as passive, unresponsive, with less emotional involvement and higher negative feelings and intrusiveness. Information on the association of paternal antenatal and postnatal depression symptoms on early interaction is still scarce. The present study explored the effects of both maternal and paternal antenatal and postnatal depression symptoms (DS) on maternal, paternal and infant behavior during dyadic interactions. The sample comprised 166 mothers and 143 fathers recruited during the third trimester of pregnancy. Measures of depression symptoms (EPDS) were completed during the third trimester of pregnancy, and at 2 months postpartum. Mother-infant and father-infant interaction was video recorded in a 5-min session and scored according to the Global Rating Scales.

Maternal DS during pregnancy and at 2 months postpartum is associated with more rejecting behaviors toward the infant ( $r=-0.156$ ,  $p=0.044$  and  $r=-0.211$ ,  $p=0.008$ , respectively) and less attentive infants ( $r=-0.156$ ,  $p=0.045$  and  $r=-0.188$ ,  $p=0.017$ , respectively). Maternal DS at 2 months is associated with higher sadness in the interaction ( $r=-0.174$ ,  $p=0.028$ ). Paternal antenatal DS is associated with more rejecting behaviors ( $r=-0.179$ ,  $p=0.032$ ) while paternal DS at 2 months is associated with lower responsiveness and activity ( $r=-0.203$ ,  $p=0.18$ ;  $r=-0.235$ ,  $p=0.006$ , respectively) and higher sadness ( $r=-.235$ ,  $p=0.006$ ). Paternal DS at 2 months is also associated with infant's self-centered behavior ( $r=-.179$ ,  $p=.039$ ) and with less fun and enthusiastic involvement interactions ( $r=-.172$ ,  $p=.048$  and  $r=-.231$ ,  $p=.007$ , respectively). Both maternal and paternal DS, before and after childbirth, are associated with lower quality of early interactions. This reflects not only on their behaviors but also on the child behavior. Attending to the long-term consequences of impaired early interactions on the child developmental outcomes, early intervention in these cases is advise.

### **Symposium S75 - PARENTAL SINGING AT THE HEART OF FAMILY-CENTERED CARE IN THE NICU: A CROSS-CULTURAL PERSPECTIVE ABOUT CURRENT RESEARCH AND CLINICAL PRACTICE**

**Shoemark H.<sup>[1]</sup>, Ettenberger M.<sup>[4]</sup>, Palazzi A.\*<sup>[2]</sup>, Sgobbi B.<sup>[3]</sup>**

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In this emerging era of individualized healthcare, the role of families with their everyday capacities is fundamental to the well-being of children. Nevertheless, the admission of an infant in the Neonatal Intensive Care Unit (NICU) is a stressful experience that can challenge parenting and threaten successful parent-infant attachment. Within the growing evidence for NICU music therapy, parental singing is emerging as a family-centered approach to integrate the parents in the infant's care, facilitating parent confidence and attachment. In this symposium music therapists from four countries will present the current research and clinical practice for family-centered music therapy and parental singing in NICUs. The first presentation, "Empowering parents to sing with their infant in the NICU", highlights the therapist's facilitation for parental voice and singing as a basis for parent-infant interaction. Encouraging vocal interplay can empower the parent to provide experiences of reciprocity, synchrony and intersubjectivity. The second presentation, "Family-centered Music Therapy in the NICU – Current research and clinical practice in Colombia", provides a Latin American perspective, focusing on the use of parental singing and songwriting with high-risk neonates in three NICUs in Bogotá. The third presentation, "Music therapy Intervention for the Mother-Preterm Infant Dyad (MUSIP): Challenges and preliminary results from a Brazilian NICU", describes the process of a music therapy intervention to sensitize maternal singing to the preterm infant in a NICU in Porto Alegre (Brazil). Finally, the fourth presentation, "Premature family music therapy intervention: protocol to support parenting and preterm development", illustrates the Psychological and Music Therapeutic Italian Protocol (PFMI), which uses parental singing and listening to parent's preferred music to improve the well-being of preterm newborns and caregivers, and support their relationship. This symposium gives a cross-cultural overview of the relevance of interventions which promote parental voice and singing as an effective family-centered approach in the NICU.

S75.2

#### **EMPOWERING PARENTS TO SING WITH THEIR INFANT IN THE NICU**

**Shoemark H.\***

*Temple University ~ Philadelphia ~ United States of America*

This presentation will outline a conceptual framework for supporting parental voice use in the NICU. Parents are often encouraged to read or sing to their infants in the NICU as desirable experience for both parent and infant. While singing provides parents with experiences of reciprocity, synchrony and intersubjectivity, the context of the NICU can impinge on the readiness of parents to use their voice. Across the NICU admission, a parent's opportunities for vocal action can be organized into three phases aligned with infant availability for interplay. In the Anticipatory phase, the infant is not available because of medical instability and the role of the parent is constrained to a physical presence and limited sensory support. The music therapist works to promote awareness of self in context and infant cues of awareness. Once the infant has stabilized and is socially available but restricted by their condition, the parents enter a phase of Cautious interplay, in which they are unsure about what they can do. The music therapist works to promote their effective use of voice and build awareness of infant thresholds for stimulation. Finally, in the phase of Active parenting, the infant may have periods of stability and social availability, parents focus on opportunities for development, and music becomes a vehicle for holding the dyad or triad in an expanded sense of family. These processes are underpinned by theories of attachment and parental self-efficacy, and are responsive to the needs of parent and infant.

S75.3

#### **FAMILY-CENTERED MUSIC THERAPY IN THE NICU – CURRENT RESEARCH AND CLINICAL PRACTICE IN COLOMBIA**

**Ettenberger M.\***

*Universidad Nacional de Colombia ~ Bogotá ~ Colombia*

This presentation will overview of the basic tenets of family-centered music therapy program as implemented in the NICUs of three major hospitals in Bogotá, the capital of Colombia. Family-centered care places the patient and his/her family at the centre of care and is described as a collaborative approach to health care decision-making. While music therapy research and clinical practice in the Neonatal Intensive Care Unit (NICU) has traditionally focused on the neonate alone, there is a recent shift towards more family-centered approaches integrating parents, caregivers or family members into active experiences of music therapy with their baby in the NICU. Research outcomes demonstrate that this is beneficial for the baby, and for the parents or caregivers. The presentation will provide the audience with insights into current trends in music therapy research and clinical practice in the NICU from a Latin American perspective. Results of three recent studies will be supported with clinical vignettes and videos to illustrate the value of parental singing when working with high-risk neonates in the NICU.

S75.4

#### **MUSIC THERAPY INTERVENTION FOR THE MOTHER-PRETERM INFANT DYAD (MUSIP): CHALLENGES AND PRELIMINARY RESULTS FROM A BRAZILIAN NICU**

**Palazzi A.\*<sup>[1]</sup>, Meschini R.<sup>[2]</sup>, Piccinini C.A.<sup>[1]</sup>**

*<sup>[1]</sup>Universidade Federal do Rio Grande do Sul ~ Porto Alegre ~ Brazil, <sup>[2]</sup>Santo Stefano Rehabilitation Institute ~ Porto Potenza Picena ~ Italy*

This presentation will describe the Music Therapy Intervention for the Mother-Preterm Infant Dyad (MUSIP), the purpose of which is to sensitize and support the mother to sing to her preterm infant during the hospitalization in the NICU. Premature birth and the hospitalization in the Neonatal Intensive Care Unit (NICU) are traumatic events that affect both infants and mothers. Research on music therapy has shown impact on several aspects of the infant's behavioral and physiological responses, on maternal anxiety and on mother-infant relationship. The presentation will illustrate

the MUSIP protocol, that involved eight sessions and was used in a public hospital in Porto Alegre (Brazil) with nine mothers and their preterm infants. After the intervention, before discharge and in three cases, one year after discharge, mothers were interviewed and the dyad was videotaped during singing and non-singing interactions. Preliminary results suggested that music therapy and maternal singing in NICU contributed to: a) the infant's and mother's well-being through relaxation, distraction from the NICU environment and the strengthening of maternal competences, b) mother-infant bonding, providing opportunities of interactions, allowing prolonged face-to-face contact and affection behaviors, and c) communicative musicality, through the imitation between maternal singing and infant's vocalizations. Finally, sensitizing the mother to singing in NICU contributed to mother-infant bonding and had a multiplier effect for the whole family.

S75.5

### **PREMATURE FAMILY MUSIC THERAPY INTERVENTION: PROTOCOL TO SUPPORT PARENTING AND PRETERM DEVELOPMENT**

**Sgobbi B.\***

*Hospital "Filippo Del Ponte" NICU ~ Varese ~ Italy*

The presentation will illustrate the Psychological and Music Therapeutic Italian Protocol (PFMI), designed to stabilize the physiological state of premature newborns, improve the well-being of caregivers and support the relationship between infants and parents.

The birth of a very premature infant is a critical event in the life of a family and has a significant emotional, social, health, and economic impact on infants and their parents. We have structured an integrated Psychological and Music Therapeutic Italian Protocol (PFMI), in which the music therapy process facilitates affective communication and an emotional connection between parent and infant. During music therapy, the parent and infant are reciprocally engaged in physical, sensory, and emotional experiences. The methodologies provide an early intervention in the first days of hospitalization in the NICU through both an active (parental singing) and a receptive approach (listening to recorded parental singing). These techniques are used separately or in combination, depending on the stage of hospitalization, the stability of the newborn and the objectives pursued. This stimulates parents to take an active role in the infant's care and treatment and allows the baby to find the affectivity and the bonding experience interrupted by premature birth. Results from our research showed that this protocol positively influences infant and parent outcomes in the short and long term. Such therapy becomes a support for the prematurely born infant and his/her parents during hospitalization and after discharge.

### **Symposium S76 - ASSESSMENT IN CHILD MALTREATMENT: SYMPTOMS, MENTAL REPRESENTATIONS AND INTERACTIONS**

**Speranza A.M.\*<sup>[1]</sup>, Boris N.<sup>[2]</sup>**

<sup>[1]</sup>*Department of Dynamic and Clinical Psychology, Sapienza University of Rome ~ Rome ~ Italy,*

<sup>[2]</sup>*Circle of Security International ~ Orlando, Florida ~ United States of America*

The aim of this Symposium is to address how early traumatic experiences affect child development with regard to symptomatology, mental representations and quality of interactions. The first presentation will report data on the prevalence of trauma exposure and the prevalence of PTSD and other symptoms in children involved with the child welfare system exposed to potential abuse. Identify behavioral symptoms related to trauma in mass screening has a high potential value for early assessment and treatment. The second presentation will focus on maternal insightfulness regarding their children's inner world in light of maternal childhood sexual abuse (CSA). Within an attachment perspective, the study underlines the risk embedded in parenting with unresolved

traumatic past and the importance of resolution as a buffer against the negative effects of childhood trauma. The third presentation will emphasize the importance of an attachment-informed assessment in high risk families involved in child abuse and maltreatment to explore the intergenerational transmission of abuse. Considering parental states of mind with respect to attachment, childrens' mental representations, and quality of interaction could shed light on relational context within abuse situations, with significant implications for treatment. In addition to the three speakers, an expert in child abuse and maltreatment will discuss these presentations.

S76.2

### **TRAUMA AND BEHAVIORAL HEALTH SCREENING FOR YOUNG CHILDREN INVOLVED WITH CHILD WELFARE**

**Murphy D.\* , Mai T.A., Scheeringa M.S.**

*Louisiana Child Welfare Trauma Project, Tulane Department of Psychiatry and Behavioral Sciences ~ New Orleans ~ United States of America*

Young children involved with the child welfare system are frequently exposed to trauma, i.e. abuse, and thus are at high risk for developing posttraumatic stress disorder (PTSD). Despite this risk, screening for PTSD has not been routine practice within the child welfare system. Thus, PTSD in these vulnerable children likely has been under-identified or misidentified as other disorders. Aims were to identify the prevalence of trauma exposure in children, birth to three years old; and the prevalence of PTSD and other emotional/behavioral symptoms in three-year-old children within a child welfare sample in the United States. The Trauma and Behavioral Health Screen (TBH) was developed for youths, birth to 18 years. The screen begins with an inventory of traumatic events to be completed for all children. It also includes 35 items for children, three years and older, assessing PTSD, attention-deficit hyperactivity disorder, internalizing and externalizing symptoms, plus items specifically for young children regarding attachment and autism. The TBH was administered to caregivers of 4,171 children, birth to three years old, who were involved in child welfare between 2014 and 2017. Follow-up screens were completed regarding 1,020 of the children. Initial screening results indicate that 17.04% of the children were exposed to at least one traumatic event. Of 635 three-year-old children, for whom the TBH was completed adequately, 28 (4.41%) met the cutoff for PTSD, suggesting the need for further assessment and possible intervention. This study revealed strengths and limitations of mass screening as an approach for identifying trauma exposure and PTSD in young children. Directly asking caregivers in a child welfare population about these issues was effective for identifying potential concerns requiring intervention and thus, this approach may be generalizable to other settings. One challenge was that not all caregivers completed the TBH completely and some concerns may have been missed.

S76.3

### **MOTHERS' INSIGHTFULNESS REGARDING THEIR CHILDREN'S INNER WORLD IS RELATED TO THEIR HISTORY OF SEXUAL ABUSE BUT MODERATED BY RESOLUTION OF THE TRAUMA**

**Koren--Karie N.<sup>[1]</sup>, Oppenheim D.\*<sup>[1]</sup>, Getzler--Yosef R.<sup>[2]</sup>**

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The study examined maternal insightfulfulness in light of maternal childhood sexual abuse (CSA). Based on attachment theory that emphasizes resolution of the trauma as a critical buffer against the deleterious effects of childhood trauma, we hypothesized that Resolved mothers who experienced CSA would be more insightful than Unresolved mothers and no different than mothers who did not experience trauma in their childhoods. The insightfulfulness of sixty mothers toward their school age

children (30 mothers who experienced CSA and 30 mothers similar in their background characteristics but with no CSA) was assessed using the Insightfulness Assessment (Oppenheim & Koren-Karie, 2002). Mothers' resolution of the trauma was assessed using the Adult Attachment Interview (AAI; Main, Goldwyn, & Hesse, 2002). In addition, measures pertaining to the severity of the abuse and to maternal psychopathology were obtained. As hypothesized, within the CSA group mothers who were Resolved were more insightful than Unresolved mothers and no different in their insightfulness than mothers who did not experience CSA in their childhoods. The severity of the abuse and maternal psychopathology were not associated with insightfulness. These results expand our understanding regarding the risk embedded in parenting in light of unresolved traumatic past and the importance of resolution as a buffer.

S76.4

#### **ATTACHMENT-INFORMED ASSESSMENT AND INTERGENERATIONAL TRANSMISSION OF CHILD ABUSE: RESEARCH DATA**

**Nicolais G.<sup>[1]</sup>, Speranza A.M.\*<sup>[1]</sup>, Nassisi V.<sup>[1]</sup>, Cammarella A.<sup>[2]</sup>, Menozzi F.<sup>[2]</sup>, Ammaniti M.<sup>[1]</sup>**

<sup>[1]</sup>*Department of Dynamic and Clinical Psychology, Sapienza University of Rome ~ Rome ~ Italy,*

<sup>[2]</sup>*Centro Fregosi Spazio Sicuro ~ Rome ~ Italy*

Abusive and maltreating family contexts have a profound impact on child development, not only on the behavioral and symptomatic status of the child but also on his/her mental representations. Attachment perspective supported the hypothesis of an “intergenerational transmission of abuse” resulting from parents’ attachment mental state as a key mediation factor in this vicious circle. Aim of the study was to explore the intergenerational transmission of abuse, through an attachment-informed assessment, identifying parental states of mind with respect to attachment, children’s mental representations, and quality of dyadic interactions in high risk families involved in child abuse and maltreatment. One hundred and twenty-six parent-child pairs were involved in the diagnostic assessment. Parents’ attachment state of mind was assessed using Adult Attachment Interview (AAI, Main, Goldwyn, & Hesse, 2003); children’s mental representations were assessed using MacArthur Story Stem Battery (MSSB, Bretherton et al., 1990) or Story Stem Assessment Profile (Hodges et al., 2002); quality of regulation strategy in dyadic interactions was assessed using the Crowell Procedure (Crowell & Feldman, 1988) within the parent-child dyads. Results support the hypothesis that Insecure and especially Unresolved/disorganized states of mind, rooted in parents’ early traumatic experiences, represent a significant risk factor for insensitive and abusive caregiving, observed in dyadic interactions (lower sensitivity, more negative affective expressions, etc.), as well as in attachment representations and behaviors in children. Early traumatic relational experiences influence parental state of mind with respect to attachment, thus compromising the process of dyadic affective regulation. Attachment-informed assessment, including interactional and representational measures, could shed light on relational context within abuse situations, providing significant information for treatment.

#### **Symposium S79 - HARNESSING THE STRENGTH OF LONGITUDINAL BIRTH COHORT DESIGNS TO UNDERSTAND PRENATAL AND EARLY POSTNATAL PREDICTORS OF INFANT AND CHILD DEVELOPMENT**

**Hentges R.\***

*University of Calgary ~ Calgary ~ Canada*

Identifying early risk factors for maladaptive child development is an important first step in designing effective prevention and intervention programs, as early preventative programs can disrupt the developmental processes related to the emergence of later difficulties. The majority of

research to date has focused on examining risk factors operating early in childhood. However, emerging research suggests that the prenatal and early postnatal periods may be particularly potent in terms of their influence on later child development (DiPietro, 2004; Madigan et al., 2017). Thus, prospective birth cohorts are critical for increasing our understanding of how the early environment impacts development from infancy through early childhood, a period of rapid development and growth. This symposium will present findings from four different birth cohorts that examine the link between the prenatal and early postnatal environment and child outcomes. The first paper explores whether there are differential associations between pre- and post-natal maternal depression and child development across multiple domains (e.g., depression, executive functioning). The second paper complements this research by examining gender differences in how maternal use of antidepressants during pregnancy shapes infant and child hypothalamic-pituitary-adrenal (HPA) axis functioning. The third paper further examines maternal prenatal psychosocial risk (e.g., stress, depression) and family risk factors on trajectories of early communicative development, which are themselves early risk factors for later developmental problems. Finally, the fourth paper examines early postnatal family risk factors at 2 months old for school-entry internalizing and externalizing problems, with a particular emphasis on older siblings' emotional and behavioural problems. Together, these papers highlight the influence of the prenatal and early postnatal environment on several different facets of early child mental health. In addition to pointing to potential targets for clinical prevention programs, findings from several of the papers will also be discussed in terms of potential protective factors.

S79.2

#### **SUBGROUPS IN TRAJECTORIES OF COMMUNICATIVE DEVELOPMENT FROM 12 TO 36 MONTHS: PREDICTORS AND CONSEQUENCES**

**Hentges R.\*<sup>[1]</sup>, Madigan S.<sup>[1]</sup>, Plamondon A.<sup>[2]</sup>, Racine N.<sup>[1]</sup>, Collison B.<sup>[1]</sup>, Tough S.<sup>[1]</sup>, Graham S.<sup>[1]</sup>**

<sup>[1]</sup>University of Calgary ~ Calgary ~ Canada, <sup>[2]</sup>Université Laval ~ Quebec ~ Canada

Delayed communication abilities (e.g., language) is one of the earliest identifiable symptoms of developmental problems (Collison et al., 2016). However, relatively little is known about individual patterns of communicative development from ages 0 to 3, which is the prime period for the emergence of communication and language problems. The current study used growth-mixture-model analyses to identify subgroups of communicative development trajectories from ages 12 to 36 months. In addition, we examined prenatal and early post-natal predictors of these trajectories. Participants were 3,387 mother-child pairs from the All Our Families (AOF) cohort. Mothers completed questionnaires during the pre-natal period regarding psycho-social risk and demographics. Data regarding the infant (e.g., birth weight, pre-term delivery) were collected from medical records and mother-report at 4-months post-delivery. Development of communication skills was assessed at 12, 24, and 36 months with the Ages and Stages Questionnaire (ASQ; Bricker, Squires, & Mounts, 1995) Communication subscale. Mothers also reported on developmental delay diagnoses at age 36 months. Analyses revealed three distinct communication trajectories from 12 to 36 months: a normative-stable class (85%), a low-improving class (13.5%), and a low-declining class (1.5%). Predictor analyses revealed that low social support, high prenatal stress and depression, pre-term birth, and low income were all risk factors for belonging in the improving versus normative class. Maternal history of miscarriages and a family history of language delays distinguished the declining class from both the normative and improving classes. By age 3, over half of the declining class had a developmental delay diagnoses, compared to 9% in the improving class and 1% in the normative class. This study highlights potential targets for both pre- and post-natal prevention and intervention programs that can work toward decreasing existing disparities in child communicative development.

S79.3

### **BEHAVIORAL RISK ASSESSMENT FROM NEWBORN TO PRESCHOOL: THE VALUE OF OLDER SIBLINGS**

**Rodrigues M.\*<sup>[1]</sup>, Binnoo--Erez N.<sup>[1]</sup>, Plamondon A.<sup>[2]</sup>, Jenkins J.<sup>[1]</sup>**

*<sup>[1]</sup>University of Toronto ~ Toronto ~ Canada, <sup>[2]</sup>Laval University ~ Quebec ~ Canada*

Most studies that identify early risk factors for later child psychopathology assess risks during the preschool period or later. However, it is necessary to identify high risk infants prior to the display of psychopathology, when interventions have the greatest impact. Hence, tools with adequate predictive power for later psychopathology are needed. Previous studies show that risk prediction in the infancy period is weak or has no demonstrated predictive validity. The aim of this study was to examine the plausibility of a risk prediction tool in infancy for school-entry emotional and behavioral problems. Familial aggregation has been operationalized previously as maternal psychopathology. The hypothesis was tested that older sibling psychopathology, as an indicator of familial aggregation, would enable a fair level of risk prediction compared to previous research, when combined with traditional risk factors. Using a longitudinal design, data on child and family risk factors were collected on 323 infants (M=2.00 months), all of whom had older siblings. Infants were followed up 4.5 years later when both parents provided ratings of emotional and behavioral problems. Multiple regression and ROC curve analyses were conducted for emotional, conduct, and attention problems separately. Older siblings' emotional and behavioral problems at infancy were the strongest predictors of the same problems in target children 4.5 years later. Other risk factors, including maternal depression and socioeconomic status provided extra, but weak, significant prediction. The area under the ROC curve for emotional and conduct problems yielded fair prediction. This study is the first to offer a 'fair' degree of prediction from risk factors at birth to school-entry emotional and behavioral problems. This degree of prediction was achieved with the inclusion of older siblings' emotional and behavioral problems, thus limiting generalizability to children with older siblings.

S79.4

### **LONGITUDINAL DIURNAL CORTISOL PATTERNS AND PRENATAL SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI) EXPOSURE IN INFANTS AND CHILDREN FROM 3 MONTHS TO 6 YEARS OF AGE**

**Ngo V., Park M., Brain U., Weinberg J., Oberlander T.\***

*University of British Columbia ~ Vancouver ~ Canada*

Selective serotonin reuptake inhibitor (SSRI) antidepressants are commonly used in pregnancy. SSRIs inhibit the reuptake of the neurotransmitter serotonin (5HT) at presynaptic neurons, thereby increasing central synaptic 5HT levels. Development of the hypothalamic-pituitary-adrenal (HPA) axis stress regulation system is influenced by serotonin (5HT) and early environment extending from fetal life into early childhood. Therefore, prenatal exposure to SSRI antidepressants and maternal mood may shape HPA axis development and subsequent stress regulation. We investigated whether prenatal SSRI exposure associates with diurnal cortisol patterns across infancy and early childhood. We also investigated whether the effect of SSRIs is moderated by infant/child sex. Saliva samples were collected in the morning and afternoon from SSRI exposed and non-exposed infants/children at 3 months, 6 months, and 6 years of age (n=52). Generalized estimating equations were used to assess the effect of SSRIs on diurnal cortisol change scores (AM – PM), controlling for prenatal and postnatal maternal internalizing symptoms. Interactive effects between sex and prenatal SSRI exposure on diurnal cortisol levels were examined. Prenatal SSRI exposure was not associated with a main effect on diurnal cortisol patterns; however, a significant interaction between child sex and

prenatal SSRI exposure on the diurnal cortisol pattern was found ( $\beta = -0.95, p \leq 0.0003$ ). SSRI-exposed females had consistently lower AM-PM cortisol change scores at each time point from 3 months to 6 years compared to non-exposed females. There were no significant findings on cortisol in SSRI-exposed compared to non-exposed males. Females prenatally exposed to SSRI antidepressants had dampened everyday diurnal cortisol patterns, suggesting sex and 5HT-related differences in HPA development and function. These changes could have significant implications for infant temperament and self-regulation as well as mental health disorders later in life.

S79.5

### **DIFFERENTIAL ASSOCIATIONS BETWEEN ANTENATAL AND POSTNATAL MATERNAL DEPRESSION AND MULTIPLE CHILD OUTCOMES: LONGITUDINAL DATA FROM ALSPAC-UK**

**Pearson R.\*<sup>[1]</sup>, Evans J.<sup>[1]</sup>, Taylor A.<sup>[1]</sup>, Netsi E.<sup>[2]</sup>, Stein A.<sup>[2]</sup>**

<sup>[1]</sup>University of Bristol ~ Bristol ~ United Kingdom, <sup>[2]</sup>University of Oxford ~ Oxford ~ United Kingdom

Depression is common during pregnancy and after birth and both exposures potentially impact upon multiple domains of child development. However, specific associations and mechanism according to different timings of maternal depression is less clear. Longitudinal data from over 10,000 parents and children pairs from the Avon Longitudinal Study of Parents and Children (ALSPAC) was used, linking maternal depression reports during pregnancy and after birth and child outcomes at follow up assessments. We report strong evidence that both antenatal and postnatal maternal depression increase offspring risk across developmental domains. However, differential patterns emerged regarding the timing of maternal depression. For example, there was evidence that maternal education moderates the impact of antenatal but not postnatal depression. In addition, antenatal and postnatal depression were both independently associated with poorer executive functions but with different cognitive components. Both antenatal and postnatal timings of maternal depression are associated with poor child outcomes across domains. However, different patterns of associations according to timing of maternal depression, imply differential mechanisms. This may suggest that different intervention strategies may be needed in pregnancy and after birth.

### **Symposium S83 - A CHECK-IN ON WELL-BABY CHECK-UPS: WHAT CAN WE LEARN ABOUT INFANT MENTAL HEALTH DURING ROUTINE PRIMARY CARE VISITS?**

**Racine N.\*<sup>[1]</sup>, Pillai Riddell R.<sup>[2]</sup>, Gleason M.M.<sup>[3]</sup>, Zeanah P.<sup>[4]</sup>**

<sup>[1]</sup>University of Calgary ~ Calgary ~ Canada, <sup>[2]</sup>York University ~ Toronto ~ Canada, <sup>[3]</sup>Tulane University ~ New Orleans ~ United States of America, <sup>[4]</sup>University of Louisiana ~ ~ United States of America

Routine visits with a health-care provider in the first five years of a child's life provide a unique opportunity to "check-in" on the mental health of children and their relationships with their primary caregivers. There is a need for brief and well-validated instruments to screen and identify these mental health and relationship difficulties. Looking across multiple methods and multiple informants in two North American samples, these papers present on emerging tools and indicators that can be used to garner information about child, parent, and dyadic well-being in the primary care setting. This symposium will provide cutting edge research for infant mental health professionals and primary care workers alike on what indicators may be most useful in identifying families that require additional support. The first paper, presented by Dr. Rebecca Pillai Riddell, describes an observational assessment tool (the OUCHIE) developed to examine the sensitivity of caregiver behaviour in the primary care setting. Using a longitudinal cohort of with over 3000 parent-child observations, this tool is designed to help health professionals identify parents who may struggle with supporting their child's distress. The second paper, presented by Dr. Mary

Margaret Gleason, will describe a caregiver reported tool, the Early Childhood Screening Assessment, that can be administered to caregivers in primary care to assess a child's behavioral and emotional difficulties. This paper will focus on the needs and broader implications of using sound psychometric tools for identifying young children with behaviour problems. The third paper, presented by Dr. Nicole Racine examines child distress behaviour to vaccination in preschool-aged children and whether these behaviours can provide indications of school-readiness and mental health difficulties. Finally, Dr. Paula Zeanah, an expert in the area of infant mental health assessment and treatment in the primary care setting, will discuss clinical implications for the application of screening tools in the primary care setting as well as directions for intervention and research for this area of research.

S83.2

### **PARENTAL RESPONSES TO INFANT PAIN DURING VACCINATIONS: TAKING THE TEMPERATURE OF PARENT-INFANT DYADS DURING WELL-BABY VISITS**

**Pillai Riddell R.\*<sup>[1]</sup>, Gennis H.<sup>[1]</sup>, Tablon P.<sup>[1]</sup>, Greenberg S.<sup>[2]</sup>, Garfield H.<sup>[2]</sup>**

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Building a secure attachment is one of the most important milestones of early childhood. Child development experts know that observing infants and caregivers during distressing events and watching how they both regulate are predictive of both infant development and maternal emotional challenges. Despite the importance of learning emotional regulation to lifetime mental health and its dependence on early caregiving, little work on has been done to help integrate this important health determinant directly into pediatric primary care settings. Due to the regularity of well-baby visits in Canada, vaccinating nurses and physicians are in a unique position to 'take the temperature' of a dyad's relationship and the way in which caregivers soothe their infant's pain-related distress at repeated intervals across early childhood. Providing a feasible way to screen for caregivers who may struggle in supporting their child's distress would allow for health professionals to initiate support for these infant-caregiver dyads earlier. Our lab ([www.yorku.ca/ouchlab](http://www.yorku.ca/ouchlab)) has developed the OUCH-IE (Opportunities to Understand Childhood Hurt – Inoculation Evaluation). Based on research with almost 3000 vaccination appointments, the OUCH-IE is a checklist of 8 caregiver behaviours seen in the minutes post-needle that reflect challenges in responding to an infant's high distress. The tool was refined with vaccinating nurses and physicians. It has demonstrated reliability and validity, is easy to learn and takes less than 30-seconds to administer post-vaccination. The OUCH-IE appears to be a promising and highly feasible measure that can be seamlessly integrated into primary care.

S83.3

### **IDENTIFYING YOUNG CHILDREN WITH MENTAL HEALTH ISSUES IN PRIMARY CARE: THE EARLY CHILDHOOD SCREENING ASSESSMENT**

**Gleason M.M.\*<sup>[1]</sup>, Middleton M.<sup>[2]</sup>**

*<sup>[1]</sup>Tulane University School of Medicine ~ New Orleans ~ United States of America, <sup>[2]</sup>Institute of Infant and Early Childhood Mental Health ~ New Orleans ~ United States of America*

Although the specific content of preventative health care visits varies across the globe, these visits generally are encouraged as a means of providing routine immunizations, physical examinations, and health surveillance. In the U.S., a substantial portion of these visits focus on screening for health risk factors. Parents identify these visits as potential, but rarely used resources for information about infant mental health. In the US as in other places, most early childhood mental health concerns are not identified and receive no treatment. Validated parent report measures increase

identification rates of mental health problems in older children, but widespread use of early childhood screens has been limited. The Early Childhood Screening Assessment (ECSA) was developed to identify the mental health needs of young children 18-60 months and their mothers in primary care visits. Further revisions addressed feedback about length of the questionnaire. In its original 40 item ECSA, sensitivity identifying a psychiatric diagnosis using a structured interview was 86% and specificity was 83%. The empirically-derived brief version was developed with 89% sensitivity and 85% specificity as well as high ratings of acceptability. The tool has been validated in Romania and translated into Spanish, Romanian, Turkish, and Arabic. Used as part of an early childhood mental health consultation program, providers report increased use of validated measures in their practice as well as increased identification of mood and anxiety problems. Validated screening measures can identify children in need of mental health assessment in preventive health care visits. Providing education and/or consultation support may promote use of such measures.

S83.4

#### **DISTRESS REGULATION TO VACCINATION AS AN INDICATOR FOR EARLY SCHOOL READINESS AND MENTAL HEALTH**

**Racine N.\*<sup>[1]</sup>, Gennis H.<sup>[2]</sup>, Pillai Riddell R.<sup>[2]</sup>, Greenberg S.<sup>[3]</sup>, Garfield H.<sup>[3]</sup>**

*<sup>[1]</sup>University of Calgary ~ Calgary ~ Canada, <sup>[2]</sup>York University ~ Toronto ~ Canada, <sup>[3]</sup>University of Toronto ~ Toronto ~ Canada*

Social and emotional competencies, such as distress regulation, are established in early childhood and are critical for the development of children's mental health and wellbeing. Routine vaccinations in primary care provide a unique opportunity to relate responses to a universal, relatively standardized, distress regulation paradigm (i.e. pain-related distress) to key developmental outcomes. The current study sought to examine distress regulation during routine preschool vaccination as a predictor of outcomes related to school readiness. It was hypothesized that children with poorer distress regulation abilities post-vaccination would have lower cognitive, academic, and social-emotional abilities. Furthermore, it was hypothesized that insensitive parenting would exacerbate this relationship for children with poor distress regulation abilities. As part of an ongoing longitudinal cohort, 172 parent-child dyads were videotaped during their preschool vaccinations and subsequently participated in a full day school readiness psychological assessment in a university lab (cognitive, academic, and social-emotional domains). Videotapes were coded for child pre-needle distress (baseline distress), immediate post-needle pain-related distress reactivity (immediate distress reactivity), and pain-related distress regulation (distress regulation). Parent sensitivity during the vaccination was also coded. Baseline distress prior to vaccination predicted greater externalizing problems. Parent sensitivity did not moderate the association between any child distress behaviors and school-readiness indicators. Child distress behaviors prior to needle, regardless of parent behaviour, during the vaccination context may provide valuable information to health care professionals about child school readiness in the behavioral, emotional, and executive function domains.

#### **Symposium S84 - INTERNATIONAL PERSPECTIVE ON THE FIRST 1000 DAYS: CHALLENGES AND SUCCESSES ACROSS THE GLOBE**

**Graham M.\*<sup>[1]</sup>, Lang B.<sup>[2]</sup>, Malek A.J.E.<sup>[3]</sup>**

*<sup>[1]</sup>Florida State University ~ Tallahassee ~ United States of America, <sup>[2]</sup>Parent Infant Partnership (PIP) UK Ltd ~ Northampton ~ United Kingdom, <sup>[3]</sup>Tygerberg Academic Hospital/University of Stellenbosch ~ Tygerberg ~ South Africa*

The First 1000 Days, a focus from conception to age 3, offers an opportunity to break the cycle of intergenerational poverty, poor outcomes for mothers and babies, trauma and early adversity. The best chance to change this trajectory is by the 1000th day when the brain has reached 80% of adult size, and has been building critical neural pathways to support emotional, social and cognitive support. How these pathways are strengthened or neglected sets the lifelong journey for that infant. This symposium will showcase a cross continental initiative which utilizes an infant mental health framework for enhancing parenting capacity during this pivotal period. The First 1000 Days Initiatives will be featured from three continents: United Kingdom, South Africa and the United States. The 2014 WAIMH featured the First 1000 Critical Days work in the UK which inspired the South Africa and US replications. The presentations will highlight the similarities and the uniqueness of each of the First 1000 Days Initiatives toward elevating the availability of high quality infant care, prominence of infant mental health, access to nutrition, health care and family planning, parenting supports, home visiting, and early intervention linked to strengthen families and communities. Each country will describe how the First 1000 Days Initiatives are promoting systems collaboration, political commitment, collective impact and societal investments toward improving child and family well-being across the world.

S84.2

#### **FIVE YEARS ON FROM THE LAUNCH OF THE FIRST 1001 CRITICAL DAYS MANIFESTO IN THE UK**

**Lang B.\***

*Parent Infant Partnership (PIP) UK Ltd ~ Northhampton ~ United Kingdom*

In October 2013 a political manifesto was launched in the UK which put forward the moral, scientific and economic case for the importance of the conception to age 2 period, and the need for relevant services in the early years period. It demonstrated the commitment of politicians from across the political spectrum to acknowledge the importance of the first 1001 critical days. This was no longer just a vision within the academic and early years workforce, but evidence of a political will to change the outcomes for children in the UK. Five years on, what has happened? The presentation will share an overview of developments since the initial manifesto. This will include progress and challenges within both national and local political and practice levels, including examples of initiatives within health and social care systems, third sector and policymaking. The presentation will be based on the recommendations set out in The Building Great Britons Report (2015) which were based on addressing the two themes borne out of the evidence the report included: Without intervention, there will be in the future, as there has been in the past, high intergenerational transmission of disadvantage, inequality, dysfunction and child maltreatment. In addition to the positive developments seen, we also reflect on the challenges faced in hard economic times and the impact this has been having on progress within the early years sector.

S84.3

#### **SOUTH AFRICA'S WESTERN CAPE PROVINCIAL FIRST 1000 DAYS OF LIFE INITIATIVE**

**Malek A.J.E.\***

*Tygerberg Academic Hospital/University of Stellenbosch ~ Tygerberg ~ South Africa*

The Western Cape Government has been implementing a transversal campaign that raises awareness and facilitates action at the community and service provision levels concerning the first 1000 days of life. The First 1000 Days Initiative is situated within the Safe and Healthy Children and the Safe and Healthy Families sub-components of Provincial Strategic Goal 3, both ultimately impacting on the Safety and Wellbeing of Communities and Engaged and Healthy Youth. A life course approach has been applied and the 3 key foundation areas have been grouped as Nutrition

and Health, Nurture, Care and Support and Safety, protection and stimulation. The goal of the First 1000 days of Life's is to ensure that every pregnant woman and child is nurtured and parents and caregivers are supported from conception onwards, especially the most vulnerable, through a whole society approach, so that children can achieve their full potential. Key successes (as well as challenges) will be shared for discussion, including: a comprehensive 1st 1000 Days situation analysis by the Department of Health, leading to a systematic interventions framework; capacity building for empathetic service provision through training and service redesign; 1st 1000 Days Theory of Change process with a range of stakeholders; fostering of closer cohesion between Provincial Strategic Goals and various partners towards promotion of early childhood development and violence prevention; strengthening family and caregiver capacity to provide nurturing care and closer parent/caregiver attachment starting before birth and continuing into adolescence, through comprehensive maternal care and parental/caregiver guidance; ongoing advocacy and community dialogues

S84.4

#### **FLORIDA'S FIRST 1000 DAYS**

**Graham M.\***

*Florida State University ~ Tallahassee ~ United States of America*

The highest rate of return in early childhood development comes from investing as early as possible...Starting at age three or four is too little too late, as it fails to recognize that skills beget skills in a complementary and dynamic way. Efforts should focus on the first years for the greatest efficiency and effectiveness, Dr. James J. Heckman, Nobel Laureate in Economics. Knowing that the first 1000 days is the most cost effective time to lay the foundation for lifetime success, Florida has moved forward with an initiative called The First 1000 Days. The Florida Children & Youth Cabinet voted unanimously that the first 1000 days of a child's life should be at the top of the state's priorities. Five key policies were recommended including: Expanding affordable and accessible high quality infant toddler care; Improving outcomes for infants and toddlers in child welfare through baby court and lineage with early childhood systems; Expanding eligibility for EARLY intervention; Promoting utilization of mental health services especially for maternal/paternal depression and infant mental health; Supporting economic policies that promote stable nurturing, self sufficient parents. The goals of the First 1000 Days are to promote systems development and collaboration at the community and state levels among programs serving families with children prenatal-3. This presentation will describe how Florida has infused infant mental health, trauma informed care and related cutting-edge practices into existing service delivery models. Data from our expanded "baby court" programs will be shown as public awareness strategies for increasing mental health services.

#### **Poster Workshop PW09 - THE ADBB SCALE**

PW09.1

#### **INFANTS IN DAY-CARE: SECURE ATTACHMENT, CHARACTER, CLINICAL WITHDRAWAL AND FREQUENCY OF ILLNESSES**

**Grasso F.\***

*Università Siena ~ Siena ~ Italy*

The presentation will depict the firsts research using both ADBB and attachment style assessment jointly made in Italy and in France, in comparable day care centers. The goal of the study was to assess the effects of entering day care for infants, on mental and on physical health. The ADBB Scale is a screening tool targeting a behaviour alarm signal in babies between 2 and 24 months of age that

subsequently needs to be confirmed, interpreted, and further investigated. In this regard two longitudinal studies were conducted in France and Italy in collaboration with the paediatricians. The goal of both the study was to investigate the physical as well as the psychological effects on young infants with early entry dates into day care. We found that clinical withdrawal (ADBB>5), cumulated with an insecure attachment (assessed by SSP,) difficulties in temperament (assessed by ICD and Quit) and troubles in the adaptation to the nursery are strongly correlated with high risk temporal profiles of somatic disorders in the day-care. Both studies confirmed that quite a lot of infants experience a lot of distress when entering day care, and exhibit more frequent diseases and behavioural difficulties. Being insecurely attached was not linked with more negative events after the child enters day care, but securely attached children may not benefit from day care as much as infants from high risk groups do. This poster is meant to be part of a poster workshop on ADBB training, chaired by A Guedeney

PW09.2

### **THE USE OF THE ADBB FOR EARLY INTERVENTION AND PREVENTION WITHIN THE VIDEO FEEDBACK PROTOCOL IN THE PUBLIC/ PRIVATE PEDIATRIC SETTING: AN ITALIAN EXAMPLE**

**Facchini S.\***

*Azienda per l'Assistenza Sanitaria ~ Pordenone ~ Italy*

Using and training with the ADBB in the Italian Early Video Feedback Intervention project (Dr Sergio Facchini)

A further ongoing Early Video Feedback Intervention project is using ADBB, as an assessment tool, during Well Baby Visits (1-18 months old infants) in the Italian primary care setting. ADBB positive rates are comparable with previous studies. Preliminary results will be discussed. However, there is currently insufficient evidence to determine the optimal timing and intensity of primary care interventions to promote Infant mental health. The methodology of Antoine Guedeney, creator of ADBB, the Alarm Distress Baby Scale (Guedeney and Fermanian, 2001) has inspired us. The ADBB is a screening system of observation for Infant social behavior, designed to be taught to pediatricians and other professionals of infant health. A quite limited instruction period (2 weekends) has proven sufficient for training pediatricians in the system. We find encouraging how Guedeney's results have demonstrated the rapidity with which PPCPs can learn a new mode of evaluating infant social behavior.

PW09.3

### **SOME CONSIDERATIONS ABOUT ADBB TRAINING COURSES IN ITALY**

**De Rosa E.\***

*Gemelli University hospital ~ Roma ~ Italy*

History and results of the first Italian validation of the ADBB scale in Italy (E De Rosa & al, 2010)  
Experience on training professionals with the ADBB scale. The Alarm Distress Baby Scale, is an extraordinary clinical instrument to value psychical and relational distress in early childhood. In the last decades, the scale has been widely used by professionals from diverse fields working with children up to two years, like kindergarten teachers, pediatricians, nurses. We point at a widely distribution of the scale all over the country through specialized training courses. Moreover, we strongly believe that the ADBB scale should be a major in psychotherapy graduate schools as well as in residency programs. In fact, to ensure wide dissemination of the scale, is very important that people working in health centers and public services or in private practice as well, are trained in using the scale and in teaching other professionals working there at the same. Furthermore, only the raise awareness among ADBB trainers, about early withdrawal damages on children, could

increase attention in using the scale more and more often in order to recognize the signs of withdrawal as soon as possible.

PW09.4

#### **ASSESSING SOCIAL WITHDRAWAL SIGNS USING ALARM DISTRESS BABY (ADBB) SCALE IN A SAMPLE OF 7-MONTH-OLD INFANTS IN MALAWI AND FINLAND**

**Ibrahim O.\*<sup>[1]</sup>, Puura K.<sup>[2]</sup>, Pyykko J.<sup>[3]</sup>, Maleta K.<sup>[5]</sup>, Leppanen J.<sup>[3]</sup>, Ashorn U.<sup>[3]</sup>, Ashorn P.<sup>[4]</sup>**

<sup>[1]</sup>University of Tampere, Faculty of Medicine and Life Sciences, Child Psychiatry Department. Suez Canal University, Faculty of Medicine, Neuropsychiatry Department ~ Tampere ~ Egypt, <sup>[2]</sup>University of Tampere, Faculty of Medicine and Life Sciences, Child Psychiatry Department ~ Tampere ~ Finland, <sup>[3]</sup>University of Tampere, Faculty of Medicine and Life Sciences, Center for Child Health Research ~ Tampere ~ Finland, <sup>[4]</sup>University of Tampere, World Health Organization Department of Maternal, Newborn, Child, and Adolescent Health ~ Geneva ~ Finland, <sup>[5]</sup>University of Malawi ~ Malawi

Most cross-cultural research assessing children's social development has been focusing on clinical samples and has been done mostly in a sporadic way making the comparisons hardly valid. It is assumed that cultural contexts affect Socio-emotional development but domains and extent of its influence is still debatable. 40 infants in both countries participated in a feasibility study for assessing infant cognitive development. The infants were videotaped in both samples in a structured test-situation in interaction with a researcher for 10 minutes. The videotapes were then analysed with the ADBB for signs of infant social withdrawal behaviour. The ADBB is an observation method with 8 items measuring infant social behaviour and each item is scored from 0 to 4. Scores of five or above are a sign of possible withdrawal (indicating deviance from normal behaviour). A score above 9 indicates definite deviance. The median total ADBB score was significantly higher for the Malawi infants compared to Finnish infants (5.0 vs 2.5,  $p < 0.001$ ). Interestingly, there was no significant difference in briskness of response or general activity between the two samples. In the Finnish sample there was no sex difference in the total ADBB scores, whereas in Malawi more boys had scores below 10 than girls. In the Malawian Sample, smaller yearly household income was associated with higher total ADBB score. only in Malawi using 0-8 vs 9+ ADBB total score tabulation. Our results indicate that also infant social development may be at risk in countries where families have low yearly income. It has to be noted that the test situation may have been more strange to the Malawi infants and affected their scores to some extent. Further studies are needed to confirm our findings.

PW09.5

#### **EARLY DETECTION OF WITHDRAWAL IN THE FIRST LEVEL HEALTH AND INTERVENTION FOR REDUCING RISKS IN THE EARLY DEVELOPMENT: THE URUGUAYAN EXPERIENCE**

**Bonifacino N.\***

*Montevideo IMH/ univ Valencia, Spain ~ Montevideo ~ Uruguay*

Aims: Evaluate the effectiveness of First Level Teams trained in ADBB scale (Guedeney 2001) and in interventions aimed to promote synchrony in parent-infant interactions, for reducing infant withdrawal during the first year of life. Method: First Level Health professionals were trained in ADBB for early detection of withdrawal and in interventions to be done from the monthly well-baby visit to promote new resources in parent – infant interactions. The impact of this training in the infant health is assessed through a comparative analysis of withdrawal between a follow up group of 100 infants assisted by the trained professionals and assessed with ADBB in two times during the first year of life, and a same age control group assisted by not-trained professionals. Independent judges will score the video-material in double blind system. Results: Final results will be available in

March 2018, at the end of the study. Preliminary results of follow-up group: 1st ADBB assessment (infants from 2 to 5 months) 23.1% withdrawal (ADBB >4); 2nd ADBB six months later: 9.6% withdrawal. Conclusions: not enough data until the end of the study (March 2018).

## Brief Oral Presentations BOP25 - THE BABY AND PARENTING

### BOP25.1

#### **DEVELOPMENT OF THE COPARENTING RELATIONSHIP: RELATIVE CONTRIBUTIONS OF CHILD AND PARENTAL PSYCHOPATHOLOGY**

**Grimas E.\*<sup>[1]</sup>, Fàbrega M.<sup>[1]</sup>, O'Farrelly C.<sup>[1]</sup>, Iles J.<sup>[1]</sup>, Stein A.<sup>[2]</sup>, Murray L.<sup>[3]</sup>, Mesman J.<sup>[4]</sup>, Van Berkel S.<sup>[4]</sup>, Ramchandani P.<sup>[1]</sup>**

*<sup>[1]</sup>Imperial College London ~ London ~ United Kingdom, <sup>[2]</sup>University of Oxford ~ Oxford ~ United Kingdom, <sup>[3]</sup>University of Reading ~ Reading ~ United Kingdom, <sup>[4]</sup>Leiden University ~ Leiden ~ The Netherlands*

The relationship between parents with regard to raising their child (coparenting) is a risk factor for later psychopathology in children and poor outcomes in parents. Research has suggested this relationship is multi-directional, yet less is known about the relative contributions of parental and child psychopathology to the development of the coparenting relationship. 192 families were assessed when their child was 3 and 24 months old. Child temperament and parental mental health were assessed at 3 months by self-report. The coparenting relationship was assessed at 24 months using an observational measure of coparenting behaviour. Complete data were available for 117 families. Hierarchical logistic regression analyses showed that higher maternal depressive symptoms at three months was associated with higher maternal cooperation at two years ( $\beta = .194$ ,  $p = .032$ ). More difficult infant temperament at three months was associated with higher paternal cooperation at two years ( $\beta = .191$ ,  $p = .050$ ). These findings offer an interesting insight into the development of the coparenting relationship over time. Contrary to our hypotheses, these findings suggest that parents who face early difficulties when their child is very young, may adapt their coparenting over time to compensate for this. This could lead to increased cooperation when they interact with their child at a family level. That effects differ between parents emphasises both the importance of involving both mothers and fathers in parenting research, as well as the unique role each parent plays within the family system.

### BOP25.2

#### **PARENTAL STRESS AND BURNOUT: IMPACT OF THE PERCEIVED SOCIAL SUPPORT FROM SPOUSES** **Lebert A.\*, Wendland J., Prioul S., Boujut E., Dorard G.**

*UPD LPPS EA4057 ~ Boulogne Billancourt ~ France*

Raising a child can be considered as a stressful task that can threat parents' mental health. Recent research seems to confirm the existence of maternal burnout (8%). Social support from spouses and relatives has a well-known protective factor for parents' mental health. The aim of the present study is to investigate the links between perceived social support and maternal burnout within the transactional model of stress. A total of 315 French speaking mothers (mean age=34,90; SD=6,87) from the general population completed a set of questionnaires including a sociodemographic form (in order to gather general information on the mothers, their spouses and children living at home), the Maslach Burnout Inventory adapted to parents (MBI-parental), the Social Support Questionnaire-6 (SSQ-6), the Stress Parental Index-Short Form (SPI) and the Hospital and Anxiety Depression Scale (HADS). Three groups were established: single mothers (n=33), mothers with social support from spouses (n=154) and mothers without social support from spouses (n=128).

Comparative analyses revealed that satisfaction with social support from spouses has an important impact on the mother's mental health. Mothers who perceived an unsatisfactory social support from their spouse had significantly higher scores on emotional exhaustion, depression and anxiety scales than mothers with supportive spouses and single mothers. Moreover, mothers who feel they receive poor support from their spouse were significantly less satisfied about their global social support than mother with a good perceived social support from their spouse. Our study put in light that marital adjustment and support are relevant issues to consider in the field of maternal exhaustion. This dimension should be considered for prevention and intervention strategies in the area of parenthood, dyadic adjustment and mental health.

BOP25.3

### **STEPFAMILIES: IMPACT OF COPARENTING AND (STEP)PARENT –(STEP)CHILD RELATIONSHIP ON CHILD'S DIFFICULTIES**

**Repond G.\* , Darwiche J.**

*University of Lausanne ~ Lausanne ~ Switzerland*

Over the past years, families' forms have become more diverse and stepfamilies are a current family form nowadays. However, creating a new family household may be a challenge for each member of the stepfamily, especially for the stepparent to create a good relationship with the stepchild. Only rare data are available concerning the impact of coparenting for the stepfamily's well-being whereas coparenting has been described as a key variable with nuclear families. The aim of the present study was to analyze the predictive value of the coparenting quality between the stepparent and the biological parent for the quality of the (step)parent-(step)child relationship and the predictive value of the quality of the (step)parent –(step)child relationship for the child's difficulties. Fifty-seven stepfamilies were included in the study. Both parents and stepparents fulfilled questionnaires assessing positive and negative coparenting behaviors (McHale, 1997), the quality of their relationship with the (step-)child (QCS, Beaudry et al., 2001) and children's difficulties (SDQ, Goodman, 1997). Using structural equation modeling (SEM), the model had a good fit (chi-square was not significant). The quality of coparenting was predictive of the quality of the relationship between the (step-)parent and the (step-)child (for parents  $\beta = 0.5$ ,  $p = .00$  ; for stepparents  $\beta = -0.25$ ,  $p = .02$ ). The quality of this relationship was in turn predictive of the child's difficulties (for parents  $\beta = 0.41$ ,  $p = .00$  ; for stepparents  $\beta = -0.38$ ,  $p = .00$ ). Previous researches on stepfamilies mainly focused on the impact of the relationship between the stepparent and the child to explain the child's difficulties. Our results underline that it is important to analyze the quality of the coparenting relationship for a better understanding of stepfamilies' challenges and especially for understanding the child's difficulties.

BOP25.4

### **DELIVERING A VIDEO FEEDBACK PARENTING PROGRAMME TO CO-PARENTS – THE POTENTIAL BENEFITS AND CHALLENGES OF WORKING WITH TWO CAREGIVERS**

**Stevens E.\*<sup>[2]</sup>, Iles J.<sup>[1]</sup>, Ramchandani P.<sup>[2]</sup>, O'Farrelly C.<sup>[2]</sup>**

*<sup>[1]</sup>Imperial College London & University of Surrey ~ London ~ United Kingdom, <sup>[2]</sup>Imperial College London ~ London ~ United Kingdom*

Recent research on early interventions with parents of infants at risk of externalising behaviour problems indicates that focusing on co-parenting and involving fathers in treatment may enhance effectiveness. Despite this, there are very few parenting interventions designed to work with both caregivers. This presentation draws from Healthy Start, Happy Start study, the largest randomised controlled trial to investigate the effectiveness of Video-feedback intervention to promote positive

parenting (VIPP) and is also the first study to test the effectiveness of VIPP with two parents (VIPP-Co). VIPP is a home-visiting programme aiming to enhance parental sensitivity by helping the parent to identify the child's signals and respond to them adequately and promptly. It includes specific strategies to help parents manage difficult moments and behaviours and aims to create a more positive cycle between the parent and child. In this study, 300 families of children at risk of behavioural difficulties (51 where there was a second caregiver taking part) were recruited into the study predominantly from NHS health visiting services and children's centres. Families were randomly allocated to receive VIPP or treatment as usual. This presentation will provide an overview of how the main elements of VIPP were adapted for the VIPP-Co manual for working with two caregivers. Video clips will be presented to illustrate how feedback is delivered to two parents and finally, the potential benefits and challenges of working with two parents are discussed in relation to clinical case studies and wider VIPP-Co delivery in the Healthy Start, Happy Start trial.

BOP25.5

### **GROUNDING THERAPEUTIC GAINS: COPARENTING-CENTERED INFANT-FAMILY MENTAL HEALTH WITH HIGH RISK FAMILIES**

**Negrini L.\*, Mchale J., Butler L., Malone J., Griner M.**

*University of South Florida St. Petersburg ~ St. Petersburg ~ United States of America*

Gathering evidence in the infant mental health literature demonstrates that targeting intergenerational transmission of faulty relationship patterns can alter cycles of adversity that negatively impact infants and toddlers. At the same time, failure to conceptualize problems in, and therapeutically strengthen, triangular and family-level dynamics within the child's broader family system can jeopardize and even undermine repair in infant-parent dyads. In the United States, USF St. Petersburg's Infant-Family Center (IFC), a new program of USFSP's Family Study Center, has for two years now been serving at-risk families from high poverty communities experiencing intergenerational trauma and toxic stress. The IFC's approach centers on trauma-responsive approaches that facilitate involvement of each child's coparents in family-level therapeutic supports and services: family-level assessment involving both dyadic and triadic assessments, dyadic therapies including Child-Parent Psychotherapy with multiple family dyads, often child-mother and child-father, Focused Coparenting Consultation involving concentrated efforts to develop coparenting alliances, and intergenerational family-level supports. This report details successes and challenges in early implementation of this multi-level approach. We present summary process and outcome data and individual case examples addressing child and family outcomes affected by this blend of family-level interventions, focusing on child social-emotional and behavioral indicators, parent-child relationship quality, family relationships and coparenting practices. Strategies for successful engagement in early phases of the work are identified, and we focus on clinician training, supervisory practices, treatment planning, challenges in soliciting and maintaining coparental engagement throughout the course of treatment, and key areas for growth identified following the first year of IFC outcome evaluations.

BOP25.6

### **THE TRANSITION INTO PARENTHOOD**

**Brandi D.\***

*Von Anfang an.e.V. ~ Hamburg, Germany ~ Germany*

The presentation examines how couples are assisted for expectating parenthood and if struggling in transition could be prevented by an early intervention during a parenting program. For this a new program "SAFE HAVEN" is designed to help make interactions more fulfilling and joyful. There is

a big interest in young people getting prepared for parenthood. Yet not many take place in a parenting program. By introducing a new parenting program in the city of Hamburg, Germany we researched on the needs of young people and their consciousness for the process of transition. As many relationships are not prepared to the challenges of parenting the burden and exhaustion can be overwhelming.

BOP25.7

### **CIRCLE OF SECURITY COS WITH FOSTER PARENTS WITHIN THE LONDON INFANT FAMILY TEAM (LIFT)**

**Nankivell L.<sup>[1]</sup>, Sanzone L.<sup>[2]</sup>, Lamb C.\*<sup>[3]</sup>**

*<sup>[1]</sup>Clinical psychologist ~ London ~ United Kingdom, <sup>[2]</sup>Social work practitioner ~ London ~ United Kingdom, <sup>[3]</sup>Consultant Child & Adolescent Psychiatrist | South London & Maudsley NHS Foundation Trust ~ London ~ United Kingdom*

The London Infant and Family Team (LIFT) targets the mental health needs of under 5 year olds in care proceedings, and provides assessments and interventions for infants, their parents and foster carers within the framework of the Family Court. LIFT offers the well evidenced Circle of Security programme (Powell, Cooper, Hoffman and Marvin). CoS is a relationship based intervention designed to enhance attachment between caregivers and children. The presentation describes an 8 week CoS group programme run for a groups of 8-10 foster parents. All carers can feel unsure about what a child might need from them at times. CoS distils decades of attachment research into an accessible step-by-step programme, enabling caregivers to better understand their child's emotional world (by learning to read their emotional needs) and support their child's ability to successfully manage emotions. This presentation reflects on the experience of facilitating an attachment based group for foster carers; supporting foster carers to become a network to each other; and building links with local foster carers working with LIFT cases. We illustrate how foster carers reflect on the needs of children, on how their own experiences impact on their ability to care for infants, and on the comfortable and uncomfortable aspects of parenting. The group sessions also facilitate reflections on being a foster carer, challenging the notion that foster carers "shouldn't get attached". The carers also provide their feedback of the group and learning on CoS principles.

### **Brief Oral Presentations BOP28 - INFANT REGULATORY AND FEEDING PROBLEMS**

BOP28.1

### **REFRAME PEDIATRIC FEEDING THROUGH AN INTERDISCIPLINARY LENS TO CREATE POSITIVE MEALTIMES**

**Park K.\*<sup>[2]</sup>, Trejo S.<sup>[1]</sup>**

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Feeding and eating are vital activities that provide nutrition in the life of a child. Mealtime offers opportunities for social connectedness, sharing of experiences and development of traditions within families and cultures. Children with special healthcare needs and chronic conditions are at greater risk for developing feeding disorders or disordered feeding patterns in early childhood. The feeding relationship between a parent and child can also be disrupted. This contributes to further challenges with family functioning, stress, and decreased quality of life for the entire family. Occupational therapists hold a unique perspective in understanding attitudes, family values and cultural components to provide a context for the mealtime experience as well as the skills to assess the oral motor and sensorimotor components of feeding. However, multiple interrelated factors need to be

considered. Maladaptive behaviors often exhibited can include oral sensory aversion, picky eating, feeding refusal, and disruptive behaviors during mealtime. Therefore, children with feeding challenges benefit most from a collaborative interdisciplinary process that encourages family participation, shared assessments and treatments and negotiated mutual goals. This presentation will describe REFRAME: a model to assess and provide intervention for feeding disorders, which incorporates trust within the parent child dyad, enjoyment, and cultural factors to promote positive mealtime experiences.

BOP28.2

### **THE FEEDING TUBE DEPENDENT INFANT-DEVELOPMENT OF THE SELF WITHIN THE CONTEXT OF MEDICAL TRAUMA, PERSISTENT ORAL AVERSION AND ARTIFICIAL FEEDING**

**Mader L.\***

*Perinatal and Infant Mental Health -Child and Adolescent Mental Health ~ Adelaide ~ Australia*

This paper will explore the development of the infant's representations of self within the context of tube-dependency. Persistent tube dependency will be discussed within the context of early disruptions to parent-infant mutual regulation. Artificial feeding through Naso-Gastric tubes or Percutaneous Gastrostomy has a valid place in the medical care of Infants. However, there is a well-documented risk of the development of Tube Dependency with associated oral food aversion, maladaptive feeding behaviours and spiralling parent-infant conflict and distress. Tube dependency can persist even under conditions of hunger, medical stability and sensitive, responsive care. This paper will explore the development of the infant's representations of self within the context of tube-dependency. The significance of early oral experience to the Infant's emerging sense of self-agency and to the experience of rewarding, shared affect and attention will be discussed. Therapeutic approaches will be presented which acknowledge and strengthen the role of parents as a psycho-biological regulator for the Infant. The Infant's capabilities and initiatives are honoured in a manner that allows for gentle reworking of the parents representations of their child, whilst easing parental anxieties and grief. The necessary integration of past experience with new possibilities requires an opportunity for the inner world of the infant to be expressed and accepted in the presence of others. The infant is kept at the centre of these approaches, guiding the pace of change. Clinical cases will be presented with video footage of infant-parent interactions, doll-play, group programs and parent interviews.

BOP28.3

### **A COMPARISON OF THE SENSORY PROFILES OF PARENTS AND THEIR CHILDREN AGED 0-3 YEARS OLD, WITH AND WITHOUT FEEDING DISORDER**

**Zivan O.\*<sup>[2]</sup>, Yochman A.<sup>[1]</sup>, Meiri G.<sup>[2]</sup>, Yerushalmy B.<sup>[3]</sup>, Atzaba--Poria N.<sup>[4]</sup>**

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During infancy, feeding is a mutual activity for child and parent (co-occupation); 25% of all children under the age of 6 years are diagnosed with some type of feeding disorder, with negative implications for parent-child interactions and general family functioning. One of the possible causes for a feeding disorder is sensory food aversion. Most of the research examining the relation between sensory modulation disorder and feeding has been conducted on children diagnosed with autism and focused solely on the sensory profile of the child, ignoring the need to evaluate the characteristics of both parent and child. To the best of our knowledge, our research is the first to compare the sensory profiles of parents and children (aged 7-35 months) with and without feeding disorders, using the new survey Sensory Profile 2 for these ages (Dunn, 2015). As we hypothesized,

sensory profiles of children with a feeding disorder were found clinically deficient (compared to the control group) in most of the patterns and subparts. Moreover, a higher rate of clinical deficit was found in children with a feeding disorder. However, no significant difference was found between the sensory profiles of parents; positive significant relations were found between the sensory profiles of the children and their mothers. A child with a feeding disorder and sensory sensitivity is more likely to have a mother with sensory avoidance patterns and/or sensory sensitivity. Furthermore, we found that a child's deficient sensory profile triggers a mother's concern for her child's feeding and weight. The findings of this research strengthen the importance of detection and early treatment (such as occupational therapy) for infants. The findings can also increase the awareness of the relation between difficulties regarding feeding and sensory modulation disorder and provide an appropriate answer to the sensory needs of the parent and child.

BOP28.4

#### **INFANT/TODDLER CRYING, SLEEPING, AND FEEDING PROBLEMS AND TRAJECTORIES OF ATTENTION PROBLEMS ACROSS ADULTHOOD**

**Bilgin A.\***, Baumann N., Wolke D.

*University of Warwick ~ Coventry ~ United Kingdom*

Infant regulatory problems have been associated with increased attention problems in childhood but it is yet to be determined whether this association continues until adulthood. This study was a prospective cohort study, which followed 342 individuals of the Bavarian Longitudinal Study from infancy to adulthood. Participants were enrolled from 1985 to 1986 and followed up to 2015. Participants were assessed for regulatory problems at 5, 20 and 56 months via standard parental interviews. Data on attention problems and ADHD diagnosis were collected at 6,8 years by parent report and 25-31 years by self-report. Attention span was assessed using expert behaviour observations both in childhood and adulthood. Eighty-three participants had multiple/persistent regulatory problems among which 49 (59%) had persistent and 34 (41%) had multiple regulatory problems. Infants/toddlers with multiple/persistent regulatory problems had more ADHD diagnosis both in childhood (6 years: OR= 2.34, 95% CI= 1.18-4.65; 8 years: OR= 2.10, 95% CI= 1.13-3.90) and adulthood (OR= 2.25, 95% CI= 1.11-4.53) compared to those who never had regulatory problems. We identified the following two attention problems trajectories: low attention problems (87.2%) and high-decreasing attention problems (12.8%); and the following two attention span trajectories: medium attention span (74%) and medium-increasing attention span (26%). Having multiple/persistent regulatory problems was associated with high-decreasing attention problems trajectory. Early multiple/persistent RPs predict stable attention problems trajectories from childhood to adulthood. Interventions for early RPs could prevent the development of attention problems.

BOP28.5

#### **INFANT REGULATORY PROBLEMS, PARENTING QUALITY AND CHILDHOOD ATTENTION PROBLEMS**

**Breeman L.D.\*<sup>[1]</sup>**, Jaekel J.<sup>[2]</sup>, Baumann N.<sup>[3]</sup>, Bartmann P.<sup>[4]</sup>, Bäuml J.<sup>[5]</sup>, Avram M.<sup>[5]</sup>, Sorg C.<sup>[5]</sup>, Wolke D.<sup>[3]</sup>

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Early regulatory problems (RPs) such as crying, sleeping or feeding problems are associated with later childhood attention problems. Research examining the combined impact of multiple/persistent RPs and early parenting quality on attention problems is scarce. The aim of this large prospective cohort study was to examine the combined effects of early multiple/persistent RPs and parenting quality on childhood attention problems assessed by multiple informants. In the Bavarian Longitudinal Study, 1495 infants were followed from birth to 8 years of age. Parenting quality including parent-infant relationships were assessed at birth and 5 months, RPs were assessed at 5 and 20 months, and childhood data on attention problems were collected at 8 years, using parent reports and expert behaviour observations. Hierarchical linear regression analyses were conducted and final model results were corrected for gestational age, sex and family socioeconomic status. After correction for confounders, early RPs ( $\beta_{RPs} = .090$ ,  $p = .006$ ) and parenting quality ( $\beta_{parenting} = .120$ ,  $p = <.001$ ) were related to later attention problems. When the interaction effect of RPs and parenting was included in the model, results showed that infants who had both multiple/persistent RPs and poor parenting quality were disproportionately more likely to show attention problems at age 8 years ( $\beta_{RPs} = .031$ ,  $p = .46$ ;  $\beta_{parenting} = .087$ ,  $p = .016$ ;  $\beta_{RPs*parenting} = .106$ ,  $p = .021$ ). Early guidance and support for parents of infants with multiple/persistent crying, sleeping or feeding problems may be essential to prevent the development of later childhood attention problems.

BOP28.6

#### **CAREGIVER INTERACTIONS DURING DIAPERING: ASSOCIATIONS WITH CHILD WELL-BEING AND INVOLVEMENT**

**Laurin D.\***

*Eastern Michigan University ~ Ypsilanti ~ United States of America*

Diapering is a frequently occurring care routine in infant and toddler programs. Individual care routines are important indicators of process quality in the professional literature, yet information highlighting dimensions and specific processes is lacking. Diapering practices are often hurried, on average three minutes in length, (Laurin, 2015, 2017). When filtered through the adult's caring, protective presence diaper changing is a key opportunity for a child to have an inner experience of what being cared-for is. It is through the day-to-day experiences of being- cared-for that the capacity to care for others is learned (Noddings, 1984). Thus, a primary aim of this study was to provide information about specific caregiver interactions and child well-being and involvement during diapering in infant and toddler group care settings. Two standardized tools measuring caregiver affection, responsiveness, encouragement, and teaching, and child well-being and involvement were used. Observations of 226 classroom diaper changes by 49 caregivers, with 113 infants' and toddlers' 3-37 months of age, 2-timed diapering cycles per child, in 30 infant and toddler classrooms in a Midwest US city across 4.5 month period. Caregiver responsiveness and encouragement strongly predicted child well-being and involvement with significant differences across caregiver roles. Results indicated males were significantly lower in well-being than females. A significant predictor of gender differences in child well-being was associated with caregiver roles. Suggests caregiver interactions are linked to child outcomes and contributes important information about an understudied routine in infant and toddler childcare settings. Important questions about early interactions with male and female infants' and toddlers' and interactions that vary across caregiver roles. Implications for professional development with home visit practitioners, parents, early interventionists, infant mental health, nursing, medical, and social work professionals is addressed.

BOP28.7

**PARENTAL STRESS AND SENSORY INTEGRATION DISORDER AS RISK FACTORS FOR POOR NUTRITION EATING DISORDERS AND GROWTH DELAY AMONG TODDLERS**

**Hertz P.\*<sup>[1]</sup>, Samish S.<sup>[2]</sup>**

<sup>[1]</sup>psychologist ~ Jerusalem ~ Israel, <sup>[2]</sup>M.Sc, R. D. ~ Jerusalem ~ Israel

Selective eating among toddlers is a well-known phenomena which is characterized by varied factors including nutritional deficits and a unique and challenging sensory profile. Our clinical experience in a multidisciplinary feeding and eating clinic, in Hadassah medical center of Jerusalem binds specific eating patterns with parental stress level. Parental stress is combined by parental general approach of satisfaction, quality of interaction with child and child's temperament, as perceived by parent. Our cross-sectional research includes thirty parents and children, referring the clinic due to selective eating and suspected sensory integration disorder. Our study includes a nutritional assessment, questionnaires testing parental stress (PSI-4) and sensory integration (Toddler sensory Profile-2) and anthropometric indices. Our study's results are relevant for GP's working in the community, who address diagnosis like ASD, ADHD and learning disabilities that interface with domains of parental stress and experience of parenting interaction and child temperament, as well as sensory integration and limited eating and nutrition. Research results are significant in the field of locating babies and families needing intervention and as a base of promoting intervention programs of prevention and treatment. It is important to apply suitable intervention programs based on a reflective manner about eating and feeding relations, in family and cultural context.

BOP28.8

**MEALTIME DYNAMICS: A COMPARISON BETWEEN MOTHER-INFANT INTERACTION AND DAYCARE CAREGIVER-INFANT INTERACTION AT MEALTIME**

**Sharfstein Y.\*<sup>[2]</sup>, Dolev S.<sup>[1]</sup>**

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Infant feeding is a meaningful daily interaction that helps shape the infant-caregiver relationship. A quality feeding process entails caregivers' sensitive response to the infants' attempts at communication. Unsuitable caregiver behavior during mealtime has been linked to selective eating and behavioral difficulties during mealtime (Williams et al., 2008), as well as to feeding difficulties during infancy, which, in-turn, increase the risk of future eating and anxiety disorders (Ammaniti et al., 2012). Only 25% of daycare-caregivers were found to react sensitively towards infants, and this percentage was even lower during feeding (Degotardi, 2010). The current study compares the emotional availability during mealtime of daycare-caregivers and infants with that of the infants and their mothers. The study population consisted of 20 babies, 20 mothers, and six daycare-caregivers. Two meals were videotaped with each infant: one with the mother and one with a daycare-caregiver. Each meal interaction was assessed using the Emotional Availability at Mealtime (EAM) Scales – an assessment based on Biringen, Robinson & Emde's (1998) Emotional Availability Scales. EAM Scales (sensitivity, structuring, non-intrusiveness, non-hostility, and infant responsiveness and involvement of the caregiver) examine the behavior and communication of the partners in the dyad and their impact on eating behavior. Infant responsiveness and involvement were found to be higher during feedings with the mother compared to feedings with the daycare-caregiver, suggesting that at mealtime mothers create a more conducive environment for mutual interaction with their infants. The study highlights the importance of examining the caregiver-infant mealtime

interaction. Future research should focus on improving mealtime Emotional Availability for both mothers and daycare-caregivers, using a video-based intervention program that supports caregivers' understanding of infants' attempts at involvement and their reactions to caregivers' initiatives at mealtime.

## **Brief Oral Presentations BOP31 - BUILDING INFANT MENTAL HEALTH SERVICES**

### **BOP31.1**

#### **INFANTS AND SLEEP: LOOKING AT MATERNAL SENSITIVITY, DEPRESSION, ANXIETY AND STRESS**

**Middlemiss W.\*<sup>[1]</sup>, Stevens H.<sup>[2]</sup>, Ridgway L.<sup>[3]</sup>, Mcdonald S.<sup>[3]</sup>, Lopez M.<sup>[1]</sup>**

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Mothers seeking support with infant sleep often present with depression, anxiety, or stress. For practitioners providing support, understanding how symptomatology is related to sensitivity of mothers' interactions and hours of infant sleep may be important. This presentation explores the relation between these variables for mother-infant dyads presenting at a residential infant sleep program. Materials and Methods: Participants were mothers and infants (4 to 10 months old) attending a residential infant sleep program encouraging responsiveness to infants' sleep cues (Ethics Approval received). Measures of infants total sleep time, mother and infant cortisol levels, and mothers' depression, anxiety, and stress (DASS21) were collected. Mothers' sensitivity with infants was observed and rated (Ainsworth). Results: At time of admission, mothers with severe or greater symptomatology for anxiety (DASS anxiety score  $\geq 10$ ,  $n = 23$ ) and stress (DASS stress score  $\geq 19$ ,  $n=16$ ) received statistically significantly lower ratings of observed sensitivity (sensitivity scores: 27.9 and 27.6 of 36, for anxiety and stress respectively) in comparison to mothers who had moderate to no symptomatology for anxiety ( $n = 10$ ; score 31.8;  $t(31) = -2.40$ ,  $p = .02$ ) or stress ( $n=15$ , score 30.9,  $t(31) = -2.14$ ,  $p = .05$ ). Maternal adaptation and maternal initiating were statistically significantly lower for mothers with severe or higher anxiety; maternal adaptation, interaction, and initiating were significantly lower for mothers with severe or higher stress. Conclusion: Along with additional analyses, implications for anxiety and stress as related to maternal sensitivity will be examined.

### **BOP31.2**

#### **PARENTS' PERSPECTIVES OF INFANT MENTAL HEALTH ASSESSMENTS**

**Doherty M.\*, Lam M., Nalden W., Winlove A., Wilson S.**

*Kari Centre, ADHB ~ Auckland ~ New Zealand*

The paramount importance of building an alliance with families undergoing an infant mental health assessment is well known; the potential for this process to be therapeutic has been advocated by a number of writers. The components of a comprehensive infant mental health assessment (developmental history, clinical interviews around presenting problems and family of origin, structured observations of parent – child interactions, formulation and feedback) have been well documented in the literature. What appears to be minimally addressed is the perspective of parents and caregivers undergoing this comprehensive process. Our Infant Mental Health service carried out a qualitative study to identify what elements engaged families and felt therapeutic and what aspects may hinder this process. Recorded semi-structured interviews asked parents and families about their experience throughout the assessment, which were then analyzed thematically. Thematic analysis of the filmed interviews demonstrated that some aspects of our approach were experienced as engaging and/or therapeutic and, in some instances, assisted families to shift their

perspective on the presenting difficulties, even prior to intervention commencing. These themes included “getting to know the whole story”, “slowing down”, “therapeutic holding” and including fathers. Aspects families highlighted as more challenging or possibly hindering the therapeutic alliance included: the length of the process, their expectation of more immediate practical solutions and/or strategies and the emotional impact of talking about parents’/caregivers’ own histories. Excerpts of the recordings illustrate these themes. Hearing directly from families about the experience of the assessment process has enabled us to reflect on, consolidate and change a number of aspects of our practice – especially around acknowledging the impact of the process on families and how best to frame and explain the assessment and its rationale. It has also strengthened our commitment to including fathers/partners and sometimes wider family in the process.

BOP31.3

### **HOW TO BUILD A 0-6 MENTAL HEALTH PROGRAM**

**Matheson K.\*<sup>[1]</sup>, Vloet M.<sup>[2]</sup>**

*<sup>[1]</sup>University of Ottawa ~ Ottawa ~ Canada, <sup>[2]</sup>Childrens Hospital of Eastern Ontario ~ Ottawa ~ Canada*

Research has consistently demonstrated that the first six years of a child’s life are vital. The brain grows and changes significantly, and is influenced considerably by the child’s attachment to caregiver(s). Given the impact of early childhood experience on lifelong mental health and well-being, it’s important to have mental health services that address specific needs of infants and young children (ages 0-6 years). Investigators conducted a multistage study of mental health service delivery for the infant and early childhood population in Ottawa, Ontario, Canada. The purpose of this needs assessment evaluation was to identify current services as well as gaps in mental health delivery for children 0-6 years of age and their families in the Ottawa. Researchers at the Children’s Hospital of Ontario (CHEO) first conducted a qualitative environmental scan of community and hospital based services in the Ottawa, Canada community. An estimation model based on population statistics was undertaken to help identify the level of need for tertiary care intervention within the catchment served by the CHEO. Finally, the formal needs assessment was conducted with the goals of 1) gathering information about the needs of the 0-6 age group who require tertiary level intervention in the Ottawa community, in order to facilitate the potential development of a hospital-based infant and early childhood mental health service at CHEO 2) identifying anticipated barriers to accessing such a service and 3) gaining an understanding of the specific needs from within CHEO and within the larger Ottawa community. Mixed methods survey and qualitative focus group data was obtained. The environmental scan revealed available services in the area were focused on the prevention/early intervention level tier of healthcare, followed by promotion-based services with an absence of tertiary level services. Needs assessment qualitative analysis using a thematic approach also revealed that 1) community-level service providers frequently cited the need for improved collaboration with tertiary care and primary care providers and 2) surveillance indicators in regard to the state of infant and child mental health in Ottawa are notably absent. This presentation will highlight the operationalization of a 0-6 mental health service model in a large Canadian city.

BOP31.4

### **FEASIBILITY STUDY FOR A GENERAL PRACTICE-BASED CLUSTER-RANDOMISED TRIAL OF THE IMPACT OF THE RESILIENCE PROGRAMME (RP – ROBUSTHED.DK) ON EARLY CHILD DEVELOPMENT**

**Wilson P.\*<sup>[1]</sup>, Kragstrup J.<sup>[2]</sup>, Graungaard A.<sup>[3]</sup>, Lykke K.<sup>[3]</sup>, Overbeck G.<sup>[3]</sup>, Ertmann R.<sup>[3]</sup>, Væver M.<sup>[4]</sup>, Thompson L.<sup>[5]</sup>, Gillberg C.<sup>[6]</sup>**

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We report a pilot study to inform the implementation of a complex randomized controlled trial in Danish general medical practice of the web-based Resilience Programme (Robusthed.dk, RP) for pregnant women and families with small children. In Denmark a high proportion of child health surveillance and antenatal care is delivered by general practitioners (GPs). We hypothesise that RP can reduce stress in exposed families before birth and increase sensitivity to the needs of the young child. We further hypothesise that RP will improve social, emotional and language development at 30 months (primary outcome in the randomized study). We plan to assess the feasibility and reliability of rapid GP assessments of parental mental health, of the quality of parent-child interaction and of child neurodevelopment as well as the uptake and use of RP among families who could benefit from the intervention. We also aim to optimise the RP intervention for use among young families. Ten GPs have been trained in rapid structured assessments of parental mental health, in the assessment of parent-child interaction using the Child-Adult Relationship Observation (CARO) system and in a rapid standardised assessment of child neurodevelopment at 5 weeks, 5 months, 1 and 2 years old. These assessments will be implemented and reliability assessed using video-recorded consultations involving scheduled health checks with 100 patients. Data will be presented on the implementation and reliability of the standardised health checks during pregnancy and infancy, on the extent to which GPs recommend RP interventions to families in greatest need, and on the uptake of RP among patients. The feasibility of a unique large scale randomised trial based in Danish general practice, aiming to improve infant mental health will be described.

BOP31.5

#### **SUSTAINABILITY AND EFFICACY OF A NATIONAL PERINATAL AND INFANT MENTAL HEALTH SERVICE IN A CLIMATE OF CHANGE**

**Priestly L.\*<sup>[1]</sup>, Barnett B.<sup>[2]</sup>**

<sup>[1]</sup>Raphael Service ~ Perth ~ Australia, <sup>[2]</sup>Raphael Service Blacktown ~ Sydney ~ Australia

The Raphael Services in Australia are a national, secondary, specialised mental health service providing community-based care for families from pre-conception to when children are 4 years of age. We are based in 3 states across Australia and have been in the midst of service delivery change over several years. My presentation will summarise the vision of the service operating in accordance with the mission of a National Catholic Private Health Organisation. I will describe the model of care and strategic vision. I will comment on the challenges of implementing that vision in an Australian setting and the organisational change occurring to address the challenges. I hope to illustrate the model with a clinical case, focusing on the attachment basis of our model, e.g. including the Adult Attachment Interview and the Circle of Security in our clinical work.

BOP31.6

#### **THE FINNISH FAMILY CENTRE SERVICE MODEL**

**Hastrup A.\*<sup>[1]</sup>, Pelkonen M.<sup>[2]</sup>, Bildjuschkin K.<sup>[1]</sup>, Normia--Ahlsten L.<sup>[1]</sup>**

<sup>[1]</sup>National Institute for Health and Welfare ~ Helsinki ~ Finland, <sup>[2]</sup>Ministry of Social Affairs and Health ~ Helsinki ~ Finland

The aim of the presentation is to describe the Finnish Family Centre Service Model. A family centre combines in a new way the basic level health, social, and early education services for families with children, as well as the services provided by non-governmental organizations. A family centre offers help and support to families close to their everyday life on a low threshold, appropriate timing, and on the basis of families' needs. A family centre aims at building child and family-oriented services that foster the wellbeing and health, including the mental health, of children and families. At the same time, the aim is to identify as early as possible the cumulative health and welfare risks and to offer help quickly and when necessary. The contents of the presentation include the goals of the family centre model, national guidelines and implementation support guiding the development process in the forthcoming regions, and a description of the present phase of development of family centres. The national guidelines include a description of the essential tasks and the minimum services of the service network of the centre. In order to combine the competencies of several professionals and service sectors to support the everyday life of families, the cooperation and coordination for providing services in the centres must be smooth and fluent. In addition, family centres in the regions must have functional cooperation structures and coordination and management practices.

### **Workshop WS60 - INTENTIONAL PRACTICE FOR POSITIVE CHANGE: MINDFULNESS SUPPORTS DIVERSITY, INCLUSION AND EQUITY PRACTICES IN PARTNERSHIP WITH THE DIVERSITY-INFORMED INFANT MENTAL HEALTH TENETS**

**Shahmoon--Shanok R.\*<sup>[1]</sup>, Kandace T.<sup>[2]</sup>**

*<sup>[1]</sup>Center for Attachment Research, New School for Social Research, ~ New York, NY ~ United States of America, <sup>[2]</sup>Irving Harris Foundation ~ Chicago, IL ~ United States of America*

Similar to and enhanced by the practice of mindfulness, it takes personal commitment, conscious effort, and intentional resource allocation to implement diversity, inclusion and equity principles into our spheres of practice. In societies within which markers of difference including race, the class, gender, sexual orientation, ability and immigration status are fraught with conflict, chances are that if diversity and inclusion are not addressed deliberately, historical injustices will continue to be recapitulated in daily experiences. Using exercises, lecture and discussion, the workshop introduces participants to the Tenets via mindfulness practice grounded in self-regulation and compassion. The session will enlarge awareness about both non-dominant and dominant ways of experiencing life. As meditation is to mindfulness, the Tenets are useful to the extent that they are practiced. Developing awareness and making change within ourselves, our groups and our organizations requires relationship, reflection, patience, perseverance, safety-making and risk-taking. Mindfulness supports present-moment awareness and intentional action. Taken together, mindfulness and the Tenets buttress self-knowledge, reflective practice and intentional action in our quest to foster diversity, inclusion and equity practice in our work with infants, and toddlers and parents. Like a silent yet powerful eagle, mindfulness helps lift and carry the long, arduous effort of opening minds and hearts to differences. Repeatedly returning to mindfulness enhances conjoined, compassionate aspirations and supports the balance needed to do our work across chasms of inexperience with "the other".

### **Workshop WS61 - A TOOL TO PROMOTE SOCIAL JUSTICE AND DIVERSITY-INFORMED PRACTICE IN FAMILY-SERVING AGENCIES**

**Frankel K.\*<sup>[1]</sup>, Kandace T.<sup>[2]</sup>, Noroña C.R.<sup>[3]</sup>**

*<sup>[1]</sup>UCSOM ~ Denver ~ United States of America, <sup>[2]</sup>Harris Foundation ~ Chicago ~ United States of America, <sup>[3]</sup>Boston Medical Center ~ Boston ~ United States of America*

In a world in which race, class, gender, sexual orientation, disability status, immigration status, and others can be fraught with conflict and saturated with historical trauma, these forces are also at play within our agencies and organizations. Chances are that if diversity, inclusion and equity are not deliberately addressed, oppression will be played out (covertly and overtly) in ways that may replicate injurious patterns or reproduce historical injustices for the infants, toddlers and families in our care. It takes commitment, conscious effort, and intentional resource allocation to implement diversity, inclusion and equity principles in organizations. Many argue they do not know where to start. This workshop will present The Diversity-Informed Infant Mental Health Tenets (Tenets) as a tool and a resource to promote diversity informed, reflective practice. The Tenets are designed to raise awareness of inequities and injustices by empowering individuals, agencies and systems of care to identify and address social justice issues intricately intertwined with infant mental health work. An overview of each Tenet will be provided. Participants will partake in an organizational assessment to examine their organization's readiness for Tenets implementation. The workshop will include a discussion of specific strategies for operationalizing the Tenets within systems of care. It will introduce the "Tenets Toolkit" which is available to support use of the Tenets within agencies/organizations. Participants will identify leverage points and develop action plans for furthering diversity and inclusion in their own practice and that of their organization.

### **Workshop WS66 - INTEGRATED IMH, DEVELOPMENTAL AND PARENT MEDIATED INTERVENTION OFFER BEST PRACTICE IN TREATING ASD AND OTHER DEVELOPMENTAL DIFFERENCES IN TODDLERS**

**Wieder S.\*, Delahooke M.**

*Profectum Foundation ~ LA ~ United States of America*

Emphasis will be given to the hierarchical processes of development tailored to Individual differences in affective, language, motor, sensory and cognitive systems in both the parent and child and how these dynamically influence their relationship, deeply affecting social and emotional development as well as the child's responses to treatment. This workshop will integrate best practice principles gleaned from IMH and current developmental science in treating ASD. The presenters will report on evidence-supported parent mediated interventions, including the DIR-FCD model, that utilizes caregiver/child relationship based interactions tailored to their individual differences. Videos and case studies will illustrate the importance of calibrating and synchronizing interactions to support all aspects of parent mediated interventions where relationships lay life long foundations for relating, communicating and learning, the core deficits of autism, and produce sustainable outcomes. The DIR Model by Greenspan & Wieder (1988, 2006) bridges the worlds of developmental intervention and IMH. DIR defines the developmental processes necessary for self-regulation, symbolic and emotional capacities through the relationship based intervention long established within IMH. Together they promote social-emotional development and utilize reflective practice. Developmental science is shifting away from behavioral reductionism to a relational developmental perspective, with its emphasis on mutually influencing components in dynamic change patterns over time (Aldwin 2014). The DIR Model integrated IMH and pioneered just such an approach.

### **Brief Oral Presentations BOP34 - WORKING WITH FATHERS**

BOP34.1

**PATTERNS OF DEPRESSIVE SYMPTOMS AND ANGER IN MEN AT THE PEAK AGE FOR ENTERING FATHERHOOD: ASSOCIATIONS WITH POSTPARTUM PATERNAL-INFANT BONDING**

**Macdonald J.\*, Harrison T., Youssef G., Di Manno L.**

In past research, anger has been linked to depressive symptoms in men. For postpartum fathers specifically, co-existing symptoms potentially fuel a volatile caregiving environment that compounds socio-emotional risk for the developing infant. Participants (N=666; 35% fathers) were from the Men and Parenting Pathways (MAPP) Study, an Australian longitudinal study of men (28-32 years), approaching the peak age for fatherhood (33 years). Data were from Wave 1. Depressive and anger symptoms were assessed with the DASS-21 and STAXI-2 State Anger feelings, verbal expression, and physical expression subscales. Profiles were identified using Latent Class Analysis. Class membership was then assessed as a predictor of paternity status. In men with infants  $\leq 12$  months (n=75), class membership was also assessed as a predictor of scores on the Paternal Postpartum Attachment Scale. Four profiles of men were identified: 1) Healthy (47.8%); 2) Mild Depressed/Mild Angry Feelings (29.2%); 3) Severe Depressed/Generalised Anger (15.8%); and, 4) Severe Depressed/Antisocial (7.2%). Compared to the Healthy men, those with Mild symptoms had increased odds of being a biological father (OR=1.99, 95% CI 1.36-2.91), or step or adoptive father (OR=7.11, 95% CI 2.34-21.62). Compared to men with Healthy and Severe Depressive/Generalised Anger profiles, Depressive/Antisocial men had significantly poorer bonds with their infant children. Elevated anger and depressive symptoms at the mild level are associated with fatherhood. Additionally, severe co-occurring postpartum feelings of anger and depressive symptoms are linked to impaired paternal-infant bonding. Further examination of longitudinal risks for fathers and subsequent risks for infants is warranted.

BOP34.2

#### **TEXT MESSAGING KENYAN FATHERS IN THE PERINATAL PERIOD TO IMPROVE MATERNAL HEALTH AND INFANT DEVELOPMENT**

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Improving maternal care and infant survival, growth and development in low to middle-income countries (LMIC) are global health priorities. Interventions including responsive parenting have demonstrated moderate to large effect sizes in improving cognitive and socioemotional development and early growth and nutrition. However, until recently, studies have focused on mothers and the potential of fathers to improve maternal and infant outcomes has not been examined and included in LMIC interventions even though fathers' role in family decisions influencing maternal care and infant nutrition have been recognised. A difficulty to date has been the resource implications for services in reaching out to fathers and the reluctance of fathers to attend face-to-face programs during the perinatal period. The widespread use of mobile phones in LMIC presents an opportunity to communicate with fathers over the perinatal period to influence their understanding and engagement in the care for mothers and the developmental needs of infants and young children. The evidence-based, theory-informed mHealth intervention, SMS4dads, piloted in Australia, will be adapted for Kenyan fathers and delivered through local SMS providers supported by Kenya-based clinicians and researchers. SMS4dads messages supporting father-infant engagement, co-parenting, and maternal and paternal mental health will be adapted to include fathers' support for maternal care services and optimal home care practices through an iterative process of message development and participatory workshops with Kenyan fathers and mothers. A randomized controlled trial will test the intervention. A bank of messages suitable for Kenyan fathers will be developed and tested for acceptability and effectiveness assessed against infant

development measures at 6 months after birth. Father-focused mHealth interventions may help improve LMIC maternal and infant health.

BOP34.3

**A SIGN OF SUCCESSFUL LONG-TERM, FATHER-CHILD ADAPTATION? IMPROVED SYNCHRONY BETWEEN FATHERS RATINGS OF PRETERM-CHILDREN'S BEHAVIOR-PROBLEMS AND OWN PARENTING STRESS ACROSS CHILDHOOD.**

**Landsem I.P.\*<sup>[1]</sup>, Handegård B.H.<sup>[2]</sup>, Wang C.E.A.<sup>[2]</sup>, Tunby J.<sup>[2]</sup>, Stein Erik U.<sup>[2]</sup>, Rønning J.A.<sup>[2]</sup>**

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The Tromsø Intervention Study on Preterms(TISP) has in line with the earlier well-known “Vermont-study” documented positive, long-lasting results for preterm born children (preterms) and their parents after implementation of the Mother-Infant Transaction Program (MITP) until children's age of nine (Landsem et al.,2014 & 2015). This presentation focus on how the MITP-intervention may have affected parents’ long-term adaptation to their children, assessed as longitudinal associations between repeated ratings of child-behavior-problems and parenting stress. Families with preterm-born children (birth-weight<2000g) were randomized, either to MITP- (PI, n=72) or a preterm control group (PC, n=74) while staying in the NICU, approximately at GA 32. The PI-group received a modified-version of MITP consisting of 12 one-hour sessions (8 the last week before discharge and 4 home-visits the first 3 month), while the PC-group got standard information and support. This study uses measures of child-behavior problems (Child-Behavior Check-List, CBCL) and parenting stress (Parenting-stress-index, PSI), rated by mothers and fathers separately. Previous reports from TISP documents possible intervention-effects on children’s internalizing, attentional and social behavior, thus longitudinal associations between these behaviors and main dimensions of parenting stress (child-, parent- and relation-related stress) have been analyzed in longitudinal models (SPSS, LMM) testing effects of time, stress, group and interactions between these variables. Significant three-way-interactions between time, child-related-stress and group appears in fathers reports of internalizing behavior (2-9 years), and between time, group and parent- and relation-related parenting stress on social behavior (5-9 years). These seem to appear because PI-fathers are more sensitive to internalizing behavior than PC-fathers at children’s age of two, while internalizing-behavior at nine years associates stronger with stress in PC-fathers than PI-fathers. In relation to social behavior, associations grow from five to nine among PI-fathers while decreasing among PC-fathers. Quantitative and qualitative analyses indicate more synchronous reports of behavior and stress among PI-fathers than PC-fathers.

BOP34.4

**CLINICAL CHARACTERISTICS OF PATERNITY DURING PREGNANCY**

**Perelman O.\*, Bydlowski S., Missonnier S.**

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The psychological process of becoming parent during pregnancy is critical and each future parent undergoes psychic and identity changes. These rearrangements depend on early childhood history and have their clinical characteristics on the side of the man. Future fathers go through an updating of their first identificatory processes such as psychic bisexuality, admitting the condensation of masculine/feminine and active/passive positions. Thus, pregnancy is a favorable period to observe fathers reenact narcissist wounds experienced in early childhood, especially the distinction between the sexes. The awareness of their impossibility to carry children would make them relive a

castration. The present study aims at exploring men's psychological transition to fatherhood using the obstetrical ultrasound as an observational framework. Our hypothesis is that fathers, during pregnancy, would deploy a double rivalry, archaic and oedipal, through references to past psychic problems. Participants were ten French men expecting a child for the first time, aged between 27 and 38 years (M = 32,6), and attended quarterly ultrasounds (3rd, 5th and 7th month pregnancy). The research protocol included: 1) the realization of a projective drawing of the image they saw on the monitor and their family tree, 2) a semi-structured Interview for Paternal Representations during Pregnancy (IRPAG, Ammaniti, 1999) at the 7th month, for categorizing the paternal representations, 3) the repeated scoring of self-questionnaires measuring depression and anxiety, adapted to pregnancy (EPDS & STAI) 4) and the use of projective tests (Rorschach, TAT) at the 6th month pregnancy, offering precious informations regarding oedipal and pre-oedipal conflicts. Preliminary results point out links between fathers' psychic elaboration of the rivalry and paternal representations (of the unborn child, themselves as fathers, parents as grandparents), and the perception of the ultrasound image. We will illustrate our results, research problematic and hypotheses through several clinical examples.

BOP34.5

### **THE FAN AND FATHERS: EXAMINING THE FLOW OF THERAPEUTIC ENGAGEMENT WITH FATHERS OF FUSSY BABIES**

**Isarowong N.\***

*Erikson Institute ~ Chicago ~ United States of America*

The FAN (Facilitating Attuned Interactions) approach was developed at Erikson Institute by Linda Gilkerson, PhD as a process-oriented communication and engagement tool for Fussy Baby Network (FBN), a home visiting program for families of infants under one year. FAN theory of change posits that attunement, defined as an individual's sense of feeling connected and understood, opens the space for change. Professionals utilize the FAN approach's five core processes to guide their engagement and attunement with parents, led by parents' immediate concerns and their engagement cues while attending to the professionals' own internal affective state. While more research is on mothers, fathers of fussy babies experience a higher risk for parenting stress, anxiety, and depression. Research suggests that the risk is more dependent on whether parents experience their infants' crying as problematic than on the actual amount of crying. FAN is sensitively attuned to parents' internal experience of their babies and parenting. This study is an initial exploration of the flow of FAN-based home visits with fathers present. We consider: How do men — fathers — respond to interventions which are designed to explore and validate feelings, build upon their own capacities rather than offering a fix, and value their own insights? We utilize the FAN core processes as conceptual markers to track the flow of engagement and a modified FAN Post-Contact Reflection Tool completed by home visitors for data collection. This presentation will share findings on the professional's perceived flow of father engagement: which core processes were used and in what order, what cues signaled the home visitor to use the process, and an analysis of match/mismatches and repairs in the father-home visitor interactions. Lessons learned from this study will refine the FAN approach for attunement with fathers and inform other home visiting programs on deepening FAN engagement with fathers.

BOP34.6

### **FATHER-INFANT INVOLVEMENT IN EARLY INFANCY: CONTRIBUTIONS TO BEHAVIOURAL OUTCOMES AT 24 MONTHS FROM A LONGITUDINAL UK STUDY**

**Lancaster R.\*, Barker B., O'Farrelly C., Ramchandani P.**

*Imperial College London ~ London ~ United Kingdom*

Fathers' involvement in early childcare has become a focus of increasing interest. Low levels of parental involvement are associated with the display of internalising and externalising behaviours in young children. This study is an exploration of fathers' involvement in early childcare, looking at the characteristics of their involvement and examining associations between paternal involvement and later child behaviour. This includes an exploration of associations between the father's reported involvement and maternal report of father's involvement across time and any effect of gender or birth order. Father involvement was measured using a 5-item questionnaire adapted from the Early Childhood Longitudinal Study - Birth Cohort (ECLS-B; Amdreassen, Fletcher & West, 2005) assessed at 3 months and 12 months post-partum. At 24 months, the Child Behaviour Checklist (CBCL) was used to measure externalising and internalising behaviours. Fathers reported higher scores than mothers about their own involvement, although the fathers' and mothers' reports were positively correlated. There was a positive correlation between the fathers' engagement scores at 3 months and at 1 year. Fathers' involvement was higher with male infants. It decreased with increasing birth order of the child. There was a positive correlation found between fathers' engagement and child CBCL scores ( $r = .198, p < .05$ ), which was found to be robust when the 3 month and 1 year involvement measures were combined. The results indicate that fathers' involvement, even in early infancy (i.e., 3 months), may influence behavioural outcomes in children. Public health policies looking to promote health in children should include a focus on the involvement of fathers in the early years.

BOP34.7

**THE IMPORTANCE OF THE PERCEIVED FATHER-ROLE FOR PARENTAL STRESS: TAKING PARENTAL LEAVE AND PERCEIVING THEMSELVES AS AN EDUCATOR REDUCES PARENTAL STRESS IN FATHERS**

**Smoydzin L.F.<sup>[1]</sup>, Rütter J.N.<sup>[1]</sup>, Fiedler S.<sup>[2]</sup>, Krüger N.<sup>[1]</sup>, Smoydzin L.F.\*<sup>[1]</sup>**

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Having to provide for the family as well as serving as an educator for their children can lead to increased parental stress in fathers. Our aim was to investigate differences in parental stress between fathers who did and those who did not take parental leave. It was furthermore explored whether these differences were influenced by the father's perceived roles as either the "provider" or the "educator". 289 fathers living in Germany participated in an online survey, of which 153 took parental leave. The mean age was 35.2 years. On average, the fathers had 1.6 children. All fathers completed the Eltern-Belastungs-Inventar (EBI, the German version of the Parental Stress Index from Abidin) and provided socio-economic data. Fathers taking parental leave did not differ significantly from those who did not regarding their level of education and the completion of vocational training. However, fathers who described themselves as a provider differed significantly from those who described themselves as an educator or as both educators and providers. There was a significant interaction found with taking parental leave. Fathers who took parental leave while describing themselves as an educator reported the least parental stress compared to fathers who did not take parental leave or who described themselves as providers or as both. Parental leave offers fathers the chance to focus on building an emotional bond with their child and on learning how to take care of it without being torn between the demands of the job and the demands of the family. Reducing parental stress in fathers is beneficial for the child's development and the welfare of the parents and should thus be further examined.

[Symposium S87 - PARENTING INTERACTIONS AND CHILDREN OUTCOMES: RESULTS FROM CHILE, CHINA, SPAIN AND USA](#)

**Farkas C.\*<sup>[1]</sup>, Rivero Garcia M.M.<sup>[2]</sup>, Innocenti M.<sup>[3]</sup>**

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Introduction: Research has demonstrated that differences in early parenting are related to children's development, and later social and academic achievements. Many researchers study the effect of parenting behaviors on infants and toddlers and their relationship with children's positive developmental outcomes (Bradley et al., 1994; Collins et al., 2000). This is relevant for developing research-based interventions and measures to guide our practices. Some research suggests aspects of mothering are consistent across cultures while other research highlights cultural variations. Although certain competences are present in all parents, they may manifest differently in different cultures, and possibly influence children outcomes in different ways. Global changes also influence parent beliefs, parenting interactions and developmental expectations. Studies of parent-child interactions using the same measurement tool in different cultures are needed to generate knowledge that will inform culturally-sensitive intervention practices. Aims: To present mothers' parenting interactions (and some father data) and its relationship with infants' and toddlers' developmental outcomes, considering similarities and differences in four countries: Chile, China, Spain and USA. Methods: All the studies used adapted versions of the Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO, Roggman et al., 2013) measure. For children outcomes, different instruments were used (BSID-III, ASQ-III, PPVT, CBCL). The session chairs will introduce PICCOLO and relevant background information. Presenters will discuss how parenting interactions in their samples are related to children developmental outcomes. Finally, the discussant will provide integrative comments, will examine similarities and differences observed cross-culturally and begin the audience discussion. Results: All studies found positive relationships between parenting interactions and children's developmental outcomes, considering language, cognitive, fine motor and socioemotional development, communication, problem solving and personal-social skills, and adequate behaviors. Conclusions: Differences in parenting behaviors are globally related with children's positive outcomes in these studies from Chile, China, Spain and USA.

S87.2

### **MOTHERS' PARENTING INTERACTIONS WITH INFANTS AND TODDLERS AND ITS RELATIONSHIP WITH CHILDREN'S LANGUAGE AND SOCIOEMOTIONAL DEVELOPMENT IN CHILE**

**Farkas C.\*, Strasser K., Santelices M.P.**

*Pontificia Universidad Católica de Chile ~ Santiago ~ Chile*

Studies of mothers across different cultures and conditions have shown remarkably similar patterns of parenting behaviors linked with children's development - responsiveness and sensitivity to the child's needs being among the most well-established (e.g. Farkas et al., 2017). Another parenting behavior - teaching - support children's development and have showed some specificity in effects depending on language context. The influence of parents' encouragement of children's exploration, however, has been noted to depend on cultural values about autonomy (e.g. Kağıtçıbaşı, 2007; Keller & Otto, 2011). A standardized observation measure of parenting interactions was used, the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes PICCOLO (Roggman et al., 2013). The measure was adapted to Chile (Farkas et al., 2016) and scored based on a 5-minute free-play mother-child interaction. Bayley's language and social emotional scales were administered to children. Participants were 91 mother-child dyads of different SES, with typically developing children attending childcare centers. Data were collected when children were 10-15 months (T1) and 28-33 months (T2). Mothers show an increase over time in responsiveness, encouragement and teaching, but affection remained stable, and mothers' age and educational level predicted parenting. Mothers' parenting was related with children's socioemotional

development at T1 ( $r=.282^{**}$  affection,  $r=.288^{**}$  responsiveness,  $r=.226^*$  encouragement,  $r=.390^{**}$  teaching) and less strongly at T2 ( $r=.218^*$  responsiveness,  $r=.250^*$  teaching). Additionally, parenting was related with children's language at T1 ( $r=.235^*$  encouragement,  $r=.212^*$  teaching) and more strongly at T2 ( $r=.254^*$  affection,  $r=.408^{**}$  responsiveness,  $r=.335^{**}$  encouragement,  $r=.433^{**}$  teaching). Parenting behaviors of Chilean mothers are relevant for children's development but their influence varies according to children's developmental stage. Implications for policy and future research directions are discussed.

S87.3

### **RELATIONS BETWEEN PARENTING ASSESSED WITH PICCOLO AND CHILD'S DEVELOPMENTAL OUTCOMES**

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A great amount of literature has related parental behaviors – e.g., contingent responses to the child, verbal stimulation, parent-child participation in joint activities, affection, secure attachment- to child's linguistic, cognitive and socio-emotional development (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Page, Wilhelm, Gamble, & Card, 2010; Roseberry, Hish-Pasek & Golinkoff, 2013). Most studies have been conducted with mothers but, in the last years, the interest in fathering has been increasing (Anderson, Roggman, Innocenti & Cook, 2013; Kochanska, Aksan, Prisco & Adams, 2008). Our aims are to contribute to the literature about relations between parenting and child's development, with data from mothers and fathers from the same families. Participants were 37 families with a normally developing child aged 18-30 months (11-20 months,  $n=8$ ; 21-30 months,  $n=20$ ; 31-40 months,  $n=9$ ), recruited from child-care centers, pediatric centers and convenience. 37 mothers and 34 fathers engaged, separately, in a 10-minute free play session at home, and auto-recorded their interactions. Two independent recorders scored the videotapes according to the PICCOLO scale (Roggman et al., 2013), which assesses parent-child interactions across four domains: Affection, Responsiveness, Encouragement and Teaching. Children's development was assessed by the BSID-III scales (Bayley, 2015). Positive significant Pearson correlations have been found between parenting and child's development. For younger children, the linguistic level was related with mothers' Affection, Teaching and total PICCOLO scores; and cognitive level with fathers' Responsiveness. For middle-aged children, positive relations were between mothers' Responsiveness, Teaching and total PICCOLO scores, and language; and fathers' total PICCOLO and cognition. No significant correlations were found for older children. Mothers' and contributions to child's development can be different and complementary, and changing according to child's age. A better knowledge about these contributions is relevant for improving positive parenting in early intervention programs.

S87.4

### **DEVELOPMENTAL PARENTING AND CHILD DEVELOPMENT OUTCOMES WITH US INFANTS AGE 3-9 MONTHS: EXPANDING THE VALIDITY OF PICCOLO TO INFANCY**

**Roggman L.\*, Gurko K., Olson T., Park S.J.**

*Utah State University ~ Logan ~ United States of America*

Parent-child interactions are important for child development outcomes. Our earlier studies of parents' interactions with toddlers ages 1-3, showed that brief observations of parents' developmentally supportive behaviors can predict children's school readiness and academic outcomes in the elementary grades, years later. Other researchers, using the same measure in

various countries and cultures, have also predicted child development outcomes from developmentally supportive parenting interactions with toddlers and young children. The measure of parenting interactions used for these studies is now being tested with infants during the first year of life, to explore whether the same kinds of parenting interactions observed to predict later development will also be associated with infant development. US Mothers of 87 infants, 3 to 9 months old ( $M = 5.4m$ ,  $sd = 1.4m$ ) participated in a 10-minute video-recorded play session, later coded with the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes, using expanded guidelines for infancy (PICCOLO+B; Roggman et al., 2013a, 2013b), interrater agreement  $> .85$ ; domain alpha  $> .70$ ; factor loadings  $> .40$ . Trained assessors worked with parents to complete an age-appropriate Ages and Stages Questionnaire-3 form, alpha = .67-.91 by area (ASQ-3; Squires & Bricker, 2009). Developmentally supportive mother-infant interactions predicted child development. Predictive validity of the PICCOLO measure in infancy was reflected in associations between parenting behavior and child development, and was especially consistent for mothers' responsiveness behaviors, which significantly predicted ASQ-3 communication, fine motor, problem solving, and personal-social skills. Results support the use of PICCOLO as a valid measure of developmental parenting with young infants, reflecting the key role of maternal responsiveness that appears to support early development in multiple areas. Follow-up observations and further study are needed to see if these early interactions will continue to support child development across the early years.

S87.5

**THE PARENTING INTERACTION WITH CHILDREN: CHECKLIST OF OBSERVATIONS LINKED TO OUTCOMES (PICCOLO): INFLUENCES OF CHINESE PARENT-TODDLER PLAY ON CHILD EXTERNALIZING AND INTERNALIZING BEHAVIORS.**

**Qiu W., Anderson S.\***

*Weber State University ~ Ogden ~ United States of America*

Child development is a national priority in China, but parents tend to value children's cognitive and physical development, over socioemotional development (NHFPC, 2015). Home visiting and social service programs need tools and strategies to facilitate positive early parent-child relationships that support child socioemotional outcomes (Leung et al., 2013). Parent-child play may be an effective context for practitioners to facilitate parent-child interactions that reduce child externalizing and internalizing behaviors (Bratton & Swan, 2017). This study examined how specific aspects of Chinese parent-toddler play interaction measured by the strength-based parent-child interaction tool Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013), influenced child externalizing and internalizing behaviors. Play observations of 97 parents with 2-3 year-old toddlers were coded with PICCOLO by Chinese bilingual observers. Interobserver correlations for the four domains of Affection, Responsiveness, Encouragement, and Teaching were .73 to .88. Scale reliability ranged from alpha = .68 to .76. Child externalizing and internalizing behaviors were measured with the parent completed Child Behavioral Checklist (Su et al., 1998) concurrently, and one year later. The quality of mother-child interaction was relatively high: Responsiveness ( $M=12.37$ ), Affection ( $M=12.07$ ), Encouragement ( $M=11.6$ ), and Teaching ( $M=10.46$ ). Multiple regression models tested the contribution of each PICCOLO domain in predicting child 3 to 4-year-old externalizing, and internalizing behavior while controlling for 2 to 3-year-old behavior. The Affection domain uniquely predicted fewer externalizing ( $\beta = -.27$ ,  $p = .01$ ) and internalizing behaviors ( $\beta = -.33$ ,  $p < .001$ ). Preliminary results suggest that Chinese mother warmth, affection, and enjoyment, during play with toddlers, captured by the PICCOLO tool, was associated with fewer child externalizing and internalizing behaviors, into the preschool years. Final

presentation results will control for child temperament and include contributions of father-child play interaction to externalizing and internalizing behaviors.

## Brief Oral Presentations BOP37 - ATTACHMENT, MENTALIZATION AND IMH - PART I

BOP37.1

### **STUDY OF THE DIFFERENCES IN AFFECTIVE REGULATION IN MOTHER-BABY INTERACTION AT SIX MONTHS OF AGE, BETWEEN PRIMIPAROUS AND MULTIPAROUS MOTHERS AND ITS RELATION TO MATERNAL SELF-ESTEEM, BABY TEMPERAMENT**

**Vardy I.\***

*ines ~ Buenos Aires ~ Argentina*

This Study is part of a larger Research Programme funded by the International Psychoanalytic Association and the University of Buenos Aires, Argentina related to Dyadic Affective Regulation, Children's Affective Self Regulation and Disregulation signs. The study attempted to determine how it influences the Affective Regulation and Self-Regulation of infants at six months of age, whether the mother is Primiparous or Multiparous and the existing relationship with the temperament of babies and maternal Self-esteem. A healthy sample of 46 mothers, 50 % primiparous 50 % Multiparous, and their babies (aged 23 to 31 weeks) were videotaped during a 3 minutes Face to Face interaction, and microanalyzed using the ICEP Scale -Infant and Caregiver Engagement Phases- (Tronick & Weinberg) to evaluate Affective Regulation. Diverse instruments were administered to mothers: Maternal Self-Report Inventory, Shea & Tronick to evaluate Maternal self esteem ; the Infant Behaviour Questionnaire, IBQ, Shea & Tronick to evaluate babies temperament and a the Baby developmental interview, EMI, UBA; The primiparous mothers express more Positive Affect in the interaction, observing in these dyads more positive Matches, whereas the multiparous mothers express more Neutral Affect, observing in the Multiparous dyads more neutral Matching. In relation to self-esteem, the configuration of maternal self-esteem is different in primiparous and multiparous mothers. Primiparous mothers, the better their body image and postpartum health, express more Positive Affect in mother-infant interaction. And multiparous mothers the greater the feelings about pregnancy, pre-delivery and delivery express more Positive Affect in the interaction mother-baby. As for temperament, Primiparous mothers refer to a greater capacity foAppeasement in Temperament of their babies and also when they have a lower Maternal Self-esteem see their babies more smiling while multiparous mothers when their Maternal Self-Esteem is higher, they can refer that their babies are more complaining. These differences found will be discussed expecting to be a contribution to enrich the clinical and preventive interventions of early infancy.

BOP37.2

### **CONCORDANCE BETWEEN MATERNAL REPRESENTATIONS OF THE CHILD IN PREGNANCY AND INFANT ATTACHMENT SECURITY AND PARENT-INFANT INTERACTION: A SYSTEMATIC REVIEW OF LONGITUDINAL STUDIES**

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Pregnancy is a unique period in that representations of self and others are reactivated and reorganized in response to the developing relationship with the unborn baby. A range of both interview and parent-report tools measure parental representations or states of mind with respect to the unborn child. A systematic review was undertaken to identify longitudinal studies of the concordance between such measures of maternal representations of the child in pregnancy and

infant attachment security at 12 months, or mother-infant interaction. Key electronic databases were searched, and eligible studies were identified and data extracted. Where appropriate, data was synthesized using meta-analysis and expressed as both effect sizes and odds ratios. A total of 12 papers were identified of which 6 measured the concordance between maternal representations and infant attachment security and the remaining papers measured concordance with the quality of parent-infant interaction. The results show that in the absence of an intervention, 'balanced' representations of the child in pregnancy are associated with a fourfold increase in the odds of being securely attached at 12 months, while an unbalanced/disrupted representation is associated with a twofold increase in the likelihood of an insecure/disorganized attachment. The implications for future practice and research are discussed.

BOP37.3

### **MATERNAL FETAL ATTACHMENT: DURING AND AFTER PREGNANCY**

**Sajjadianari S. \*, Alavinezhad S.S., Shokoohi Yekta M.**

*University of Tehran ~ Tehran ~ Iran, Islamic Republic of*

The importance of prenatal attachment during pregnancy and postpartum

Attachment is a strong bond between mother and child which could be considered an amazing and unique phenomenon. The primary relationship between a mother and her child during pregnancy is described as maternal fetal attachment. Getting attached to her child during pregnancy, a mother will be ready to initiate a joyful communication with her infant postpartum, and to allow her infant to form a safe and healthy attachment. In contradiction to common belief about initiation of primary attachment at the age of 6 months, studies show that not only pregnancy is the period in which the attachment is formed, but by the means of proper trainings, we could lay the grounds for development and growth of maternal fetal attachment and help mothers to enjoy stressful times of pregnancy. In the field of training and education of maternal fetal attachment techniques, a comprehensive package that includes teaching different aspects of attachment and reinforcing its details is not available. However, in this article intervention program for healthy attachment development based on Cranley's (1981) dimensions of maternal fetal attachment is introduced. Overall, the results of the studies in the literature show that participating in pregnancy training program leads the promotion of mental health of women during pregnancy and postpartum, as well as increases the mental health standards of infants.

BOP37.4

### **THE DEVELOPMENT OF MATERNAL ATTACHMENT DURING PREGNANCY: THE APPLICABILITY OF FINNISH VERSION OF MATERNAL ANTENATAL ATTACHMENT SCALE**

**Niela--Vilen H. <sup>[1]</sup>, Ekholm E. <sup>[2]</sup>, Axelin A. <sup>[1]</sup>**

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Maternal antenatal attachment toward her unborn baby has been under investigation for several decades. An instrument called Maternal Antenatal Attachment Scale (MAAS) has been developed to measure it. The aim of this study was to test the applicability of the Finnish translation of MAAS and to describe the development of attachment during pregnancy. The study was conducted as a descriptive prospective survey in 2016–2017. The MAAS is composed of 19 items with five response options each. The maximum score is 90 and higher score indicates a higher level of attachment. Pregnant primiparous, Finnish speaking women with singleton pregnancy were recruited at the first trimester ultrasound screening or at the first doctor's appointment in the maternal clinic in southwestern Finland. The participants were asked to complete the MAAS and background

information after providing the written informed consent. The second measurement point was at third trimester when the MAAS was sent with a prepaid envelope to the participants' home addresses. Altogether 56 women were included in the sample. Their median age was 27 years ranging from 18 to 41 years. Most of the women (91%) were married or cohabiting, and 84% of the participants reported that their pregnancy was planned. They completed the first questionnaires at the median 12 weeks of pregnancy (range 7-15 weeks). The second questionnaire was completed at the median of 35 weeks of pregnancy (range 32-40) by 44 participants. The global attachment score increased being on average 75.3 (7.7) at the first measurement point and 80.1 (5.8) at the second measurement point. The Finnish MAAS version showed a good internal consistency with Cronbach's alpha of 0.83. The Finnish version of MAAS seemed to be applicable. Maternal attachment increased during the pregnancy, however, it is notable that the level of attachment was rather high already in early pregnancy.

BOP37.5

### **IS PRENATAL ATTACHMENT ASSOCIATED WITH PRE-SCHOOL ATTACHMENT?**

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The term "attachment" identifies the strong and long lasting affective bond that develops between children and their caregivers wherein a child selectively seeks his/her mother in times of stress as a means of achieving comfort and feelings of safety. Recently attachment relationship between mother and her child is suggested to develop before birth and the development of an association between the mother and her fetus has been referred and assessed as 'prenatal attachment'. The latest studies have reported associations between prenatal attachment and adverse developmental outcomes and infants' wellbeing. The effects of prenatal attachment on preschool attachment patterns are not well-known yet. Participants were 39 mothers whose prenatal attachment levels were determined for the purposes of another study and their children aged between 44-51 months (mean= 47,9±2,0 months). Sociodemographic data form and the pre-school strange situation test were applied. Although the prenatal attachment scores of the mothers of the securely attached preschool children were higher than those of the insecurely attached children, this difference was not statistically significant ( $p=0,17$ ). Insecurely attached children had significantly more common history of grandparental losses than those who were securely attached ( $p=0,03$ ). Other sociodemographic data were similar for different preschool attachment patterns. Although not statistically significant, it has been found that mothers of preschool secure children have higher prenatal attachment levels and this difference needs to be investigated in larger sample groups. Insecure children's having more common grandparental losses than secure children indicates that stressful life events may have consequences for the preschool attachment relationship. This finding underlines the importance of early intervention programs aimed at improving the ability to cope with stressful life events to aid attachment relationship at the preschool age.

BOP37.6

### **CAN ATTACHMENT BE MEASURED DURING THE FIRST YEAR OF LIFE? A THEORETICALLY-DRIVEN APPROACH TO PREDICT STRANGE SITUATION CLASSIFICATIONS FROM EARLY INFANT BEHAVIOUR**

**Abbott K.<sup>[1]</sup>, De Pascalis L.\*<sup>[2]</sup>, Hill J.<sup>[1]</sup>, Sharp H.<sup>[2]</sup>**

<sup>[1]</sup>*University of Reading ~ Reading ~ United Kingdom,* <sup>[2]</sup>*University of Liverpool ~ Liverpool ~ United Kingdom*

The possibility that attachment-like patterns in infant behaviours with a caregiver might be established, and classified, before age 1 year is largely unexplored in literature. The 'Still-Face' was used with 268 mother-infant dyads at 7 months of age, and at 14 months attachment was assessed using the 'Strange Situation'. Maternal sensitivity, both in the 'Still-Face', and in a separate play procedure was assessed at 7 months. A theoretically driven system of rules was established for using widely-adopted infant communication and affect scales to generate 4 attachment-like categories from the Still Face. The presented approach to the classification of early attachment-like behaviours was found to have strong validity. Higher maternal sensitivity scores were associated with secure compared to disorganised ( $d = 0.65$ ,  $p < .001$ ) and resistant ( $d = 0.80$ ,  $p < .001$ ) groups at 7 months. A strong association was found between membership of the 4 attachment categories at 7 and 14 months, even controlling for early maternal sensitivity ( $p < .001$ ). Secure status at 7 months predicted security at 14 months ( $OR = 2.92$ ,  $p < .001$ ), and disorganisation at 7 months predicted disorganisation at 14 months ( $OR = 2.67$ ,  $p = .001$ ). For the latter prediction, an interaction between 7-month infant classification and concurrent maternal sensitivity was also found ( $p = .042$ ). With low early sensitivity, the odds ratio (OR) of disorganisation at both 7 and 14 months was 3.938, (56.76% correctly predicted disorganisation). With high sensitivity, the OR was 1.245 (32.00% correctly predicted disorganisation). Attachment-like patterns of behaviour in response to perceived threat seem to be established earlier than previously reported. The effect exerted by maternal sensitivity on attachment also seems to be more complex than previously assumed.

BOP37.7

#### **ASSESSING PREVERBAL INFANTS' INTERNAL WORKING MODELS OF ATTACHMENT**

**Aptaker Ben Dori S.\*<sup>[1]</sup>, Frenkel T.<sup>[2]</sup>, Atzaba--Poria N.<sup>[3]</sup>**

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Attachment theory suggests that internal-working-models of attachment (IWMs), begin to develop during the first year of life and shape interpersonal relationships/choices throughout life. Intergenerational-transmission of attachment relate infant IWMs to maternal own attachment, as well as maternal and infant interactional-behavior. Limited studies directly assess IWMs in preverbal infants via a paradigm in which infants observe abstractly depicted interactions of a "parent" and "infant" figure. Findings reveal that infant attachment-style and maternal-sensitivity are associated with infant social information-processing patterns while viewing the IWM-paradigm. These information-processing patterns are taken to be markers of infants' developing IWMs. A modified IWM-paradigm will be used to further establish our ability to index preverbal infant's developing IWMs. Importantly we will examine novel associations between the IWM-paradigm and mother's own attachment style. Finally, we will examine the translation of IWMs into infant behavior in relation to the paradigm-parent-figure, and within actual mother-infant-interactions. Mother-infant-freeplay (9-13 months), was followed by a modified IWM-paradigm in which a live puppet-show depicted an infant-bear-puppet interacting with either a responsive or unresponsive parent-bear-puppet in alternating scenes, presented until infant-habituation. Next, infants were asked to choose between the responsive/unresponsive parent-puppets. Finally, a second show presented the infant-bear approaching either the responsive/unresponsive parent-bear. Infants' puppet-choice and looking-times were recorded. Maternal attachment was assessed via self-report. The majority of infants (75%) chose the responsive parent-puppet ( $P < 0.01$ ) and looked longer at the unresponsive-parent scenes ( $p < 0.01$ ). Infant choice of the responsive parent-puppet was associated with infant secure-attachment behaviors within actual mother-infant-interactions ( $p < 0.05$ ). Finally, infants choice was related to maternal-attachment, such that high maternal-attachment-anxiety

was more likely to be associated with infants' choice of unresponsive-parent-puppet ( $p < 0.01$ ). The present findings further establish our ability to index preverbal infant's IWM's. Results provide empirical support for hypothesized links between maternal attachment, infant IWMS, and associated infant behavior.

### **Workshop WS72 - WORKING WITH FATHERS: LONDON INFANT FAMILY TEAM**

**O'Sullivan B.\*<sup>[1]</sup>, Lamb C.<sup>[2]</sup>, Entwistle H.<sup>[1]</sup>**

<sup>[1]</sup>*Social work practitioner ~ London ~ United Kingdom*, <sup>[2]</sup>*Consultant Psychiatrist ~ London ~ United Kingdom*

The London Infant and Family Team (LIFT) in England is innovative in that it targets the mental health needs of under 5 year olds in care proceedings, and provides assessments and interventions for infants, their parents and foster carers within the framework of the Family Court. This presentation will describe an overview of LIFT's work with fathers of infants referred to our service. Services often focus on the relationship between mother and infant, and sometimes underestimate the role that fathers play in the development of their baby's mental health. We will illustrate our therapeutic work through a case presentation of a four month old infant and his father. The case is complicated by the infant's unusual neurodevelopmental profile. We will outline our assessment methods and findings with respect to the infant's mental health and the quality of his relationship with his father, with particular emphasis on attachment style. We will then describe our therapeutic work with the infant-father dyad using a combination of the Circle of Security Intervention and Video Interaction Guidance, both of which are interventions designed to promote more attuned and responsive parenting. We will present the outcomes, and discuss the impact of our work with the infant-father dyad on the professional system.

### **Workshop WS73 - HOW TO INCLUDE FATHERS IN THE THERAPEUTIC PROCESS BY USING THE LAUSANNE PICNIC GAME SITUATION**

**Van Kuijk M.<sup>[1]</sup>, Frascarolo F.\*<sup>[2]</sup>, Lapalus N.<sup>[1]</sup>**

<sup>[1]</sup>*Ouder-Baby-Centrum ~ Tilburg ~ The Netherlands*, <sup>[2]</sup>*UR-Center for Family Study ~ Lausanne ~ Switzerland*

In this workshop, we will describe a way to include fathers in the therapeutic process: using the Lausanne PicNic Game situation, in which all family members are invited to pretend having a picnic. Involving fathers in the therapy of mothers suffering from postpartum depression does not appear to be an easy task. Yet their role is crucial in family interactions which are potentially affected by this disorder, and which greatly matter to child development. The procedure that we suggest takes place in three steps: 1) mother-infant and father-infant dyadic free plays are recorded, as well as the LPNG situation (Favez & Frascarolo, 2016) including all family members; 2) the dyadic free plays are assessed through the Emotional Availability Scales (EAS; Biringen, Robinson & Emde, 2010), while the LPNG is evaluated in terms of difficulties and resources of the family; 3) a video feedback-based intervention with both parents is then conducted on the basis of the recordings. The most adjusted interactions between family members are emphasized, whether it be parental ones, coparenting and/or marital relationship interactions. We also stress the importance of the father's presence to enhance the mother's parental self-efficacy and self-esteem. In this workshop, we will explain how to use the LPNG by showing recordings of clinical cases to the audience. Keys to interpret LPNG situations will be introduced and participants will be invited to analyze recorded LPNG situations. We will finally discuss ways of involving fathers in interventions that are specifically intended for mothers, or for the mother-infant relationship.

## **Workshop WS78 - ETHICAL ISSUES IN INFANT OBSERVATION**

**Kushilevitz I.<sup>[1]</sup>, Kalish Z.\*<sup>[2]</sup>, Orenstein R.<sup>[3]</sup>, Raviv A.<sup>[4]</sup>**

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This paper focuses on ethical issues that come up while an infant observation (Bick, 1964) takes place. Those concerns can rise either in the observer's mind, and/or in the seminar group by other participants or seminar leader. Ethical issues can touch the basic characteristics of the infant observation model, ranging from common ethical concerns to extreme and rare ones.

Three levels of ethical challenges will be presented and explored, and examples to each of them will be discussed in depth in the presentation:

1. Slight ethical issues such as preserving the observant stance while coping with challenges to the basic elements of the observation model, like dealing with a new mother's need for advice, concrete help or attention.

2. Moderate issues such as dealing with circumstances when the mother misinterprets the baby's signals; or the baby's development is compromised, and the observer feels the situation neglectful (Kalish et al, 2008; Rustin, 1988).

3. Severe ethical issues, when there is apparently evidence of neglect or abuse of the baby.

Holding the conflictual stance of being an invited observer in the house, while not betraying the best interest of the child, may produce high tension, that needs to be contained by the observer and the seminar group (Rustin, 1988). The group has a crucial role in differentiating between the different levels, helping the observer sustain and contain a considerable amount of anxiety in order to preserve the observant stance, or, if lost under the burden, eventually accompanying him to gaining it back.

## **Workshop WS79 - THINKING ABOUT THE NURTURING ENVIRONMENT: WHEN WITH THE CAMERA AND WHEN WITH THE NAKED MIND**

**Hatzor T.\*<sup>[3]</sup>, Llairó A.<sup>[1]</sup>, Mellier D.<sup>[2]</sup>**

*<sup>[1]</sup>Director of Clinical Psychology Center Bruc Salut SCP ~ Barcelona ~ Spain, <sup>[2]</sup>Professor of Clinical Psychology and psychopahtology ~ Universite de Franche-Comte ~ France, <sup>[3]</sup>Director of the Parent Infant Psychotherapy Program of Columbia University ~ ~ United States of America*

To explore how the clinician and researcher gathers information essential to understand and contain emotional experiences and communications between parents and babies when using the video camera and when observing with the naked eye. This workshop will explore how the mind of the clinician collects information and learns about the maternal environment when intervening with parents and babies as it is recorded with the camera and/or via Bick's method of infant observation. We will focus on the importance of our mind that works like a sensitive photographic paper which recalls, contains and provides a psychic envelop for intense experiences that unfold between infants and parents. We will highlight the importance of pleasure in the mother-baby relationship and how the clinician sees and understand these moments when using a camera and when with the naked eye. We will use both videos of clinical interventions with babies and parents as well as vignettes gathered with Bick's infant observation method. First, Talia Hatzor will introduce the topic with clinical examples. Antònia Llairó will present her work with video camera and with mother-baby observations, showing instances when the camera missed as well as moments when the camera enhanced the clinician's exploration of her containing capacities. Denís Mellier will present themes gathered with Bick's infant observation method that followed the development of pleasure or lack of it as manifested in oral fantasmatic communication between mothers and babies. We intend to create an open and active dialogue of exploration and learning with the audience.

**WEDNESDAY MAY 30, 2018**

**9:00-12:30 Plenary Session (New Investigator Award and Presidential Symposium)**

**New Investigator Award**

**Parent-child interaction in the context of parental obesity and links to children's development**  
***Sarah Bergmann (Germany)***

Almost two decades ago the World Health Organisation described obesity as a current major public health concern and key contributor to pathology. However, even today our knowledge on factors that contribute to the development and maintenance of obesity remains fragmentary. Hence, more research on risk and protective factors for the development of childhood obesity is necessary, especially regarding potentially modifiable environmental influences. Consequently, the interest in obesity within the context of the family and in the role of parents and parental characteristics has increased during recent years. Within this context, the psychoanalyst Hilde Bruch emphasized the importance of parent-child interaction for the development of obesity in children. For example, due to mismatches in the interaction between caregiver and child, the child does not learn to distinguish hunger from other internal or affective states. This leads to overeating in response to aversive affective states and consequently to development of obesity and also to impaired psychosocial functioning. Based on findings showing that maternal obesity is a risk factor for obesity in children and for children's psychosocial outcomes, studies presented in this talk investigated the association between maternal weight status and aspects of mother-child-interaction and their role in children's future development.

**13:15-14:15 General Sessions**

**Symposium S88 - VIDEO INTERVENTION IN PREVENTION PROGRAMS AIMED AT PARENTS OF INFANTS IN THE COMMUNITY AND IN AT RISK CONDITIONS**

**Riva Crugnola C.\*<sup>[1]</sup>, Reck C.<sup>[2]</sup>, Downing G.<sup>[3]</sup>**

*<sup>[1]</sup>Department of Psychology-University of Milano-Bicocca ~ Milan ~ Italy, <sup>[2]</sup>Department of Psychology, Ludwig-Maximilians University ~ Munich ~ Germany, <sup>[3]</sup>Clinical Faculty, Salpetriere Hospital and Paris University VIII ~ Paris ~ France*

Discussant: George Downing

The aim of the symposium is to illustrate a method of using video-feedback - the Video Intervention Therapy (VIT, Downing et al., 2013) - in prevention programs for parents of infants in the community and in at risk conditions. In this context VIT is used in a pre-determined number of sessions aimed at increasing parents' sensitivity and their capacity for emotional regulation and mentalization, through discussing with them videos showing interaction with their infants. Through the use of VIT, the therapist can focus on either the "outer movie," i.e. the objective behavior seen in the video or the "inner movie," i.e. the thoughts, feelings, and body experience of the parent during the interaction. The specific aim is to analyze micro-analytically a mother's communication with her infant through analysis of the interaction conducted with her by the therapist. Specific importance is also attributed to exploring with the mother her feelings upon viewing the video in relation to both her own emotions and those attributed to her infant, the aim being to increase her ability to "mentalize" her infant. At the symposium four papers narrating studies involving use of VIT will be presented. The Sadurni paper concerns a program aimed at multi-traumatized mothers of children

placed in residential and foster care. The Riva Crugnola paper concerns a program conducted during the first year of the infant's life aimed at adolescent mothers with adverse experiences. The Facchini paper illustrates intervention aimed at parents in a pediatric primary health care setting carried out at different ages of the infant (from 1 to 18 months). The Sudati paper is focused on the use of VIT with high-risk mothers with substance abuse disorder and co-occurring psychiatric disturbance. The papers show the efficacy of the intervention assessed from the perspective of sensitivity, emotional regulation, and parental discomfort.

S88.2

### **MAKE THE REAL INFANT VISIBLE WITH VIT: A QUALITATIVE STUDY OF MULTI-TRAUMATIZED MOTHERS INVOLVED IN THE INFANT WELFARE SYSTEM**

**Sadurní M.<sup>[1]</sup>, Perez--Burriel M. \*<sup>[1]</sup>, Sadurní G.<sup>[3]</sup>, Masiques R.<sup>[3]</sup>, Pi M.T.<sup>[4]</sup>, Tabora A.<sup>[2]</sup>**

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The mothers of children placed in a residential and foster care studied in our Lab have in common the presence of multiple traumatic events that have wounded them along of their life (Sadurní et al., 2016). These 'ghosts in the nursery' (Fraiberg et al., 1975) from their past confabulate with the present conflictual relationships to detach the child from his or her attachment needs. Therefore, the risk to adopt negligent or actively harmful parental roles is high. Furthermore, these mothers (and fathers) are recognized as subjects who have difficulty achieving positive outcomes in the child welfare system (Larrieu et al., 2008). Therefore, one of the priorities of our work is try to "make visible" this child. The technique of Video Intervention Therapy (VIT; Downing et al., 2013) seems to be positive for these mothers to help them to mentalize their children. However, there are no studies focused on the specific difficulties of this apparently simple goal. We present the first results from the analysis of the category Parent Supportive Presence of the Coding Interactive Behavior (CIB; Feldman, 1998) of multi-traumatized mothers with their 0-3 infants placed in a residential and foster care. We have codified interactions of these mothers filmed in our lab and we have found, as we expected, low levels of this category in all cases. We are going to relate these quantitative results with other qualitative data we got from these mothers, using the Adult Attachment Interview (Gerge et al., 1985), Child Welfare System Services Profile, and clinical notes from the individual psychotherapy. This analysis could help social services and therapists to choose the most suitable intervention or therapeutic technique. A case study will be illustrated to describe our intervention.

S88.3

### **VIDEO-FEEDBACK INFANT MENTAL HEALTH SUPPORT INTERVENTION IN A PEDIATRIC PRIMARY HEALTH CARE SETTING AT WELL-BABY VISITS**

**Facchini S. \*<sup>[1]</sup>, Sacchi C.<sup>[2]</sup>, Downing G.<sup>[3]</sup>**

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The aim of this preventive program is to support caregivers' sensitivity and mentalization in order to promote infant's secure attachment and mental health. All neonates born from January 2016 in a north-east Italian region and registered at a primary care pediatrician's office were consecutively

enrolled for a video-feedback intervention called Primary Care-Video Intervention Therapy (PC-VIT: an adaptation of Downing's Video Intervention Therapy) conducted by a pediatrician/psychotherapist. VIT is a mentalization-based, cognitive-behavioral methodology. In addition to classical cognitive behavioral techniques it draws on mentalization and other techniques developed within VIT itself. This intervention has already shown feasibility in a previous pilot study. The program consist in six video-feedback sessions performed for each baby at different ages (1, 3, 6, 8, 12, 18 months). The program is evaluated with questionnaires (EPDS, DAS, QUIT) and interviews (AAI) given to both parents plus coding of video clip interaction quality (SS, CIB). 21 of 45 newborn, registered at the pediatrician's office, met the enrollment criteria. The mean number of patients (0-14 years of age) registered at the pediatrician office in 2016 were 1.173. The medium daily activity was 16 sick visits and 7 well baby visits. The total number of PC-VIT sessions were 52 and the pediatrician time work load increased by total 39 hours (5-6 hours more each month). The preliminary data analysis shows a high enrollment rate (19 of 21: 90 %), a high attendance rate of both mothers (100%) and fathers (90%). Interestingly if the father was present at the first session then the attendance rate to the following sessions is 100%. EDPS mean decreased between 1 month and 8 months for both mothers (from 5,8 to 3,6) and fathers (from 4,5 to 3,5). The changes of the parent-child interaction and the reflective capacity of both parent will be analyzed.

S88.4

#### **THE EFFECTIVENESS OF AN ATTACHMENT BASED VIDEO-FEEDBACK INTERVENTION FOR ADOLESCENT MOTHERS AND THEIR INFANTS**

**Riva Crugnola C.\*<sup>[1]</sup>, Ierardi E.<sup>[3]</sup>, Moioli M.<sup>[2]</sup>, Albizzati A.<sup>[2]</sup>**

*<sup>[1]</sup>Department of Psychology, University of Milano-Bicocca ~ Milan ~ Italy, <sup>[2]</sup>Child Neuropsychiatry Unit, ASST Santi Paolo e Carlo Hospital ~ Milan ~ Italy, <sup>[3]</sup>Department of Psychology, University of Milano-Bicocca and Child Neuropsychiatry Unit, ASST Santi Paolo e Carlo Hospital ~ Milan ~ Italy*

Adolescent mothers have frequently a history of maltreatment and their relationship with the infants are often at risk (Madigan et al., 2012). Aim of the study was to evaluate the effectiveness of PRERAYMI (Promoting responsiveness, emotion regulation and attachment in young mothers and infants) (Riva Crugnola et al., 2016, 2017), an attachment intervention program based on Video Intervention Therapy (Downing et al., 2013), psychological support and developmental guidance. The participants were 43 adolescent mother-infant dyads of the intervention group and 20 adolescent mother-infant dyads of the control group. At infant 3 and 9 months, mother-infant interaction was coded with Care-Index (Crittenden, 1998) and a modified version of ICEP (Riva Crugnola et al., 2013). At 3 months AAI (George et al., 1985) was administered to evaluate maternal attachment and childhood experiences of care and abuse (Bifulco et al., 1994). The changes from 3 to 9 months and the moderation effects of maternal attachment and adverse experiences were analyzed in both groups. 82% of adolescent mothers reported one or more adversity in childhood; 65% of the adolescent mothers had an insecure attachment. Moreover, adolescent mothers who participated in the intervention (vs control group) increased their sensitivity and reduced their controlling style after 6 months of treatment. Infants of the intervention group (vs control group) increased their cooperative style. From 3 to 9 months the intervention group dyads (vs control group) spent more time in affective matches and less time in mismatches. The quality of maternal attachment and adversity in childhood did not affect the intervention effect. Early motherhood is associated to high frequency of insecure attachment and adversity in mothers' history. The results show the effectiveness of the PRERAYMI program based on VIT to improve adolescent mother-infant styles of interaction and emotion regulation.

S88.5

### **SUPPORTING ADULT-CHILD RELATIONSHIPS IN THE CONTEXT OF HIGH RISK PARENTING: THE CONTRIBUTION OF VIDEOFEEDBACK INTERVENTION**

**Sudati L.<sup>[1]</sup>, Miscioscia M.\*<sup>[2]</sup>, Porreca A.<sup>[2]</sup>, Zoccatelli G.<sup>[1]</sup>, Scuri M.<sup>[1]</sup>, Simonelli A.<sup>[2]</sup>**

<sup>[1]</sup>*Cooperativa di Bessimo ONLUS, Concesio ~ Brescia ~ Italy*, <sup>[2]</sup>*Department of Developmental and Social Psychology, Padua University ~ Padua ~ Italy*

Problematic parenting in high-risk mothers with Substance Abuse Disorder (SUD) and co-occurring disorders constitutes a severe risk factor for adult-child relationships, and for later child development (Dube et al., 2003). Relationship-focused intervention strategies are required to support parenting abilities and to sustain dyadic emotion regulation. Recently, Video Intervention Therapy (VIT-Downing, 2008), an evidence-based intervention technique, has been suggested as a useful method to modify dysfunctional interaction pattern and to strengthen traditional intervention methods. Evidence comes from studies in high-risk context (parental disturbances and hospitalizations, Downing, 2013). The aim of this study was to investigate the impact of VIT on quality of mother-child interactions in a group of high-risk mothers. The study involved 12 mothers, diagnosed with SUD and co-occurring psychiatric disturbance, and their children aged 2-3 years old, attending a rehabilitation community program. All the women received traditional psychodynamic mother-child psychotherapy as part of their treatment. Moreover, for half of the subjects (VIT-Group), a 3-months integrated intervention where the VIT was modularly added to classic treatment sessions was proposed. Quality of mother-child interactions was assessed through the Emotional Availability Scales (EAS-Biringen, 2008) both before (T1) and after (T2) the 3-months integrated intervention. The results were then compared with the ones of the mothers that did not receive VIT (Non-VIT-Group). The results highlighted a significant improvement in quality of mother-child interactions in the VIT-Group, with an increase in all the dimension of emotional availability considered. On the other hand, despite some changes, less improvements were observed in the Non-VIT-Group. High-risk mothers and their children are at higher risk for experiencing interactive difficulties in early infancy. The clinical implications of the results are discussed and consideration about the importance of adopting integrated intervention protocols, specifically focused on mother-child relationship, will be presented.

### **Symposium S89 - TRANSITION INTO PARENTHOOD AMONG AT-RISK MOTHERS. RESEARCH PERSPECTIVES, NEW INTERVENTION TOOLS AND ROUTES TO CHANGE**

**Salo S.\*<sup>[1]</sup>, Rutherford H.<sup>[2]</sup>**

<sup>[1]</sup>*Helsinki University Central Hospital ~ Helsinki ~ Finland*, <sup>[2]</sup>*Yale Child Study Center ~ New Haven ~ United States of America*

The transition to parenthood can be a very challenging process for some parents. This symposium is structured into two sections that incorporate empirical research and clinical interventions to understand the impact of mood (anxiety, depression) and recovery from substance abuse on mothers and their developing child. Together, the presentations will showcase the latest experimental and clinical approaches to work with at-risk women during pregnancy and the postpartum period. The first two studies examine potential maternal vulnerabilities during pregnancy and their impact on mothers and children in the postpartum period. The first study examines prenatal anxiety and brain responses to infant (and adult) face stimuli in 28 pregnant women and parental reflective function measured at 3 months postpartum. Findings revealed that neural responses to infant faces, when controlling for anxiety, predicted maternal difficulties in recognizing and understanding their infant's mental states. The second study followed 35 children exposed to opioid-maintenance treatment during pregnancy and 32 non-exposed children into

preschool (2 and 4 years) and school (8 years). The main finding was that behavioral difficulties were on average ~12% higher, and by 8 years, and that 53 % of the exposed children presented with ADHD/hyperkinesis as the most frequent problem. Two intervention studies are presented using a RCT design. The first intervention targeted 48 substance abusing pregnant women, and was designed to enhance maternal interest in fetal development, prenatal mentalization, and maternal-fetal attachment. The innovation of the intervention is the interactive use of 4D ultrasound imaging together with a mentalization-focused pregnancy diary. Findings related to maternal self-reported depressive and anxiety symptoms, fetal attachment, mentalization, and perinatal somatic outcome will be discussed. The second intervention targeted 45 depressed pregnant women and employed a prenatal Nurture and Play Group to enhance maternal mentalization, reflective functioning, and emotional availability. Findings show improved levels of reflective functioning and maternal sensitivity in the postpartum period.

S89.2

### **ANXIETY AND NEURAL RESPONSES TO INFANT FACES IN PREGNANCY AND POSTPARTUM REFLECTIVE FUNCTIONING**

**Crowley M.J., Rutherford H.\*, Mayes L.C.**

*Yale Child Study Center ~ New Haven ~ United States of America*

Women may be especially vulnerable to anxiety during pregnancy. Prior work finds that during the third trimester, women who evidence greater levels of anxiety also exhibit larger neural responses to infant faces with a neutral expression (Rutherford, Byrne, Austin, Lee, Crowley, & Mayes, 2017). The functional significance of this anxiety-brain linkage and potential connection to caregiving behavior remains largely unexplored. Emerging work implicates parental reflective functioning as an important correlate of caregiving behavior. We examine whether this prenatal anxiety-neural response association predicts parental reflective functioning measured in mothers at 3 months postpartum. 28 women were recruited from the local community during their third trimester of pregnancy. Anxiety levels were assessed and neural responses (EEG - event-related potentials) were recorded while women viewed infant and adult neutral and distress faces. At 3 months postpartum, mothers again reported on their anxiety symptoms and also completed a self-report measure of parental reflective functioning. The neural response elicited by neutral infant faces, when controlling for anxiety, predicted postpartum reflective functioning. Specifically, a larger neural response to infant neutral faces was associated with greater difficulty in recognizing and understanding their infant's mental states. Prenatal neural responses to infant cues assessed in pregnancy predicted postpartum reflective functioning when controlling for anxiety. Future work will extend these findings to examine whether prenatal neural responses and anxiety predict caregiving behavior postpartum.

S89.3

### **FOR BETTER OR FOR WORSE? DEVELOPMENTAL TRAJECTORIES IN A GROUP OF CHILDREN PRENATALLY EXPOSED TO METHADONE AND BUPRENORPHINE**

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Opioid maintenance treatment (OMT) with methadone or buprenorphine is the recommended treatment for the management of opioid-dependent pregnant women. Nevertheless, there is growing evidence to suggest that these infants tend to be at risk for a range of adverse outcomes suggesting the need of longitudinal studies. Investigate parent-reported behavioral difficulties, assess the association between quality of mother-child interaction at age 4 and behavior difficulties at age 4 and 8, and to evaluate the children's mental health status at age 8. 35 children exposed to OMT-medications and 32 non-exposed comparison children were assessed with the CBCL at age 2 and 4 and with the SDQ at age 8. Quality of mother-child interaction was assessed at age 4. At age 8, parents and teachers completed the internet-based interview DAWBA. Seventy-five percent of the children in the OMT-group lived with biological mothers at age 8. A mixed effects regression showed that reports of child behavioral difficulties decreased throughout the preschool years in both groups ( $F_{2,180} = 55, p < .001$ ). More problems were reported for boys regardless of group ( $F_{1,180} = 4.15, p = .041$ ). Ratings of behavioral difficulties were on average ~12% higher in the exposed children ( $F_{1,180} = 11.19, p = .001$ ), but there was no significant group\*time interaction. At 8 years, 53 % of the exposed children presented with ADHD/hyperkinesia as the most frequent problem. Quality of mother-child interaction at child age 4 was lower in the OMT-group ( $t_{63} = 5.7, p < .001$ ), but was not associated with behavioral difficulties (SDQ) at age 8 in either group. Although children in the OMT-group show more difficulties than the comparison group, the results reveal a heterogeneity which means that these children are also as doing well, despite the amount of reported difficulties.

S89.4

#### **SUBSTANCE ABUSING MOTHERS AT HOSPITAL MATERNITY POLICLINIC: MENTALIZATION ELEMENTS IN INTERVENTION USING 4D ULTRASOUND AND PREGNANCY DIARY**

**Pajulo M.\*<sup>[1]</sup>, Jussila H.<sup>[2]</sup>, Ekholm E.<sup>[3]</sup>**

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Substance-abusing pregnant women are one of the most challenging groups from both intervention development and research point of view. The mothers usually have many co-existing psychosocial and health problems, weak trust towards authorities and fear of stigmatization. Efforts to develop new tools and interventions to support both the mothers' addiction problem and parenting are most welcome. A new prenatal intervention for substance abusing women was developed at the maternity policlinic of Turku University Hospital. The intervention included two new elements designed to enhance maternal interest in fetal development, prenatal mentalization and maternal-fetal attachment: interactive use of 4D ultrasound imaging and a mentalization-focused pregnancy diary. Piloting of the intervention was carried out with 47 pregnant women referred to the hospital maternity policlinic from primary health care centers due to substance abuse. Three 4D ultrasound sessions took place at the maternity outpatient clinic at 24, 30 and 34 gestational weeks. They were primarily based on Ultrasound consultation idea (Boukydis 2006) where fetal development and reactions are carefully observed and discussed together with the parent(s). Three prenatal and one postnatal meeting around the pregnancy diary were offered. The week-by-week pregnancy diary included short information of fetal development, hints for the mothers how to enhance her own and the baby's well-being, and a mentalization-focused question or task (Pajulo et al. 2016). Impact of the pilot intervention was tested using a randomized control group (n=48) design. In the first phase of the study, outcomes explored included maternal self-reported depressive and anxiety symptoms, attachment to fetus, mentalization and perinatal somatic outcome. The content of the new intervention elements will be described, and their further development from mentalization-

enhancement point of view considered. Preliminary findings from the pilot study, results regarding implementation, lessons learned and clinical implications will be discussed.

S89.5

### **NURTURE AND PLAY – A RCT STUDY OF MENTALIZATION BASED GROUP INTERVENTION FOR DEPRESSED PREGNANT MOTHERS**

**Salo S.\*<sup>[1]</sup>, Flykt M.<sup>[2]</sup>, Punamäki R.<sup>[2]</sup>, Pajulo M.<sup>[3]</sup>**

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Prenatal depression has been associated with various risks in both fetal and early child developmental variables as well constitute a risk for early parenting. Nevertheless, less attention has been paid to developing programs and evaluating the impact on early caregiving, although there is strong evidence shows that maternal prenatal symptoms are associated with non-sensitive interaction, low reflective functioning or are otherwise negative strongly linked to adverse outcomes in early parenting. The present study aims to test the effectiveness of an intervention model designed specifically to enhance maternal early caregiving starting from pregnancy and continuing during the infant's first year. The aim was to study the effectiveness of a mentalization based group intervention called Nurture and Play on maternal reflectiveness and emotional availability. The study group consisted of 45 depressed mothers (gw M= 22, SD=3) screened from the well-baby clinics in 1 Southern town of Finland using EPDS (scores above 9/10). AAI, PI and a modified version of EAS (4th ed) scales were used during pregnancy, and PDI and EAS were measured again at 1 years. After randomization, 20 mothers participated in the Nurture and Play – intervention. The intervention is a short-term, manualized intervention utilizing mentalizing-based activities (e.g., homework, tasks), embodied interactive, playful activities (singing, relaxation techniques, playing with the fetus), as well as cognitive techniques for increasing affect regulation related to depressive problems. The groups started from pregnancy and continued until the baby is 7 months (altogether 11 meetings). The main results results show improvement in reflective functioning and in maternal sensitivity among the study group. These results suggest that Nurture and Play – intervention may be successful in improving preventive depressed mothers reflective functioning and emotional availability.

### **Symposium S90 - WHEN THE BOUGH BREAKS: SICK INFANTS AND THE PEOPLE WHO CARE FOR THEM**

**Paul C.\***

*Royal Children's Hospital ~ Melbourne ~ Australia*

The newborn period is usually a time of joy and positive adjustment for families. Serious illness in infancy has major implications for early emotional development and relationships both within the family and with the treating team. This symposium examines life-threatening illness during infancy from several perspectives: the developing attachment relationship between the parents and their infant; the impact of the infant's illness on the family and the implications of this for infant emotional outcomes; and the nature of the relationship between the family and the treating surgeon. The first presentation, 'Nature, Nurture and Neonatal Surgery – Mental Health Outcomes for Infants Following Discharge after Cardiac Surgery' examines the effects of cardiac surgery on the developing infant-parent relationship and infant emotional wellbeing in a cross-sectional clinical study. The second presenter reports on a mixed-methods longitudinal study that investigated parent and family responses to the diagnosis of serious liver disease in infancy. The study identified family factors that are predictive of the infants' emotional and behavioural outcomes 12 months

after initial diagnosis: 'Family Impact and Infant Emotional Outcomes when an Infant has Serious Liver Disease.' A senior consultant paediatric surgeon presents his personal reflections on 40 years' work as a surgeon operating on high-risk infants in his paper, 'The Surgeon and the Baby', describing the changing nature of the relationship between baby, family, and surgeon during the treatment journey. The symposium convener will then discuss the emotional impact upon the baby herself of serious medical problems which require surgical intervention, prolonged hospitalisation and often multiple disruptive and sometimes painful procedures. The symposium brings together international experts in Child Psychiatry, Social Work and Surgery. There will be an opportunity for questions and discussion following the formal presentations.

S90.2

### **NATURE, NURTURE AND NEONATAL SURGERY – MENTAL HEALTH OUTCOMES FOR INFANTS FOLLOWING DISCHARGE AFTER CARDIAC SURGERY**

**Jordan B.\*<sup>[1]</sup>, Sheehan J.<sup>[1]</sup>, Franich--Ray C.<sup>[1]</sup>, Little J.<sup>[1]</sup>, Anderson V.<sup>[1]</sup>, Depasquale A.<sup>[2]</sup>, Cheung M.<sup>[2]</sup>**

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Hospital admission and surgery for congenital heart defects (CHD) have a significant impact on the ecology of the developing infant-parent relationship. Medical interventions and the intensive-care setting may overwhelm the infant's capacity to regulate environmental input. Parents may be physically absent or their emotional response to the crisis may compromise the buffering support that they can offer their infant. Parents of infants under 6 months of age who had surgery for CHD were recruited during the surgical admission. Fifty-three mothers and 28 fathers completed the Heart Supports study questionnaire 6 weeks after discharge. The questionnaire sought information about whether mothers and fathers held their infant after birth, parent report of the strength of the bond they felt with their baby during pregnancy and following the birth, and the Condon Post-Natal attachment scale. Data analysis is underway and will be completed for the conference. Outcomes of interest measured in the study questionnaire are infant behavioural and emotional regulation (Greenspan, ASQ-SE, Cry Patterns Questionnaire) and items written by the researchers to measure parent perception of infant medical traumatic stress responses. Study findings will inform an infant mental health knowledge implementation project on the cardiac unit of the tertiary paediatric hospital where the research was conducted.

S90.3

### **FAMILY IMPACT AND INFANT EMOTIONAL OUTCOMES WHEN AN INFANT HAS SERIOUS LIVER DISEASE**

**Bowden M.\*<sup>[1]</sup>, Ee L.<sup>[2]</sup>, Krishnan U.<sup>[1]</sup>, O'Loughlin E.<sup>[1]</sup>, Hardikar W.<sup>[3]</sup>, Carmody D.<sup>[1]</sup>, Hainsworth C.<sup>[1]</sup>, Jermyn V.<sup>[1]</sup>, Lee M.<sup>[1]</sup>, Sawyer J.<sup>[1]</sup>, Stormon M.<sup>[1]</sup>, Holmes K.<sup>[3]</sup>, Lemberg D.<sup>[1]</sup>, Day A.<sup>[4]</sup>, Paul C.<sup>[3]</sup>, Hazell P.<sup>[5]</sup>**

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Serious liver disease in infancy causes significant morbidity. Up to 80% of children will eventually require transplantation. This study aims to investigate parent and family responses to the diagnosis of serious liver disease in infancy and to identify family factors that are predictive of the infants' emotional and behavioural outcomes. The study uses quantitative and qualitative methods. Parents of infants recently diagnosed with serious liver disease completed validated measures of parent

stress, family function, impact of the illness on the family, and father engagement, as well as an interview about their experience of the infants' illness. The measures were repeated after one year, with the addition of the Child Behavior Checklist (CBCL). Mothers and fathers of 37 infants completed the study. Illness severity, liver diagnosis other than Biliary Atresia and parent perceptions of greater impact of the infants' illness on the family predicted poorer infant outcomes. For mothers, the final best-fit model explained 32% of the variation in CBCL ( $P = .001$ ). Fathers' best-fit model explained 44% of the variation in CBCL ( $P < .001$ ). Thematic analysis of the parent interviews revealed six major themes: uncertainty; awareness of the infant's vulnerability; feelings of isolation; dealing with other aspects of life; the importance of shared experience; and adjustment. The integrated data analysis demonstrated that lack of extended family support, poor family adjustment to the illness, and financial stress are related to greater impact of the illness on the family. The study identifies early risk factors for poor emotional and behavioural outcomes for infants with serious liver disease, providing an opportunity for early intervention. Parents who lack support from extended family, who have financial stress, or who report a high impact of the illness on the family, should be referred for psychosocial assessment.

S90.4

#### **THE SURGEON AND THE BABY**

**Rode H.\***

*University of Cape Town ~ Cape Town ~ South Africa*

Reflections on 40 years' experience observing and participating in the widening field of surgery on infants previously thought impossible. The care of infants requires judgement, wisdom, knowledge and experience. But there are also undefinable aspects which cannot be described, measured, quantified or characterized which are influenced by one's own experience with babies with life threatening conditions and their anxious parents. From an external perspective the role of the surgeon is clear: he/she has been trained to examine, diagnose and operate in very specific ways. From a subjective perspective, the process is very personal. Phase one is referral of the sick infant for care, and meeting with the parents and baby. At this stage, it is impossible not to become emotionally involved in the process. Phase two is the transition from sympathizing with the parents and baby, to an objective examination of the child. Phase three is the transition from the bedside to the operating table - from Baby and family, to Baby as patient, to Baby as a liver. Emotions have no place here – the surgeon must embrace the cold reality of the task that lies ahead. Phase four is the rekindling of emotions in the surgeon, sharing in the parents' hope or despair. The surgeon must form an inner barrier that enables him/her to keep objectivity and judgment, so that this progressive disengagement not only protects him/herself, but also ensures that he/she can concentrate totally on the task ahead, realizing that faulty judgment can have serious consequences.

S90.5

#### **WHY IS THIS HAPPENING TO ME? HOW MAY THE INFANT EXPERIENCE PROLONGED HOSPITALISATION AND SEPARATION, PAIN AND INTRUSIVE PROCEDURES IN THE FACE OF SERIOUS MEDICAL ILLNESS?**

**Paul C.\***

*Royal Children's Hospital ~ Melbourne ~ Australia*

Very sick babies with congenital or acquired serious medical and surgical problems may be hospitalised for prolonged periods and subject to necessary and life-saving painful and frightening impingements. The baby sees the world, in part at least through the eyes of their parents, (Winnicott); what happens when the parents are not available, or unable to prevent the experience

of pain. This presentation will discuss clinical and research data from the perspective of the hospitalised baby herself. The newborn baby has capacity for: memory, initiating engagement and demonstrating emotional states. Babies seem to have a series of mechanisms for managing prolonged separation from parents, experience of pain and disruption. It is incumbent upon carers of very sick babies to think about ways to complement the baby's own mechanisms for emotional survival.

### **Symposium S91 - LEARNING THROUGH PLAY: BUILDING CAPACITY FOR COMMUNITIES IN LOW AND MIDDLE INCOME COUNTRIES TO PROMOTE WHOLE CHILD DEVELOPMENT**

**Robinson J.\*<sup>[1]</sup>, Popp J.<sup>[2]</sup>, Mariam E.<sup>[4]</sup>, Clarke J.K.<sup>[3]</sup>**

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Learning Through Play in Early Childhood and Learning Through Play in the First 1000 Days are initiatives of the LEGO Foundation (LF), promoting the inclusion of parent-child play in community-based innovations promoting young children's holistic development within the context of family relationships. Working with NGOs and other not-for-profit educational organizations, LF has articulated five principles of how play promotes a broad array of developmental outcomes, including social emotional. In this symposium, members of the LF team and two affiliate organizations (Sesame Workshop and BRAC Institute Educational Development) will present on community development and infant mental health initiatives undertaken in Bangladesh, India, Mexico, Uganda, Tanzania, and South Africa. The first presentation will provide theoretical and research foundations of the Learning Through Play frameworks. Three papers will consider implementation challenges of the international initiatives, and research-based evidence of effectiveness will be covered.

#### **S91.2**

### **THEORETICAL UNDERPINNINGS AND EVIDENCE FOR LEARNING THROUGH PLAY IN INFANCY AND EARLY CHILDHOOD INNOVATIONS**

**Robinson J.\*<sup>[1]</sup>, Popp J.<sup>[2]</sup>, Yanovich Z.<sup>[2]</sup>**

*<sup>[1]</sup>University of Connecticut ~ Storrs ~ United States of America, <sup>[2]</sup>LEGO Foundation ~ Billund ~ Denmark*

Learning Through Play (LTP) is an evidence-supported theoretical framework that includes five characteristics of play that support deeper learning: joyful, actively engaging, meaningful, iterative, and socially interactive. Playful interactions that are responsive to the infant's state and interest may offer important building blocks of resiliency throughout our lives. Yet, a considerable number of parents around the world find themselves struggling with some of the most adverse conditions imaginable. In this paper, we describe the five characteristics of play and briefly describe the evidence for their developmental outcomes throughout early childhood. We reviewed the published evidence base as well as non-published technical reports from non-governmental agencies for responsive parenting innovations and community-based learning through play initiatives, with highlights from international efforts with low income families in Jamaica, Bangladesh, Australia, North America, and Africa. Global parenting programmes that have championed parenting that is responsive, positive, stimulating, and supportive have contributed to this evidence base. Numerous studies show us that promoting mother-baby attachment and training mothers in play-based responsive, stimulating interaction techniques in low income homes in the first 1000 days is effective in improving the developmental outlook for young children.

S91.3

**THE PLAY LAB PROJECT OF BANGLADESH, UGANDA AND TANZANIA: ADDRESSING MATERNAL MENTAL HEALTH AND MOTHER-INFANT PLAYFULNESS IN COMMUNITY COURTYARDS**

**Mariam E.\*<sup>[2]</sup>, Robinson J.<sup>[1]</sup>**

*<sup>[1]</sup>University of Connecticut ~ Storrs ~ United States of America, <sup>[2]</sup>BRAC Institute of Educational Development ~ Dhaka ~ Bangladesh*

The BRAC Play Lab Project in Bangladesh, Uganda and Tanzania has been operating for 2 years. The play-based model has been developed for children aged 1-3 years and 3 to 5 years. A core component of the model is a play curriculum that integrates a play-based learning methodology and socio-emotional development across all areas of early years' learning. The most recent elaboration of this model is for mothers with infants and toddlers. They are invited to their neighboring courtyards to engage with the Play Leaders who offer mental health information, and lead mothers in developmentally appropriate responsive interactions and playful experiences with their children using locally sourced materials. In this presentation, we review findings from recent and upcoming evaluations of the Play Lab home visiting work, including the how, the where, and the who. Evaluation will cover training and concerns of Play Leaders, engagement of parents and evidence of observed mother-infant play interactions. Pilot program evaluation will include observations of the process of modeling and coaching mothers by Play Leaders, evidence of mother-baby play, and Play Leaders' reflections on the challenges of addressing mental health concerns within a prevention and promotion model. Prior evaluation of this home visiting model with older toddlers revealed that mother-baby play was under-utilized and maternal depressive symptoms inadequately addressed.

S91.4

**THE PLAY LAB PROJECT OF BANGLADESH, UGANDA, AND TANZANIA: DEVELOPING PLAY LEADERS TO OPERATE COMMUNITY PLAY SPACES**

**Popp J.\*<sup>[1]</sup>, Mariam E.<sup>[2]</sup>**

*<sup>[1]</sup>LEGO Foundation ~ Billund ~ Denmark, <sup>[2]</sup>BRAC Institute of Educational Development ~ Dhaka ~ Bangladesh*

The BRAC Play Lab Project in Bangladesh, Uganda and Tanzania has been operating for 2 years. The core component of the model is a play curriculum that integrates a play-based learning methodology and socio-emotional development across all areas of early years' learning. For children aged 3 to 5 years and their families, toy-making workshops offer opportunities for community Play Leaders and parents to actively engage in creating low-cost, recyclable play materials at the Play Lab spaces in their areas. Through training, capacity and skills development, the project provides new avenues of profession for Play Leaders- young empowered women of the community. The BRAC Institute of Educational Development (BIED) team is conducting research on Play Leader competencies and curriculum in all three countries and adapting tools to assess playfulness and self-regulation in young children in Tanzania and Bangladesh. Findings from these investigations will be presented in addition to the descriptive power of visuals from the community play spaces.

S91.5

**PARTNERSHIP ON PLAY: BRINGING THE JOY OF PLAY TO YOUNG CHILDREN AND THE ADULTS WHO CARE FOR THEM**

**Clarke J.K.\*, Bucavalas A., Foulds K.**

*Sesame Workshop ~ New York ~ United States of America*

Research has shown that playful learning experiences during early childhood help us all become creative, engaged, lifelong learners. However, lack of knowledge among adult caregivers and parents on the benefits and the “know how” of guided play may limit the amount of quality playtime children experience especially in low-resourced and developing areas. Sesame Workshop and The LEGO Foundation have formed a partnership to address this need in two initiatives: 1) in Eastern Cape of South Africa, Play Well Be Happy aims to shift caregivers’ perceptions about the importance of meaningful play for child development; 2) Play Every Day is a multi-country initiative that aims to empower caregivers to leverage play in support of children’s early development and lifelong learning. Our presentation will describe project learnings to date, including a summary of a Needs Assessment, descriptions of the findings from “Play Workshops”, and an overview of technical, operational, and community engagement-related challenges that Sesame Workshop has faced. Both projects have included qualitative and quantitative research to assess: beliefs about play, messages that resonate, which strategies work, and what play activities are most appealing across the different settings. Our hope is that what we have learned will contribute to a global understanding of best practices for promoting play among caregivers, children and practitioners.

### **Symposium S97 - PARENTING AND PREMATURITY: THE ROLE OF MATERNAL AFFECT, INTERACTION, AND RESILIENCE ON OUTCOMES OF INFANTS BORN PRETERM**

**Shah P.E.\***

*University of Michigan ~ Ann Arbor ~ United States of America*

Preterm birth, defined as birth prior to 37 weeks gestation, is a major public health problem, associated with significant neonatal morbidity and mortality and an increased risk for long term adverse sequelae. In addition to the child risks of neurodevelopmental and behavioral sequelae, which can persist throughout the life course, preterm birth can be a traumatic experience for families, in which this non-normative transition to parenthood is associated with anxiety, grief, depression and trauma. In this symposium, we begin with an overview of prematurity, identifying risks to the infant, caregiver, and caregiving relationship. We present data from four different longitudinal studies with an emphasis on maternal and child adaptation following preterm birth. All studies include measures of maternal and infant factors at multiple timepoints, use observational and indirect measures, and use varied statistical methods to examine individual differences associated with patterns of risk and resilience. The first paper (Gerstein et al.) examines how maternal mental health, stress and perinatal depression in the NICU are associated with parenting at age 5 in children born very preterm. The second paper (Spinelli et al.) examines the interplay between infant characteristics and maternal wellbeing and sensitivity on later child socio-emotional development. The third paper (Shah et al.) examines the role of sensitive parenting on developmental trajectories of late preterm infants. The fourth paper (Poehlmann-Tynan et al.) considers resilience as a framework to understand individual differences associated with outcomes of infants born preterm, and presents a synthesis regarding how parenting and the quality of early dyadic interactions contribute to preterm behavior and developmental well-being in the infancy to early childhood transition. This symposium considers how a focus on resilience in the context of the early dyadic relationship may help inform the development of individualized strategies and interventions to optimize outcomes of infants born preterm.

S97.2

#### **MATERNAL DEPRESSION AND STRESS IN THE NICU: ADVERSE IMPACT ON PARENTING AT AGE 5 YEARS**

**Gerstein E.\*<sup>[1]</sup>, Njoroge W.<sup>[2]</sup>, Paul R.A.<sup>[3]</sup>, Smyser C.D.<sup>[3]</sup>, Rogers C.E.<sup>[3]</sup>**

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Previous studies suggest that maternal postpartum mental health symptoms can impact parenting and child development in infants born preterm, but these studies have often not measured maternal symptomatology in the Neonatal Intensive Care Unit (NICU) or followed families through early childhood. Yet, the NICU is a uniquely stressful experience, with concerns regarding the infant's survival, inability to nurture, and financial ramifications all potentially impacting outcomes for both mothers and infants. This study examines the impact of maternal postpartum depression and stress in the NICU on multiple parenting behaviors, including intrusiveness, negativity, sensitivity, and positivity, in mothers of 5-year-old children born very preterm. This longitudinal, multi-method study followed a diverse sample of 74 very preterm children ( $\leq 30$  weeks gestation) and their mothers. Maternal depression and stress were assessed in the NICU. At age 5, mother-child dyads were observed doing tasks at a follow up assessment, which were later coded for maternal intrusiveness, negativity, sensitivity, and positivity. Other covariates, including maternal and child intelligence, maternal education, income-to-needs ratio, maternal depression at 5 years, and child sex were included in multivariate mixed model analyses. There was an interaction between maternal NICU stress and NICU depression for intrusiveness and negativity, such that greater maternal NICU depression was associated with more intrusiveness under medium or high levels of NICU stress and more negativity only under high levels of NICU stress. In contrast, greater NICU depression was associated with less sensitivity, regardless of level of NICU stress, and over and above other covariates. Findings suggest that early maternal peripartum depression can have a lasting impact on multiple parenting behaviors in mothers of children born very preterm. However, several aspects of maternal postpartum mental health must be measured in order to understand the impact on parenting and child development.

S97.3

#### **PREMATURITY FROM A MULTI-DIMENSIONAL PERSPECTIVE: THE INTERPLAY OF MATERNAL AND INFANT FACTORS IN THE DEVELOPMENT OF SOCIO-EMOTIONAL ADJUSTMENT**

**Spinelli M.\*, Aureli T., Fasolo M., Guarito M.C., Ponzetti S.**

*University G. D'Annunzio ~ Chieti-Pescara ~ Italy*

The recent literature underlines the necessity to assess and explore infant development in a multi-dimensional perspective. The focus of the analyses are reciprocal causalities between personal and environmental aspects, and the focus of interest is not the ability per se, but the relations between abilities. Although prematurity is widely considered a complex condition associated with many difficulties both at the infant and at the mother-infant interaction level, and between those there are complications in child socio-emotional adjustment, an integrated picture of the phenomena that considers the interplay between infant and maternal factors is still not clear. The present study aims to examine the interplay between infant abilities and characteristics with maternal quality of parenting and wellbeing in a sample of preterm and full-term mother-infant dyads and their longitudinal effects on child socio-emotional adjustment. Thirty-five preterm infant-mother and 35 full-term infant-mother dyads participated at the longitudinal study. At 3 months of infant age, maternal sensitivity during mother-infant interaction was assessed. Mothers completed a series of questionnaires to report the parenting stress, the traumatic symptoms after delivery, the social support received, and infant temperament. Infants self and other regulatory competences were evaluated with the Still Face Procedure. At 24 months mothers completed the CBCL to assess socio-emotional adjustment. Results showed an interplay of infant temperamental traits and regulatory

abilities with maternal wellbeing and sensitivity in affecting socio-emotional adjustment later in childhood. This was different between preterm and full-term infants with a greater effect of maternal variables in the preterm group. This picture confirmed the necessity to consider preterm infant development from a multi-dimensional perspective where infant characteristics interact with each other and with the environment to determine infant development. Theory and clinical implications will be discussed.

S97.4

#### **DEVELOPMENTAL TRAJECTORIES OF LATE PRETERM INFANTS FROM INFANCY TO KINDERGARTEN ACADEMIC ACHIEVEMENT**

**Shah P.E.\*<sup>[1]</sup>, Poehlmann--Tynan J.<sup>[2]</sup>, Richards B.<sup>[1]</sup>, Wonjung O.<sup>[3]</sup>, Kaciroti N.<sup>[1]</sup>**

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Late preterm infants (gestational age 34-36 6/7 weeks) have developmental vulnerabilities compared with full term infants. Little is known about the patterns of development within the population of late preterm infants, including which maternal, infant and dyadic factors are associated with suboptimal trajectories, consistent with development risk, and which factors are associated with more optimal trajectories, consistent with resilience. Objective is to examine trajectories of late preterm infants from infancy to kindergarten reading and math academic achievement, and to identify associated predictors of trajectories. We hypothesized that late preterm infants who experienced more sensitive early caregiving would manifest more optimal developmental trajectories. Sample included 1100 children from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B). Direct assessments of development were performed at 9- and 24-months using the Bayley Short Form-Research Edition T-scores, and at preschool and kindergarten using the ECLS-B reading and mathematics theta scores. Developmental and cognitive scores were z-scored, and latent profile analysis was performed. Multinomial logistic regression identified parent, infant, dyadic and psychosocial characteristics associated with developmental trajectories. Four trajectories were observed from infancy to kindergarten reading and math academic achievement: high-resilient, moderate-resilient, stable (reference), and at-risk. For both reading and math, children were more likely to be in the resilient trajectories if they experienced more sensitive early parenting, had Asian ethnicity or if mothers had higher education. Children were more likely to be in the at-risk trajectory if they had lower birthweight (reading trajectory), or minority ethnicity (math trajectory). Developmental trajectories of late preterm infants vary by maternal psychosocial factors, neonatal risks, and the quality of early parenting. More optimal developmental trajectories were associated with more positive early parenting. Fostering early sensitive parenting may be one strategy to promote developmental resilience in children born late preterm.

S97.5

#### **A RESILIENCE FRAMEWORK FOR UNDERSTANDING FAMILIES WITH CHILDREN BORN PRETERM**

**Poehlmann--Tynan J.\*, Fanning K., Yudawanti A., Zhu S.**

*University of Wisconsin ~ Madison ~ United States of America*

Although children born preterm are at risk for experiencing problematic developmental outcomes and their families face elevated stress and distress, variation is the rule rather than the exception. Some preterm children and their families exhibit resilience, or the process of positive adaptation despite experiencing significant adversity or risk. Although research on resilience processes has grown during the past decades, only a handful of studies have examined resilience in preterm

infants. Our previous research has found 3 pathways of adaptation for 6-year-old children born preterm: children who were resilient, those who remained at-risk, and those who exhibited significant difficulties. However, less attention has been paid to family-level resilience processes. The present study examined resilience in multiple individual and family domains as children born preterm reached school age. It extends previous research by applying a family resilience framework in addition to examining individual resilience. Using a prospective longitudinal design, 173 families with infants born preterm without significant neurological complications were assessed at NICU discharge, 9 months, 16 months, 24 months, and 6 years. In addition to child-level data, family variables such as stress, social support, and quality of life were examined. Preliminary analyses indicate that about one-third of children and families could be classified as resilient by age 6, while most children born preterm and many of their families continued to show signs of risk at the child's transition to school. Further analyses will examine links between child and family resilience. This study suggests that some preterm children and families achieve broad adaptive outcomes despite risks associated. The findings are discussed in terms of a broader framework of resilience and can inform future interventions aimed at improving child and family outcomes and guide practitioners regarding sharing resources for families with preterm infants.

### **Symposium S93 - BENEFITS OF EARLY INSIGHT ORIENTATED APPROACHES FOR INFANTS, MOMS AND DADS.**

**Ensink K.\***

*University Laval ~ Québec ~ Canada*

Improved early intervention for parents with post-partum depression or Borderline Personality Disorders (BPD), and for infants with particular regulatory difficulties, remain a matter of priority with important implications for infant adjustment and later development. In this symposium we bring together and discuss findings from three intervention and outcome studies of early attachment and insight orientated interventions for parents with specific mental health difficulties, as well as infants who present with marked regulatory difficulties. Results of two randomized control trials of attachment and insight orientated interventions with parents and infants will be presented. Furthermore, findings and reflections on interventions with parents with BPD, a particularly challenging group to reach, will be presented and will be further illustrated using a case series. The symposium, drawing together clinical researchers from Europe and North America, includes presentations and discussion of the following studies: 1) Treating early regulatory disorders: Results from an RCT on focused psychodynamic parent-infant psychotherapy (A. Georg, S. Taubner & M. Cierpka); 2) How does the Circle of Security intervention for mothers with postpartum depression and infants affect fathers? (B. Ramsauer, C. Mühlhan); 3) Exploring the play between parents with Borderline Personality Disorder traits and their children in the context of attachment focused parenting treatments (D. A. Philipp, J. Evoy, K. Cordeiro, J. Ip, R.T. Muller). Each presenter will introduce the key features and aims of the intervention model used. They will describe the populations and contexts for which it was developed, and outline the study methodology and key findings. Discussion will focus on mechanisms of impact, as well as implications for mothers and fathers, and particularities and challenges in intervening with parents have specific mental health difficulties such as borderline personality disorder. Looking back and looking forward: To examine implications for future work we will look back and reflect on lessons learned from these three studies and from each other, in order to identify key clinical and methodological lessons. We will elaborate and formulate implications for intervention, training and future research and will examine potential for strengthening clinical research through improving communication and collaboration. Audience participation and questions will be actively encouraged.

S93.2

### **EXPLORING THE PLAY BETWEEN PARENTS WITH BORDERLINE PERSONALITY DISORDER TRAITS AND THEIR CHILDREN IN THE CONTEXT OF ATTACHMENT FOCUSED PARENTING TREATMENTS**

**Philipp D.\*<sup>[1]</sup>, Evoy J.<sup>[2]</sup>, Cordeiro K.<sup>[3]</sup>, Ip J.<sup>[4]</sup>, Muller R.<sup>[3]</sup>**

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Parents with Borderline Personality Disorder (BPD) often experience difficulties with parenting, at times leading to disruptions within the parent-child attachment relationship that negatively impact early and ongoing child development. Currently, attachment focused parent-child interventions have been recommended as possible courses of treatment. This exploratory study examined how parents with BPD, or BPD traits, and their infants or small children engage in these treatments. The aim of this exploratory study was to examine how parents with BPD, or BPD traits, and their infants or small children engage in these treatments. The study used a mixed-methods design. Semi-structured interviews were conducted with clinicians who use attachment based parenting interventions such as Watch Wait and Wonder or Reflective Family Play. Clinicians responded to a semi-structured interview about their experiences working with parents who had BPD or BPD traits. Certain patterns of interaction between parents with BPD or BPD traits and their children were identified. Additionally, using a case-series design, session-by-session data were collected via retrospective chart review of families undergoing these same treatments in a large urban children's mental health centre. We compared families where a parent had BPD or BPD traits, with families seen using the same treatments, but where there was no history of parental BPD or BPD traits. The two populations are described in terms of their play characteristics, using both descriptive statistics as well as qualitative analyses. Referral characteristics are also discussed in terms of dyadic treatment versus whole family treatment in these two clinical populations. Preliminary findings regarding treatment progress and outcomes. Some of the challenges engaging parents with BPD in treatment are considered.

S93.3

### **HOW DOES THE CIRCLE OF SECURITY INTERVENTION FOR MOTHERS WITH POSTPARTUM DEPRESSION AND INFANTS AFFECT FATHERS?**

**Ramsauer B.\*<sup>[1]</sup>, Mühlhan C.<sup>[2]</sup>**

*<sup>[1]</sup>Department of Child and Adolescent Psychiatry and Psychotherapy, University Hospital Muenster ~ Muenster ~ Germany, <sup>[2]</sup>Department of Child and Adolescent Psychiatry and Psychotherapy, University Hospital Muenster, ~ Muenster ~ Germany*

To date, no data exist on how the COS intervention with mothers might benefit fathers. According to the spillover hypothesis, in the parenting relationship mother-infant treatment might have particular relevance for the fathers' level of parenting stress linked to the child, as well as to parenthood, and on his own psychological adjustment. Within a randomized controlled clinical trial, the Circle of Security (COS) 20-week group intervention was compared to treatment as usual (TAU) as a control condition including mothers with postpartum depression (PPD) and their infants. In the present study, N = 41 fathers (COS n=21/TAU n=20) associated with a clinical sample of mothers experiencing PPD with infants aged 4-9 months completed the Parenting Stress Index (PSI), Beck Depression Inventory (BDI-I), Symptom Checklist (SCL-90-R), and Difficulties in Emotion Regulation Scale (DERS) as pre-post-measurements, which were completed again at child's age of 16-18 months. The results demonstrated a positive spillover effect for the COS intervention focusing on

the developing mother-infant attachment relationship in families coping with maternal PPD, thereby improving the fathers' level of emotional clarity about the nature of his own emotional responses. Further studies are necessary to understand the clinical significance of these effects.

S93.4

**TREATING EARLY REGULATORY DISORDERS: RESULTS FROM AN RCT ON FOCUSED PSYCHODYNAMIC PARENT-INFANT PSYCHOTHERAPY**

**Georg A.\*, Taubner S., Cierpka M.**

*Institute of Psychosocial Prevention, Heidelberg University ~ Heidelberg ~ Germany*

Parent-infant psychotherapy for the treatment of regulatory disorders in infancy aims to improve the mental health of parents, their infants, and the parent-infant relationship. A wide range of different dyadic treatment models addressing both parents and infants has been developed during the last years. Yet further research is needed to evaluate the effectiveness of parent-infant psychotherapy empirically. The objective of the study is the investigation of the effectiveness of focused psychodynamic parent-infant psychotherapy compared with standard paediatric care in a sample of parents with infants diagnosed with early regulatory disorders in regard to parents' distress, infants' regulatory problems, and the parent-infant relationship. Additionally we are interested in the potential influence of parental reflective functioning as a mediator or moderator for the treatments effectiveness. Randomized controlled trial, 2-arm comparison psychodynamic parent-infant psychotherapy versus standard paediatric care within a treatment period of 12 weeks. Participants are N = 130 primary caregivers of infants age min 4 to max 15 months who before treatment fulfilled diagnostic criteria for early regulatory disorders. Primary outcomes are parenting stress (Parenting Stress Index) and parents' psychological distress (Symptom-Checklist), regulatory problems of the child (Questionnaire for Crying, Sleeping, and Feeding Behavior), and the emotional availability of the parent-infant interaction (Emotional Availability Scales). We investigate parental reflective functioning (Parental Reflective Functioning Questionnaire) as a mediator and moderator for the treatments efficacy. Outcomes are assessed pre- and post-treatment. We use regression analysis and multilevel modeling with time points (level 1) nested in patients (level 2). Due to ongoing recruitment, results will be presented at the conference. Discussion follows likewise.

**Symposium S94 - NATURE, NURTURE, AND RELATIONSHIPS: FINDINGS FROM INTERNATIONAL RESEARCH USING THE STILL-FACE PARADIGM**

**Beeghly M.\***

*Dept Psychology Wayne State University ~ Detroit MI ~ United States of America*

A growing body of research demonstrates that complex biopsychosocial processes contribute to the quality of parent-infant interactions. In this symposium, we present findings from three international research labs that utilize the Still-Face Paradigm (SFP) to illustrate this point. The SFP is a widely used observational paradigm that evaluates parent-infant interaction quality and infant self-regulatory (coping) processes before and after exposure to a social stressor (parental still-face). In the first paper, a Portuguese team presents findings from their longitudinal research with preterm and full-term infants and their mothers. The researchers identify three distinct patterns of infant self-regulatory behavior during the SFP at 3 months (corrected age) in both the preterm and full-term groups, which are associated with infant birth characteristics and maternal behavior in other contexts, and predict infant-mother attachment at age one. In the second paper, a US-based research team utilizes data from a longitudinal at-risk community sample to demonstrate that different aspects of maternal reflective functioning (RF), assessed using the Pregnancy Interview during the third trimester of pregnancy, predict variations in maternal, infant, and dyadic interactive

behavior during the SFP at 7 months postpartum. In the third paper, a multi-disciplinary research team builds on prior research showing associations between oxytocin and human parenting behavior. Specifically, the investigators use salivary DNA to assess whether maternal and infant genetic risk for low oxytocin availability, as indexed by the presence/absence of the OXTR rs2254298 receptor risk allele, or a composite measure of dyads' shared (homozygous) risk status, is associated with mother-infant interaction quality during the SFP during mid-infancy. Findings from the three papers confirm that both biological and social processes contribute to mother-infant interaction quality during the SFP during the first year of life, with implications for infant outcomes and infant mental health practice.

#### S94.2

##### **MOTHER-INFANT ATTACHMENT AND PATTERNS OF INFANT REGULATORY BEHAVIOR DURING THE STILL-FACE PARADIGM IN A PORTUGUESE SAMPLE OF PRETERM AND FULL-TERM INFANTS**

**Fuertes M.\*<sup>[5]</sup>, Lopes J.<sup>[1]</sup>, Barbosa M.<sup>[2]</sup>, Lopes Dos Santos P.<sup>[1]</sup>, Beeghly M.<sup>[3]</sup>, Tronick E.<sup>[4]</sup>**

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In prior research with healthy preterm infants, Fuertes, Lopes dos Santos, Beeghly, & Tronick (2006, 2009) identified three patterns of infant regulatory behavior in the Still-Face Paradigm (SFP) at 3 months corrected age: Positive Other-Directed, Negative Other-Directed, and Self-Directed. These patterns were associated with infant birth characteristics and mother-infant interactive behavior in other contexts. The current study evaluated whether: (a) the three regulatory patterns could be identified in an independent sample of full-term and healthy preterm infants during the SFP at 3 months; (b) the distribution of these patterns varied in the full-term and preterm groups; (c) infant regulatory patterns were correlated with birth characteristics; and (d) infant regulatory patterns predicted mother-infant attachment at 12 months. Analyses were based on data collected for 70 full-term and 70 preterm (32-36 gestational weeks) infants and their mothers in a Portuguese longitudinal study. Mother-infant dyads were videotaped in the SFP at 3 months and in Ainsworth's Strange Situation at 12 months (corrected age). Independent coders scored infant regulatory behavior or attachment status from videotapes. The same three patterns of regulatory behavior previously identified in prior research were observed for both preterm and full-term infants in the current sample. The Self-Directed pattern was more prevalent in the preterm group. Infant health status and gestational age were correlated with infant regulatory patterns. In both groups, the Positive Other-Directed pattern predicted secure attachment at 12 months, the Negative Other-Directed pattern was associated with ambivalent/resistant attachment, and the Self-Directed pattern was associated with avoidant attachment. Both preterm and full-term infants exhibit similar patterns of self-regulatory behavior during the SFP at 3 months (corrected age) that predict mother-infant attachment at 12 months. Early infant regulatory patterns may be an important component of "attachment-in-the-making" processes that contribute to attachment formation in the first year.

#### S94.3

##### **PRENATAL REFLECTIVE FUNCTIONING AND MOTHER-INFANT INTERACTIONS IN THE STILL-FACE PARADIGM: FINDINGS FROM AN AT-RISK COMMUNITY-BASED SAMPLE**

**Wong K.\*<sup>[1]</sup>, Boeve J.<sup>[3]</sup>, Alismail F.<sup>[4]</sup>, Alrajhi N.<sup>[4]</sup>, Stacks A.<sup>[5]</sup>, Beeghly M.<sup>[3]</sup>, Thomason M.<sup>[2]</sup>**

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*Detroit MI ~ United States of America, [4]Merrill Palmer Skillman Institute ~ Detroit MI ~ United States of America, [5]Merrill Palmer Skillman Institute Wayne State University ~ Detroit MI ~ United States of America*

Parental reflective functioning (RF), a parent's ability to identify mental states and link them to behavior, is associated with positive parent-child interactions and attachment security. Although RF can be measured during pregnancy and the postpartum period, most studies have evaluated postnatal RF using an overall RF score. Recently, researchers have begun to explore other ways to describe RF, using standard interviews. Specifically, they describe types of mentalization used across an interview and the number of passages with responses containing mentalization (Huibregts et al., 2016; Smaling, et al., 2016; Stacks et al., 2015). The current longitudinal study examined whether different aspects of prenatal RF are associated with mother-infant interaction quality at 7 months postpartum. Forty-five women from an at-risk community-based sample were administered the Pregnancy Interview (PI) in their last trimester, which was coded for different aspects RF. At 7-months postpartum, mother-infant dyads were videotaped in the Still Face Paradigm (SFP). Videotapes were scored for multiple dimensions of mother-infant interactive behavior. Multiple regression analyses indicated that certain aspects of prenatal RF were significantly associated with mother-infant interactive behavior at 7 months. Overall prenatal RF score significantly predicted more maternal positive affect and less shared dyadic negative affect. Additionally, types of RF used across the interview were associated with more maternal warmth, maternal positive affect, and dyadic shared positive affect, and less shared negative affect. High RF scores (5+) were associated with maternal positive affect, and less dyadic shared negative affect, whereas low prenatal RF scores (0/-1) were associated with more dyadic shared negative affect. Prenatal RF (operationalized in diverse ways) is associated with mother-infant interaction quality during the SFP at 7 months postpartum in an at-risk sample. Findings contribute a deeper more meaningful understanding of RF, with implications for infant mental health practice.

S94.4

#### **OXYTOCIN RECEPTOR GENOTYPE AND MOTHER-INFANT INTERACTIVE BEHAVIOR IN THE STILL-FACE PARADIGM**

**Beeghly M.\*<sup>[1]</sup>, Boeve J.<sup>[1]</sup>, Townsel S.<sup>[2]</sup>, Wong K.<sup>[3]</sup>, Stacks A.<sup>[2]</sup>, Manning J.<sup>[4]</sup>, Thomason M.<sup>[4]</sup>**

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Oxytocin, a neuropeptide hormone, is robustly linked to maternal care, sociality, and susceptibility to stress in non-human mammals (Donaldson & Young, 2008). A smaller literature links oxytocin to human parenting (Feldman & Bakermans-Kranenburg, 2017). Variations in oxytocin rs2254298 receptor (OXTR) genotype may underlie these associations. A-allele (risk) carriers have diminished oxytocin availability and greater stress susceptibility, whereas G-allele (non-risk) allele carriers have greater oxytocin availability, less stress susceptibility, and higher social cognition (Crespi, 2016). In the current study, we examined whether maternal or infant OXTR allele risk status, or dyads' shared (homozygous) risk status, is associated with mother-infant interaction quality during the Still-Face Paradigm (SFP) at 7 months postpartum. Analyses were based on data collected for 75 mother-infant dyads in an ongoing longitudinal study. Maternal and infant OXTR allele risk status was obtained from salivary DNA samples. Mother-infant dyads were videotaped during the SFP at 7-months postpartum. Blinded coders scored the videotapes for multiple dimensions of mother-infant

interactive behavior. OXTR allele risk status was not associated with infant sex or demographics. In multiple regressions, infant OXTR allele risk predicted less infant responsivity and more dyadic shared negativity during play and reunion episodes of the SFP, and more infant attempts to re-engage the mother during the still-face episode. In contrast, maternal OXTR allele risk predicted less maternal sensitivity and dyadic reciprocity during reunion. Mother-infant shared (homozygous) OXTR risk predicted less infant responsivity and soothability, less maternal flexibility and affective sensitivity, and less dyadic reciprocity and shared positive affect during play. OXTR allele risk status of infant, mother, and dyad is linked to compromised patterns of mother-infant interaction at 7 months postpartum. Findings suggest that both biological and behavioral factors contribute to the quality of early mother-infant relationships, with implications for infant mental health interventions.

#### **Workshop WS84 - ASSESSMENT AND INTERVENTION OF THE MATERNAL-FETAL DYAD**

**Lazarus G., Ginalis C.\***

*Emory University ~ Atlanta ~ South Africa*

We have developed an integrated model of optimal development that incorporates CNS, ANS, immune, and endocrine systems. We present the various techniques within the framework of the integrated model of optimal development. Whenever possible participants will be guided through performing specific techniques, for example biofeedback. We employ HRV biofeedback in the mother in order to target homeostasis, primarily in the ANS, with subsequent effects on CNS, immune, and endocrine systems. A shift towards homeostasis in these systems helps create a favorable intrauterine environment that will aid fetal development. Fetal neurological development can be extrapolated by analyzing fetal movement data. Data from our lab will be used to help guide participants through the various procedures that cannot be completed within the time constraints of the workshop. Our overall goal is to provide participants with practical real world examples of how to integrate information from different physiological systems when designing assessment and intervention protocols in a prenatal population.

#### **Symposium S96 - THE REVOLUTION OF WORKING TOGETHER DURING PREGNANCY – METHOD, CLINICAL ILLUSTRATIONS, RESULTS AND BENEFITS FOR PARENTS, INFANTS AND PROFESSIONALS**

**Panagiotou D.\***

*University of Franche-Comté/ University Paris Descartes ~ Besançon/Paris ~ France*

The rapprochement of the reproductive, pregnancy and infant disciplines has opened new perspectives in clinical interventions and policy changes. As presented at a pluridisciplinary symposium during the last WAIMH congress (Panagiotou et al., 2016), the Personalized Interdisciplinary Network Care (PINC) has emerged as a new paradigm of perinatal health promoting the maternal and the infant well-being from the antenatal period. But what do parents and professionals think about these new perinatal practices and the PINC paradigm? What does research show about the PINC efficacy for families at high risk? During this symposium, we will first present clinical applications of the PINC and families' and professionals' testimonies. Then, we will review the history of the early dissemination of the PINC and its impact until the actual educational framework. Personalised coordinated care since pregnancy is a core component of the future optimal infant development. Consequently, professionals of the perinatal period (obstetricians, midwives, paediatricians and mental health caregivers) need to receive specific training during their education and learn how to think and work together. Last but not least, we will present the PINC benefits for the infant development and the latest clinical intervention designed for the immediate postpartum period. Videos as well as audiovisual support will be utilised to illustrate our

presentations and open the dialog with the participants.

S96.2

### **THE PINC COLLABORATIVE CARE MODEL OF PERINATAL PRACTICES: CLINICAL ILLUSTRATIONS AND PARENTS' AND PROFESSIONALS' FEEDBACK.**

**Panagiotou D.\*<sup>[1]</sup>, Molenat F.<sup>[2]</sup>, Kirkpatrick C.<sup>[3]</sup>**

*<sup>[1]</sup>University of Franche-Comté/ University Paris Descartes ~ Besançon/ Paris ~ France, <sup>[2]</sup>AFREE ~ Montpellier ~ France, <sup>[3]</sup>Erasme Hospital ~ Brussels ~ Belgium*

As presented at a pluridisciplinary symposium during the last WAIMH congress, the Personalized Interdisciplinary Network Care (PINC) integrates all health components of the maternal and infant health into the standardized obstetric-pediatric care. During the last 30 years of medico-psychological collaborations, several evidence-based clinical and teaching tools (Early Prenatal Interview, Midwife Coordinator, Case Review Method) have been created. But what do parents and professionals think about these new perinatal practices and the PINC paradigm? What does research show about the antenatal PINC efficacy provided to women at high risk of psychopathology? During this first session, we will illustrate the applications and benefits of PINC through a clinical case presentation as well as documented testimonies of both parents and professionals. Besides, historically the PINC paradigm emerged through the interviews of families explaining their needs, expectations and bad experiences. Their feedback and case by case evolution remain the powerful tools for validation and evolution of our approach.

S96.3

### **PROMOTION AND TRAINING FRAMEWORK OF THE PINC PARADIGM**

**Morard--Dubey A.<sup>[2]</sup>, Wendland J.<sup>[1]</sup>**

*<sup>[1]</sup>LPPS, University Paris Descartes ~ Paris ~ France, <sup>[2]</sup>University Hospitals of Geneva ~ Sion, Geneva ~ Switzerland*

In this part, we will present how the PINC has been recently promoted on clinical sites and how it is integrated in educational programs all over Europe in order to ensure the sustainability and the promotion of effective interdisciplinary perinatal practices. Since, the Case Review Method was developed and disseminated in more than 50 different countries through on-site trainings as well as a guide that circulated in France and in other countries, such as Canada, Belgium, Switzerland, Brazil and Chile. This methodology is based on both the prospective and retrospective analysis of complex cases that allows the tools' continuous evaluation and evolution. In parallel, changes have been recently implemented at the higher education level (within the university curriculum of future professionals) of psychosocial and medical fields. Indicatively, this new paradigm has integrated the studies and training programs provided for both under- and postgraduate students and professionals of different fields. Such examples are the Perinatality and Early Infancy Certificate of Advanced Studies organized by the medical schools of Lausanne and Geneva and the Integrative clinical psychology and psychopathology master degree in the University of Paris Descartes. Training the new generations of professionals of the perinatal period is an indispensable investment and further changes need to be considered for the university programs.

S96.4

### **THE PINC IMPACT ON THE INFANT'S DEVELOPMENT**

**Toubin R.\***

*Regional University Hospital of Montpellier ~ Montpellier ~ France*

In this last presentation, we would like to demonstrate, firstly, the benefits of the PINC on the infant development and, secondly with audiovisual support, a specific clinical intervention created recently for vulnerable families. First, the association of this new paradigm with the innovative training method and tools presented above has risen the awareness of the perinatal teams. As a result, better screening, earlier orientation and intervention for children presenting developmental and/or psychoaffective difficulties became possible. Moreover, positive experiences with the provided antenatal care have a positive impact on parents' engagement with therapy and the alliance's quality. Last but not least, the evaluation of the family's needs permits to anticipate difficulties and prevents later parental isolation and insecurity. If needed, families can seek for help and activate the network constructed since the pregnancy. At the immediate postpartum and in the spirit of Bullinger's works, a clinical intervention on the baby's holding has been provided for vulnerable mothers with psychopathology hospitalized in the public maternity unit of Montpellier, France. The intervention reduces parental anxiety concerning the psychopathology's impact on the baby and improves their sense of competence and their understanding. However, it requires that parents have been accompanied since pregnancy and a therapeutic alliance has been already constructed. In conclusion, such an intervention constitutes a powerful prevention tool for later psychomotor and relational difficulties of the infant.

#### **Poster Workshop PW10 - TREATING CHILDREN WITH EMDR**

PW10.1

##### **EMDR ON CHILDREN AFFECTED BY EARTHQUAKES**

**Civilotti C.\*, Zaccagnino M., Maslovaric G.**

*EMDR Italy ~ Milano ~ Italy*

EMDR can be an early trauma-focused treatment with children involved in mass disasters. Individual and group sessions can be used for school children seriously exposed to trauma and grief including: threat to life, loss of family members and friends, etc. As part of a comprehensive approach, intervening with EMDR in mass disasters has proven to give a significant contribution to this field. During the presentation the structure of an intervention in the acute phase will be described. Recent developments have implemented EMDR early interventions with earthquake survivors. Epidemiological data and measured changes in post-traumatic stress before and after EMDR will be presented. EMDR therapy has developed a complete effective approach promoting remission from traumatic symptomatology, as well as promoting behavioral change and post-traumatic growth.

PW10.2

##### **SMALL SURVIVORS OF BIG DISASTERS: APPLICATION OF EMDR DURING THE ACUTE PHASE OF TRAUMA IN THE AFTERMATH OF MASS DISASTERS**

**Fernandez I.\*, Maslovaric G.**

*EMDR Italy ~ Milano ~ Italy*

EMDR has demonstrated its effectiveness in treating chronic PTSD and old trauma memories. EMDR can be part of a comprehensive treatment implemented within a community hit by a disaster, especially with children as primary victims. The presentations will highlight clinical aspects related to the use of EMDR following recent trauma of great magnitude, such as natural disasters or child murder. Authors will present outcomes of several EMDR interventions in different areas, focusing on both natural disasters, as well as social and community traumatic events. They will provide thorough description of the development of individual and group treatments and their connections in reducing PTSD symptomatology, along with the effectiveness of these interventions with children.

Findings of these studies suggest that EMDR treatment is a valid early trauma-focused intervention in the aftermath of community disasters: it is not only effective in the process of recovery from trauma, but also promotes the traumatic episode narrative and the normal process of mourning, thus preventing the development of future emotional diseases. Practical guidelines for implementation of EMDR in the acute and chronic phase of trauma after a mass disaster will be provided.

PW10.3

### **EMDR: OUTCOMES OF GROUP TREATMENTS FOLLOWING COMMUNITY DISASTERS**

**Formenti L.\*, Maslovaric G., Luzzi M.**

*EMDR Italy ~ Milano ~ Italy*

This study describes the application of an EMDR group protocol, as an early trauma-focused intervention with children involved in three different community disasters in the area of Milan in 2014. In particular, on February 2014 two children aged 2 and 8 were stabbed by their father, and a 14-year old boy committed suicide. In March 2014, three children of 3, 10 and 13 years of age were stabbed by their mother in another area near Milan. Almost 364 children were treated. The EMDR group treatment subjects were divided according to their level of exposure to the event. Assessments for post-traumatic symptomatology were carried out before and after treatment. Results indicated that, after the EMDR group treatment, children had a lower percentage of PTSD and sub-clinical PTSD symptoms. Furthermore, EMDR helped children with no symptoms reduce their level of subjective psychological distress.

PW10.4

### **THE IMPACT OF CHILDHOOD TRAUMA AND ADVERSITIES ON ADULT MENTAL HEALTH: ADVANCES IN EMDR THERAPY**

**Fernandez I.\***

*EMDR Europe ~ Milano ~ Italy*

EMDR has demonstrated its effectiveness in treating chronic PTSD and old trauma memories that can underlie most mental disorders. In the last years, the application of EMDR with populations exposed to early neglect and interpersonal trauma has become relevant. Clinical experiences reported from thousands of EMDR clinicians, as well as robust research evidence pinpoint EMDR's effectiveness not only when treating trauma as described in criterion A, but also in case of early relational trauma. According to the Adaptive Information Processing model (AIP), negative beliefs, emotions and sensations related to the chronic stress linked to experiences of domestic violence, physical, sexual or psychological abuse, rejection and neglect, become dysfunctionally stored in memory networks and can contribute to the development of mental disorders in adulthood. This presentation will provide neurophysiological, clinical and subjective research outcomes on changes post EMDR treatment, as well as review the latest publications regarding the role of early relational trauma in the development of mental disorders (DSM -5).

PW10.5

### **EMDR AND POSTPARTUM DEPRESSION**

**Zaccagnino M., Civilotti C.\***

*EMDR Center for Eating Disorders ~ Milan ~ Italy*

Scientific literature stresses that depression is the mental health disorder which causes the highest percentage of disabilities within women after childbirth. (O'Hara, 2009; Norhayati, Nik Hazlina, Asrenee, Wan Emilin, 2015). Moreover, the literature has highlighted how postnatal depression

could be associated with serious risks for the mother, for the child's cognitive, emotional and social development and for the quality of the mother-child relationship. Depressed mothers, in fact, often respond in a non-contingent and distorted manner to the infant's cues that may affect the process of mutual affective regulation in the child. This disruption, therefore, may affect the quality of the developing attachment relationship in the children influencing in a negative way future generations (Trapolini et al., 2008). In the light of these considerations, therefore, it would be useful an approach which focuses on unresolved traumatic experiences (e.g. dysfunctional attachment dynamics) which may constitute the vulnerability basis for the onset of postpartum depression and for a difficult mother-infant relationship. The EMDR treatment helps patients to track down the origins of their disease, to access to these traumatic memories and to process them in an adaptive manner. The workshop is intended to provide a theoretical framework and clinical and practical methods for intervention in the context of post partum depression with the EMDR approach. Participants will learn how to identify specific attachment targets and to conceptualize a postnatal depression case in the light of API model; clinical cases and video session will be also provided.

PW10.6

#### **ADHD, ATTACHMENT TRAUMA AND EMDR**

**Verardo A.R., Lauretti G.\*, Cioccolanti E.**

*Emdr Italia ~ Roma ~ Italy*

The aim of this study is to prove, through clinical presentation, that the ADHD syndrome is often the final clinical form of the disorganized attachment, and that is why the clinical syndrome significantly changes with EMDR treatment. The hyperactivity of children with diagnosis of ADHD presents a clinical form that overlaps with the clinical sign resulting from attachment trauma with caregivers, like hyperarousal. The attachment theory, indeed, can attribute a new understanding to ADHD symptoms and leading the clinicians towards alternative and more effective forms of therapy, which are focused on traumatic experiences' reprocessing, like the psychotherapy with EMDR (Eyes Movement Desensitization and Reprocessing).

PW10.7

#### **EMDR AND PROMOTING SECURITY IN THE ATTACHMENT BOND BETWEEN PARENTS AND CHILDREN**

**Verardo A.R., Lauretti G.\*, Cioccolanti E.**

*Emdr Italia ~ Roma ~ Italy*

The aim of this study is to show, through clinical presentation, that with relational games between the child and his/her caregiver, it's possible to give rise to gratifying and soothing interactions, which are subsequently enhanced in the memory nets with EMDR to lead the attachment bond with the caregivers towards safety and to start matching insecure or disorganized Internal Working Models with other Internal Working Models, which are characteristic of secure attachment. Secure attachment is an important protective factor for the development of psychopathology. The EMDR (Eyes Movement Desensitization and Reprocessing), as well as being efficient in the reprocessing of traumatic memories, is efficient at enhancing the positive neural patterns, which are created after the child has experienced a rewarding interaction with his/her caregiver. From this viewpoint, the psychotherapy room can become the context to encourage these positive experiences in families with severe conflicts between parents and children.

## Brief Oral Presentations BOP38 - ADAPTATION OF THE NEURO RELATION FRAMEWORK (NRF)

BOP38.1

### **CONSIDERING PRACTITIONER'S FIDELITY PROGRESS BEFORE COLLECTING FAMILY OUTCOMES USING THE NEURORELATIONAL FRAMEWORK (NRF)**

**Trujillo G.\*, Lillas C.**

*NeuroRelational Framework Global Communities ~ State of Alaska ~ United States of America*

Alaska's Infant Learning Program (ILP) has chosen the NeuroRelational Framework as one of their state-wide trainings available their practitioners. For both the ILP and the state's involvement in the State Systematic Improvement Plan, family outcomes are necessary to measure the level of impact the NRF has on parents and young children. To focus on process, practitioner readiness was considered before family level outcomes were collected. The NRF translates brain science into a comprehensive clinical approach that assesses and works to improve 1) adaptive vs. toxic stress outcomes, 2) socio-emotional developmental outcomes, and 3) functional behaviors that support resilience in brain architecture. While monitoring client progress is paramount, it is necessary to ensure practitioners first reach fidelity with the clinical treatment. Thus, family feedback was intentionally not collected until practitioners reached an Independent Level in the use of each NRF step. After 9 months of training, the ILP practitioners completed a self-report of their independent use of the NRF's 3 clinical steps. Results indicated that on a six-point Likert scale, practitioners reached an average score of 4.1 for Independent Use of Step 1 which assesses adaptive vs. toxic stress. In this step, parents are taught a color-coded system for identifying 4 different awake states, three of them being stress responses, for which the intensity, duration, and frequency of stress responses are considered. Preliminary family survey results indicated an overall decrease in both the parents' and child's duration, frequency, and intensity of stress responses.

BOP38.2

### **SUPPORTING ALASKA'S STATE SYSTEMATIC IMPROVEMENT PLAN FOR SOCIAL-EMOTIONAL CHILD OUTCOMES USING THE NEURORELATIONAL FRAMEWORK (NRF)**

**Trujillo G.<sup>[1]</sup>, Lillas C.\*<sup>[2]</sup>**

<sup>[1]</sup>*NeuroRelational Framework Global Communities ~ Sitka, Alaska ~ United States of America,*

<sup>[2]</sup>*NeuroRelational Framework Global Communities ~ Los Angeles ~ United States of America*

Alaska chose Social-Emotional Outcomes as their focus for their State Systematic Improvement Plan. As part of a statewide plan to increase and improve an early interventionist's integration of socio-emotional development, the NeuroRelational Framework (NRF) is being used to guide this transformation in communities across the state. An underlying assumption is that if the skills and knowledge of the early interventionist increase, the better the outcomes for infants, toddlers and their families. The NRF uses three clinical steps that represent an integration of infant mental health and early intervention principles with an emphasis on early brain development and neurobiology. The emphasis of the NRF on eliminating toxic stress in the family, improving the quality of parent/child engagement, and supporting healthy brain architecture provides support for social-emotional growth. The four brain systems organizing brain architecture function in multiple ways – as a way of understanding individual differences in neurodevelopment as well as guiding the co-creation of cross-sectored communities that use a common language and a shared approach. This community approach began with the early intervention sector. This resulted in Alaska having two cohorts receiving an intensive 2-year training in the NRF. In addition, one and two-day trainings in the NRF have been provided for all early interventionists in Alaska to build a common language usage across the state. The community vision is now gathering momentum to include other

stakeholders in future trainings from other community sectors, such as mental health, child welfare, and early care and education.

BOP38.3

**USING THE NEURORELATIONAL FRAMEWORK (NRF) TO TRAIN CHILD PROTECTION SOCIAL WORKERS AND SUPPORT THE DEVELOPMENT OF MULTIDISCIPLINARY TRAUMA-INFORMED COMMUNITIES IN LOS ANGELES COUNTY**

**Andrade L.\***

*NeuroRelational Framework Global Communities ~ Los Angeles, CA ~ United States of America*

Los Angeles County aims to improve practice with young children and their families by creating trauma-informed communities in at least one office per Service Planning Area (SPA). The NRF provides a match because it aligns with the County's Core Practice Model (CPM) which includes Engagement, Assessment, Teaming, Planning and Tracking with parents and community partners to improve child and family-based outcomes. Los Angeles County's Young Children in Care Strategic Plan Objective Team (SPOT) seeks to improve Trauma-Informed Best Practice regarding work with young children and their families by developing multidisciplinary teams referred to as "0-5 Champions." These groups of champions are made up of self-selected professionals that work with families involved in the county's child protection agency. Each group receives specialized trainings on different aspects of brain development and the impact of trauma. 0-5 Champions apply learning during monthly meetings with community partners focused on assessment and planning for young children and families. Next, the plan is to expand and support the "0-5 Champions" by providing NRF training for all Children's Social Workers (CSWs) along with collaborative community partners. Currently, four LA County regional offices have started the development of "0-5 Champions" and two of those offices have completed training on the NRF. Outcome data is starting to reveal that a better trained workforce may decrease the recurrence of maltreatment. The plan is for each of the 18 LA County regional offices to develop their own 0-5 Champion workgroup and to train all County CSWs on the NRF by 2020.

BOP38.4

**INNOVATION IN OUTCOME MEASURES APPROACH: USING SYSTEM SCIENCE AND TECHNOLOGY TO ASSESS STRESS AND STRESS RECOVERY IN CHILDREN AND CAREGIVERS**

**Dobbs T.\*, Lillas C.**

*NeuroRelational Framework Global Communities ~ Los Angeles, CA ~ United States of America*

The Neurorelational Framework (NRF) provides a unique lens that holds the complexity of both internal human systems and interconnected, external social systems. This presentation explores projects underway to apply system science principals as a contemporary approach for addressing and assessing the intricate interactions between multiple influences that affect stress and stress recovery in at-risk children and their caregivers. We will also discuss the benefit of applying technology in clinical settings to highlight the role of outcome measures as a feedback loop within assessment and intervention. While contributing to our theoretical understanding of stress and trauma within the body, we are interested in using innovative mathematical approaches and technologies to explore stress responses in real-time within the complexity of dynamic environments. We are assessing the feasibility of wearable sensors to assess child (0-5) and parent electrodermal activity (EDA), temperature, and heart rate variability (HRV), along with the use of a phone application for parents to input their own and their child's behavioral indicators of stress response patterns, triggers, and strategies for managing the stress response. The findings from this brief study will support more elaborate research, both theoretical and clinical, that applies dynamic

systems modeling. With information about the internal milieu, practitioners will be better able to identify problematic behaviors in terms of stress and stress recovery patterns. The phone application will guide the use of multiple resources of “tool kits” to intervene with stress reduction techniques, tailoring interventions to the individual needs based on stress and stress recovery assessments.

BOP38.5

**USING THE NEURORELATIONAL FRAMEWORK (NRF) TO BUILD A DEMONSTRATION SITE FOR CREATING A CONTINUUM OF CARE RANGING FROM PROMOTION, TO PREVENTION, TO INTENSIVE INTERVENTION WITHIN A COMMUNITY SETTING**

**Faulkner L.\***

*NeuroRelational Framework Global Communities ~ San Benito County ~ United States of America*

To ultimately address gaps in literacy and learning outcomes, San Benito County in California aims to integrate trauma-informed practice for young children and their families by creating a learning community that uses a common language and a shared approach using the NRF's three clinical steps described elsewhere on this panel. The history of the community project, overview of strategic plan, and process for implementing training in phases will be described. Leaders in San Benito County began a process of articulating strategies to increase literacy. Early in this process, local educators and leaders were interviewed resulting in 100% of responders stating literacy is an issue. A majority of those interviewed attributed low literacy performance scores were primarily attributed to migrant workers, and Hispanic families living in poverty. Fact findings could not support these attributions, leading the collaborative to ask whether a system level implicit bias existed within community. This reflective process provided new insight into the children and families living in the community, facing epigenetic risk due to intergenerational cultural trauma, toxic stress, and poverty. Influenced by research suggesting that cognitive interventions that attempt to resolve the literacy deficits or “word gap” maybe be ineffective compared to strategies that include trauma informed interventions for the child and family through a culturally sensitive lens, the NRF was adopted for this demonstration site. The strategic plan is organized through four phases, moving through promotion, prevention, intervention, and train-the-trainer.

BOP38.6

**USING A PEER FEEDBACK FRAMEWORK TO PROMOTE A CLIMATE OF COLLABORATION AND PROFESSIONAL GROWTH FOR INTERDISCIPLINARY TEAMS**

**Thomas L.\***

*NeuroRelational Framework Global Communities ~ State of Washington ~ United States of America*

Communication is the cornerstone of collaboration. This project aims to illustrate a relationship based professional development process that lays the groundwork for successful team collaboration. This presentation supports cross-sector communication that carries its inherent challenges when working to mature interdisciplinary teams. Effective communication touches every aspect of the workplace, both positively and negatively. Research supports the affirmative impact of constructive communication patterns on professional careers, relationships, personal health and organizations. The NeuroRelational Framework (NRF) is an interdisciplinary framework that always seeks to improve communication skills in the context of potential conflict. Communication that supports team relationships can significantly improve both performance and morale. This presentation will describe a direct feedback and professional development process that has been used in both non-profit and government settings. This framework is designed to reduce destructive communication patterns and behaviors such as gossip, undermining and passive aggression through

promoting:

- opportunities to develop communication skills through a structured face to face feedback process
- an increased depth of shared meaning among diverse team members
- enhanced synergy and team cohesiveness

As a result of this process interdisciplinary team members have reported improved:

- interdisciplinary relationships
- comfort in addressing difficult issues and concerns with peers
- clarity regarding indicators of effective team members
- understanding of critical areas for personal and professional growth

Promoting these important conversations shows promise in supporting a team climate of respect, transparency, trust and accountability and team relationships that support collaborative work with children and families.

## **Brief Oral Presentations BOP39 - ASSESSMENT TOOLS SCREENING**

BOP39.1

### **IDENTIFICATION OF MENTAL HEALTH PROBLEMS IN A GENERAL POPULATION OF INFANTS**

**Ammitzbøll J.\*, Thygesen L.C., Andersen A., Holstein B.E., Skovgaard A.M.**

*National Institute of Public Health, University of Southern Denmark ~ Copenhagen ~ Denmark*

Children's mental health problems are challenging to public health. Research suggests potentials of infant mental health assessment within the existing child surveillance delivered by health visitors (HV). The Copenhagen Infant Mental Health Questionnaire, CIMHQ, is a new measure developed to identify mental health problems at child age 9-10 months. The aims of this study were to investigate the feasibility of CIMHQ within existing service settings of HVs and to explore if the measure can identify predictors of mental health disorders at child age 1½ years. The study population was 2,973 infants from 11 Danish municipalities, who were assessed by HVs at age 9-10 months. A subsample of 416 children were assessed at age 18-20 months by face to face examinations and diagnosed according to the International Classification of Disease, ICD-10, and Diagnostic Classification of Mental Health and Developmental Disorders, DC:0-3. The feasibility was explored by descriptive statistics. Predictivity was investigated in children examined using the CIMHQ and assessed regarding the presence of mental health disorders. Prospective associations between problems identified and mental health disorders at 1½ years were examined by univariate and logistic regression analyses. The CIMHQ is feasible within existing service settings and predictive of mental disorders at 1½ year across the diagnostic spectrum of ICD-10 and DC:0-3R diagnoses. The results suggest that CIMHQ can be used as an overall mental health assessment at 9-10 months, with a score index a need of HV attention on the mental health of the child, and may guide a differentiated approach of interventions, within the areas: Regulatory problems of sleep, eating problems, problems of language, communication and interaction, and emotional and relational problems.

BOP39.2

### **DO TODDLERS SHOW ELEVATED STRESSLEVELS IN CHILDCARE?**

**Drugli M.B.\*<sup>[1]</sup>, Solheim E.<sup>[2]</sup>, Lydersen S.<sup>[1]</sup>, Moe V.<sup>[3]</sup>, Smith L.<sup>[3]</sup>, Berg--Nielsen T.S.<sup>[2]</sup>**

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It has been argued that frequently elevated activation of the HPA axis in early childhood endangers brain development. Meta-analytic evidence suggests that children have higher cortisol levels in

childcare than at home. In Norway more than 80% of 1- and 2-year-old children attend childcare up to 8 hours or more per day and Norwegian childcare centres therefore represent a unique context for childcare research. In the present study change of morning to mid-afternoon levels of cortisol was explored at home and in childcare in a Norwegian sample of toddlers. Further, analyses of associations between change of cortisol levels in childcare and child-, family-, and childcare factors were conducted. Parents from a prospective community-based study were invited to participate. One hundred and twelve children attending 85 childcare centres were included in the present study. Saliva samples and observations in childcare were conducted 5-6 months after the children entered childcare. Linear mixed model analyses revealed a statistically significant difference in change of cortisol levels during the day in childcare as compared at home. An increase in cortisol levels during the day was found among Norwegian toddlers in childcare, but not at home. Children with the 8-9 hours per day in childcare showed an increase in cortisol during the day, whereas children attending childcare 5-7 hours did not. In this study, an increase in toddlers morning to mid-afternoon cortisol levels was found in Norwegian childcare centres compared to home, particularly for children with long days in childcare. To investigate whether these small, yet statistically significantly elevated levels of cortisol have effect on toddlers' further development was beyond the scope of this study.

BOP39.3

#### **THE VALIDATION OF A PARENTAL RESPONSIVITY SCREENING MEASURE IN THE INFANCY PERIOD**

**Prime H.\*<sup>[1]</sup>, Jenkins J.<sup>[2]</sup>**

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Social disadvantage is related to child language, cognition, and mental health, with parental responsivity in early childhood, in part, mediating such links. Thus, identifying parents who may benefit from parent-based intervention in the early childhood period has implications for preventing the impact of socioeconomic disparities on the developing child. Although considered the gold-standard, intensive observational assessments of parental responsivity are not cost effective for widespread use in health care settings. The current study developed a screener of parental responsivity, which used a thin-slice (i.e., impressionistic) methodology based on brief observations of parent-child interaction when children were 18 months old. Participants included 501 children (and their parents) in a longitudinal birth cohort study, with three measurement points in the early childhood period. At Time 1 (child age 2 months), parents reported on sociodemographic risk (e.g., socioeconomic status, maternal depression). At Time 2 (18 months), parent responsivity was coded using 11-items indexing mutuality, mind-reading, and communication, based on a 5-minute parent-infant interaction task. Child outcomes were measured at Time 3 (52 months), which included behavioural/emotional difficulties (parent-reported), and direct assessment of receptive vocabulary, theory of mind, and executive functioning. Psychometric properties and predictive validity were examined. The parent responsivity screener showed good internal consistency and inter-rater agreement. Correlations of the parental responsivity screener with (i) early sociodemographic risk; and (ii) later child outcomes were significant in the hypothesized directions. Finally, we replicated a robust path model utilizing receptive vocabulary (52 months) as an outcome; there was a significant indirect effect of early sociodemographic risk on later receptive vocabulary via parental responsivity, controlling for earlier levels of receptive vocabulary. Preliminary analyses suggest the efficacy of using a thin-slice methodology of parental responsivity with children as young as 18 months of age. Findings are discussed from a public health perspective, with applications to high-risk and clinical samples.

BOP39.4

**MEASURING BEHAVIOUR PROBLEMS IN TODDLERHOOD: APPLICABILITY OF THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE AMONGST ONE AND TWO YEAR OLDS**

**O'Farrelly C.\*<sup>[1]</sup>, Eneberu A.<sup>[2]</sup>, Helen P.<sup>[3]</sup>, Iles J.<sup>[1]</sup>, Grimas E.<sup>[1]</sup>, Ramchandani P.<sup>[1]</sup>, Healthy Start Happy Start Study Team<sup>[1]</sup>**

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Behaviour problems can emerge early in childhood and while transient for some children, for others they represent clinically significant difficulties that can persist into later psychopathology. While debate exists as to whether it is possible/appropriate to measure mental health problems in very young children, there is a need for tools that can help in identifying those who may benefit from assessment and early intervention. This study sought to assess the psychometric properties of the early years (2-4 years) Strengths and Difficulties Questionnaire amongst 1 and 2 year old children. This study draws on screening and baseline data from the UK-based Healthy Start, Happy Start (HS,HS) trial (n =300). 2029 parents of 1 and 2-year-old children (M = 22.54; SD = 6.67) were screened using the Strengths and Difficulties Questionnaire across six UK sites. Just over one third of children (36.7%) were eligible for the RCT using a cut-off of 8 on the externalising subscale (Goodman, personal correspondence). Preliminary confirmatory factor analysis identified adequate model fit for a second order five factor model, including the SDQ subscales and broader internalising and externalising difficulties subscales. Assessment of internal consistency identified acceptable reliability for the total difficulties, externalising, and prosocial ( $\geq .70$ ) scales, borderline acceptability for the hyperactivity (.66) scale, and poorer reliability for the conduct problems, emotional symptoms, and internalising ( $\leq .59$ ) scales, with slightly higher reliability observed in older children. Amongst at-risk children enrolled in the HS,HS trial strong correlations were found between the CBCL and SDQ total/total difficulties scales ( $r = .61$ ) and internalising ( $r = .61$ ) and externalising scales ( $r = .63$ ). These results provide preliminary support for the use of the SDQ, particularly in identifying externalising and total difficulties, amongst one and two year old children.

BOP39.5

**TEMPERAMENTAL ADAPTABILITY, PERSISTENCE, AND REGULARITY: PARENTAL RATINGS OF NORWEGIAN INFANTS AGED 6 TO 12 MONTHS, WITH SOME IMPLICATIONS FOR PREVENTIVE PRACTICE**

**Olafsen K.S.<sup>[1]</sup>, Stein Erik U.<sup>[2]</sup>, Torgersen A.M.<sup>[3]</sup>, Wentzel--Larsen T.<sup>[4]</sup>, Smith L.<sup>[3]</sup>, Moe V.\*<sup>[5]</sup>**

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There is a need for standardized measures of infant temperament to strengthen current practices in prevention and early intervention. Temperament pertains to behavioral dispositions that are within normal range, but may appear deviant and abnormal to parents or others if misunderstood, and may be creating some problems of mastery and adaptation. The present study provides Norwegian data on a short scale (46 items), which is used in a US Health Maintenance Organization.

This study sought to compare internal consistencies of the Cameron-Rice Infant Temperament Questionnaire (CRITQ) with a US sample, and to determine whether dimensions with acceptable reliabilities were unifactorial. Mothers' and fathers' differential ratings of their infants were also investigated, as well as changes in ratings of temperament from six to 12 months. Associations between the temperament dimensions at 6 and 12 months and parenting stress at 12 months was also investigated for mothers and fathers. The CRITQ was filled out by mothers and fathers at six and again at 12 months as part of a longitudinal study of mental health during the first years of life (the "Little in Norway" study, 1 041 families enrolled). Parenting Stress Index (PSI) was filled out at 12 months. Internal consistencies were comparable with US -data. The dimensions persistence, adaptability and regularity had acceptable or close to acceptable reliabilities in the US study as well as in this study, and were also unifactorial in CFA analysis. Parents had differential ratings of their infants on these three dimensions, including differences in means from six to 12 months. All three dimensions were negatively related to parenting stress. The study suggests that adaptability, persistence, and regularity may be relevant when assessing infant behavior, and may be applied in systematic prevention trials for families with infants.

### **Workshop WS82 - SOCIAL-EMOTIONAL ASSESSMENT AND INTERVENTION FOR 0-3'S IN HIGH RISK POPULATIONS (S.U.S.I. STUDY)**

**Hardy C.\*, Murphy E.**

*South London and Maudsley NHS Foundation Trust ~ London ~ United Kingdom*

To present an assessment and intervention model (S.U.S.I.) for high risk children, 0-3 years, in a multi-agency collaboration with outcomes over 12 month review period. We tested the feasibility of engaging three vulnerable populations of children aged 0-3 and their families over a three year period. The clinical research delivered emotional/mental health assessments and targeted interventions for children, to improve their mental health, emotional well-being and relationships to their primary caregivers. Cohorts included in study: Children newly looked after (LAC); Children of parents referred to Parental Mental Health team (PMH); Children on Child Protection (CP) Plans. The SUSI assessment and intervention model has proved relevant and acceptable to a diverse range of children, families and caregivers, with high levels of sustained engagement across socio-demographic groups at 6 and 12 month reviews. The model was part of integrated multi-agency work and became a new approach to assess need and support statutory networks around families. 139 families were recruited across three cohorts, with 122 completing a baseline assessment, comprising clinical and standardised measures. The tailored intervention was informed by this assessment and delivered through 'live' parent-child relationship work, and reflective discussion with parents to increase responsivity and understanding of their child's needs. Significant positive outcomes highlighted at baseline to 6 month follow up were also found from baseline to 12 month follow up for all who completed more than 50% of the intervention, including improved child social-emotional development, quality of parent-child relationship and improved parental depression, anxiety and stress.

### **Workshop WS83 - MEDICAL CLOWN THERAPY FOR YOUNG CHILDREN WITH ASD**

**Ofir S.\*, Gavrieli O.**

*Ziv Medical Center Zefad ~ Israel ~ Israel*

Given effective, evidence-based interventions (EBI), many children with autism spectrum disorders (ASD) can make significant improvement in behavior, communication, and social functioning. The PLAY-Project is one such intervention for young children with ASD. PLAY-Project is an intensive home-base intervention program which helps parents use specific techniques to develop an

enjoyable relationship with their children, improve communication, social interaction and behavior. Integrated Play Groups (IPG) is another such intervention. IPG provides specialized support in small playgroups of children with ASD and typical peers. IPG builds friendships, communication and imagination. Medical-clowns (MC) provide therapeutic interventions to children in hospital settings. MC use many of the techniques found in PLAY and IPG. This proof of concept, pilot study explores the use of MC techniques, combined with elements of PLAY and IPG for young children with (ASD). The study showed that medical-clowning improves the communication and social skills of young children (33-72 months) with ASD, during interaction both with a medical-clown and with a typically developed child who joined the session. In this workshop we will present the pilot study, which took place at the Child Development Center at Ziv Medical Center, in northern Israel. We will show short videos demonstrating the techniques, will present case studies and parents' responses. In addition we will be happy to work with you on the techniques. To quote one of the parents: "my child learned to be a friend"

### **Workshop WS80 - PSYCHOTHERAPY CENTERED ON PARENTHOOD (PCP) : AN INTERVENTION DESIGNED TO NURTURE THE EARLY RELATIONSHIP**

**Nanzer N.\*<sup>[1]</sup>, Goma M.<sup>[2]</sup>, Llarío A.<sup>[2]</sup>**

<sup>[1]</sup>HUG ~ Geneva ~ Switzerland, <sup>[2]</sup>Bruc Salut SCP ~ Barcelona ~ Spain

Psychotherapy centered on parenthood (PCP) has the specificity of taking place early during perinatal period and of addressing the father as well as the mother and, of course, the baby. It aims to prevent and to treat relational and emotional suffering that could interfere with the infant's development. This workshop has two aims:

1) To describe PCP, its applications and the technical instruments used. Dr Nathalie Nanzer will outline the characteristics of this method when it is used in the prenatal period, during which the main focus of treatment is the fantasy internal objects of the mother. Once the real baby is present, the therapy progresses through back-and-forth movements between internal object relationships and the relationship with the real baby.

Method: the theoretical part will be completed and illustrated through clinical examples and video clips.

2) To describe how PCP can be implemented in the public health care system. Working as part of a network with other health professionals represents an important commitment to prevention and treatment in the perinatal clinic.

Method: Dr Marta Gomà will show how this approach has been developed and implemented in a health centre in a disadvantaged neighbourhood in Barcelona, in cooperation with care management, general practitioners, pediatricians, nurses, midwives, social workers and administrators. She will explain how PCP operates within a multidisciplinary network of health professionals through close coordination and teamwork. A case, accompanied by video material, will be presented, along with the preliminary results of an ongoing study applying PCP.

### **Workshop WS81 - EARLY THERAPEUTIC INTERVENTION SERVICES IN THE PUBLIC SECTOR**

**Layiou--Lignos E.\***

*Athens University Medical School Child Psychiatric Clinic, Children's Hospital 'Aghia Sophia' ~ Athens ~ Greece*

The infant's intense emotional experience can elicit the parents' unworked-through infantile relationships to their own parental figures. The mother-infant emotional bond that is based on repeated mutual failures in meeting the needs and expectations of both parties, leads to the establishment of impaired relationships. An early intervention programme addressing the

dysfunctional relationships between parents and children before they get established is offered at the Child Psychiatric Clinic, Athens University Medical School, 'Aghia Sophia' Children's Hospital. The approach offers brief, targeted and flexible response to parents with babies and/or young children providing the whole family a space to think together with the therapists about the anxiety-provoking situations at home. The clinical entity addressed by the therapists is the parent-child relationship. The purpose of the therapeutic intervention is to enable the parents to find their own inner resources and employ them to understand their child's communication, freeing the present relationship with their child from the 'ghosts' from their past. Through the clinical material will be illustrated: a) the psychoanalytic understanding of the parent-child relationship, b) the therapeutic stance, c) the therapeutic tools and d) the use of psychoanalytic observation (based on the Esther Bick method of infant observation).

## **Brief Oral Presentations BOP41 - ATTACHMENT, MENTALIZATION AND IMH - PART II**

### **BOP41.1**

#### **COUPLES' PRENATAL BONDING TO THEIR CHILD AND PREGNANCY-RELATED CONCERNS IN THE THIRD TRIMESTER OF PREGNANCY**

**Göbel A.\*, Mudra S.**

*Center for Child and Adolescent Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf ~ Hamburg ~ Germany*

Empirical studies support the assumption that paternal involvement positively influences the child's socio-emotional development already early in life. Even though fathers have nowadays increasing possibilities to participate in perinatal care, comparably little is known about the paternal perspective during the transition to parenthood. This is especially relevant, since becoming a parent marks a crucial experience and a period of higher vulnerability for both partners. Recent studies report that approximately 10% of fathers experience mental health problems in the perinatal period. Further, research on the maternal experiences in transition to motherhood identified especially the developing relationship to the fetus and concerns about pregnancy and parenthood as important aspects with potential influence on the postnatal mother-child relationship. It is not unlikely that similar associations might influence the paternal adaption process. Therefore, the paternal perspective during pregnancy, independently as well as in interaction with the maternal perspective, needs further investigation. The aims of this study were first, to investigate the extent of parental bonding and pregnancy-related concerns in expectant mothers and fathers, and second, to identify associations with their relationship as well as mental well-being of both parents. As part of a longitudinal study in Hamburg, Germany, a sample of 120 low-risk expectant couples was examined in the third trimester of pregnancy. Each partner filled out a set of self-report forms about bonding to the child (Maternal/Paternal Antenatal Attachment Scale, M/PAAS) and concerns regarding pregnancy (Cambridge Worry Scale, CWS). They were further asked about adult attachment style, relationship satisfaction, perceived social support and mental well-being. Results reveal individual patterns of MAAS and CWS in mothers and fathers. Further, for each partner divergent associations of MAAS and CWS with the assessed psychosocial variables were observed. Results are discussed regarding their implications for practice addressing the individual needs of parents-to-be.

### **BOP41.2**

#### **REFLECTIVE FUNCTIONING AND PERSONALITY ORGANIZATION: ASSOCIATIONS WITH NEGATIVE MATERNAL BEHAVIORS**

**Rousseau M.\*, Karin E.**

There are still significant gaps in our knowledge regarding specific risk factors associated with different types of negative parenting behaviors. Research to date has largely focused either on the determinants of specific negative parenting behaviors such as frightening and frightened maternal behaviors (Main & Hesse, 1999) or on a combination of atypical maternal behaviors (LyonsRuth, Bronfman, & Parsons, 1999) and their determinants and implications, specifically regarding disorganized attachment. The aim of this study is to examine whether mothers who manifest insensitive and disconnected behaviors in interaction with their infants differ in terms of maternal reflective functioning (RF), personality organization, and histories of abuse. A total of 86 mother–infant dyads, 28 of them with histories of abuse, participated in the study. RF was assessed with the Adult Attachment Interview, and personality organization was assessed with the self-report Inventory of Personality Organization before the birth of the baby. Maternal behaviors were assessed using the Disconnected and Extremely Insensitive Parenting measure when the infants were 15 to 18 months old. The results of multivariate analyses of covariance indicate that both RF and personality organization were associated with disconnected and extremely insensitive maternal behaviors. Mothers classified as presenting intrusive/aggressive behaviors had significantly lower RF as well as significantly more difficulties in personality organization, including reality testing, identity, and defense mechanisms. Withdrawn and disconnected maternal behaviors were associated with the combination of difficulties in mentalization and personality organization rather than difficulties in one specific area. The study provides new evidence regarding the importance of a mentalizing stance about early attachment relationships for the modulation of maternal behaviors, especially intrusive/aggressive behaviors.

BOP41.3

#### **GETTING TO KNOW YOU: PRELIMINARY EVIDENCE OF THE VALIDITY OF THE MINI-PARENTAL REFLECTIVE FUNCTIONING INTERVIEW**

**Ensink K.\*<sup>[1]</sup>, Borelli J.<sup>[4]</sup>, Normandin L.<sup>[1]</sup>, Slade A.<sup>[3]</sup>, Fonagy P.<sup>[2]</sup>**

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Parental Reflective Functioning (PRF) has been demonstrated to be a central concept for parent–infant psychotherapy because of its implications for facilitating sensitive parenting and inhibiting negative parental behaviours and thus promoting infant attachment organization and security. For this reason it is a priority to develop reliable brief measures to assess PRF regarding 6 month old infants. The aim of this longitudinal study was to examine the reliability and validity of the Mini-Parent Reflective Functioning Interview, (mini-PRFI) designed to assess the parent’s capacity to mentalize for his/her 6 month old infant (coded using the parental reflective functioning coding system; Slade et al., 2004), and to examine whether maternal insensitivity mediated the association between parental reflective functioning and children’s attachment classification (organized/disorganized). Mother–infant dyads (N = 88) completed the Adult Attachment Interview (AAI) before the birth of the infant, the Mini-PRFI when infants were 6 months old, and a behavioral interaction task and (coded for insensitive parenting with the Disconnected and Insensitive Parenting coding system) and the Strange Situation when infants were 16 months old. The findings of the study show that PRF can be rated reliably using Slade and colleagues’ (2004) coding system. PRF was strongly positively associated with AAI RF and negatively associated with maternal insensitivity. PRF predicted infant attachment organization at 16 months, and this relationship was mediated by parenting insensitivity. These findings underscore both how robust the PRF coding

system is, and show that it is possible to obtain a reliable and valid assessment of PRF using the Mini-PRFI when asking brief but relevant questions that tap into the parent's propensity to consider the infant as a unique psychological being.

BOP41.4

#### **CHILDHOOD OBESITY AND PARENTAL REFLECTIVE FUNCTIONING: WHICH CONNECTIONS?**

**Pazzagli C.\*, Germani A., Buratta L., Cenci G., Mazzeschi C.**

*University of Perugia ~ Perugia ~ Italy*

Studies on childhood obesity has shown that parents' body mass index (BMI) represents an important risk factor for the development of childhood obesity. As biological and environmental factors account for the transgenerational transmission of obesity only in part, more attention has been paid to psychological mechanisms explaining the effects of parental weight on children's weight. The issue of parents' dysregulated emotional response has received increasing support in studies and parallels have been drawn between how children develop emotion and energy-intake regulation, but little is still known about how parental responses to children's emotions are related to eating. As parental reflective functioning (PRF), which lays the foundation for the children's ability to regulate emotions, has not yet been investigated, the present study aims to evaluate whether mothers' and fathers' BMI and PRF are associated with children's weight. With a sample of 120 parents (60 mothers + 60 fathers) of 60 children aged 6-11 (M=8.77, SD=1.68) with normal-weight (n = 30) and with an obesity onset before 3 years of age (n = 30), a hierarchical regression was performed in order to determine the predictive power of PRF (assessed with Parental Reflective Functioning Questionnaire – PRFQ) on children's BMI z-score, above and beyond the mothers' and fathers' BMI. Data shows that the best model includes parents' BMI and mother's low PRF. The model is significant (F=6.71, p < .001) and explains over 27 % of the variance of child's weight. The effect of the mother's tendency to be overly certain of child's mental states is significant (b= .44, p < .05), above and beyond the parents' BMI. The current exploratory findings, if confirmed by future studies, shows an interesting effect of PRF on children's weight, with important implications on both clinical and research field.

BOP41.5

#### **REFLECTIVE FUNCTIONING ACROSS THE TRANSITION FROM PARTNERS TO PARENTS: PROTECTIVE EFFECTS WITH MATERNAL DEPRESSION**

**Goldstein A.\*<sup>[3]</sup>, Borelli J.<sup>[3]</sup>, Mc Devitt--Shai D.<sup>[1]</sup>, Slade A.<sup>[2]</sup>**

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Maternal depression during the pre- and postnatal period is associated with suboptimal parenting behavior and confers considerable risk for negative outcomes in infants, particularly with respect to self-regulation. However, few studies of maternal depression have explored the broader context in which these symptoms operate, including the couple relationship factors that may protect against these negative impacts. In the current study, we extend promising findings regarding parental reflective functioning (RF) – a well-established protective factor – into the realm of romantic relationships, measuring parents' RF for their partners (partner RF) when their babies are six months old. Using a longitudinal sample of parents followed from the prenatal period to their children's second birthday, we explore whether partner RF uniquely protects children from the negative outcomes associated with parental depression. Mothers and fathers reported on their depressive symptoms during a prenatal assessment; they completed an RF interview including measures of both partner and parental RF when their infants were six months old. Parents reported on their

parenting and children participated in a standardized laboratory assessment of effortful control when children were 24 months of age. The results indicated that fathers' partner RF, but not parental RF, weakened the association between prenatal maternal depression and permissive maternal parenting and poorer effortful control in children. Maternal partner RF did not buffer against paternal depression, and neither maternal nor paternal parental RF operated as protective factors in these models. These findings underscore the crucial role of considering the couple relationship context – particularly fathers' partner RF – in buffering children against the negative impact of maternal mood disturbances. We will discuss these findings in terms of their potential implications for interventions.

BOP41.7

### **THE ROLE OF PARENTAL REFLECTIVE FUNCTIONING ON CHILD ADJUSTMENT IN MOTHERS AND FATHERS OF PRESCHOOLER CHILDREN**

**Mazzeschi C.\*, Buratta L., Raspa V., Delvecchio E., Pazzagli C.**

*University of Perugia ~ Perugia ~ Italy*

The parental reflective functioning (PRF) is the parents' capacity to comprehend the developing mind of their child and the ability to reflect on them. Although PRF is considered at the root of parental sensitive responding in interaction with infants and, in turn, to help the child to develop emotional regulation ability, few studies have investigated PRF and the child adjustment. Two previous longitudinal studies have shown that mothers' low mentalizing increased the risk of later conduct disorder and oppositional defiant disorder at 10 years old (Centifanti et al., 2016; Meins et al., 2013). To date, the literature on PRF focused mainly on mothers and few studies have investigated differences between mothers' and fathers' PRF (Luyten et al., 2017). Because fathers' PRF capacities have been associated with socioemotional development of their children, it seems important to determine whether PRF is similar or different in fathers and mothers in preschool age children. The present study aims to evaluate in a sample of 238 parents (119 mothers + 119 fathers) of children of 24-36 months of age, mothers' and fathers' PRF and its association with their children's internalizing and externalizing difficulties. Parents filled in the Parental Reflective Functioning Questionnaire (Luyten et al., 2009) and the Strengths Difficulties Questionnaire (Goodman, 1997). Multivariate analysis of variance (MANOVA) and correlations were performed. Data shows significant differences on PRF, with mothers reporting higher PRF ( $F(1,238)=8,97$ ,  $p=.003$ ,  $\chi^2=.043$ ) than fathers. No child's gender-related differences were found. Only for fathers low PRF resulted to be significantly correlated with children's internalizing problems ( $r= -.258^{**}$ ). These findings contribute to the understanding of the importance of PRF for child's adjustment and stimulate the creation of new opportunities for prevention and intervention, paying particular attention to fathers' involvement.

### **Brief Oral Presentations BOP40 - TRAINING DEVELOPMENTS IN IMH**

BOP40.1

### **MOTHERING FROM THE INSIDE OUT: CAN ADDICTION COUNSELOR REFLECTIVE FUNCTIONING IMPROVE IN RESPONSE TO CLINICAL TRAINING?**

**Suchman N.\*<sup>[1]</sup>, Borelli J.<sup>[2]</sup>**

*<sup>[1]</sup>Yale University ~ New Haven ~ United States of America, <sup>[2]</sup>University of California Irvine ~ Irvine ~ United States of America*

Mothering from the Inside Out (MIO) is a brief evidence-based individual therapy that aims to foster parental reflective functioning (PRF) in mothers with substance use disorders. PRF encompasses the

capacity to make sense of strong emotions that arise in the mother during challenging parenting situations and to make sense of children's strong emotions and attachment needs. PRF is an important skill for parents with substance use disorders who often struggle with impulsiveness and emotion regulation in the absence of natural neurobiological rewards associated with parenting. Now that MIO has demonstrated efficacy in a laboratory setting, we are training addiction counselors to deliver MIO with fidelity in a community treatment setting. Here we will report findings from the first study objective - a test of whether clinician capacity for Clinical Reflective Functioning (CRF) improves as a function of MIO training. 20 counselors have been randomly assigned to receive 8 weeks of MIO vs PE (Parent Education – active comparison) training followed by a 12 week training case with weekly group supervision. We hypothesized that MIO clinicians would show greater improvement in CRF than PE clinicians by the training case's completion. We developed the Clinician RF Scale (CRFS) – a 4 point scale measuring CRF during open-ended responses to three brief patient interview clips. Currently, 6 MIO and 5 PE counselors have completed baseline and post-training CRFS procedures. Interrater reliability for two coders on the CRFS is excellent (ICC range = .79-.89,  $p < .001$ ). No group differences in CRFS scores at baseline were found. At post-training case, t-tests for independent samples indicated that MIO therapists showed notably higher RF ( $t = 2.41$ ,  $d = 1.06$ ,  $p < .04$ ) than PE therapists. We expect data 23 therapists by May. MIO training and supervision leads to improvement in MIO therapist CRF. Training outcomes and video examples will be presented.

BOP40.2

#### **THE BENEFITS OF A SABBATICAL IN AN INFANT MENTAL HEALTH TEAM FOR AN OLD PAEDIATRICIAN**

**Marraffa C.\*, Chapman M.**

*Royal Children's Hospital ~ Melbourne ~ Australia*

After practising as a general and developmental paediatrician for 30 years I was eager to determine how my practice and care of families whose children had significant disabilities could be improved. Most parents of children with disabilities have a different journey from those with typically developing children. The infant mental health practitioners in my tertiary hospital agreed to allow me to spend four months observing and learning about how they work with families. The opportunity to think about an infant who is ill and in a neonatal intensive care setting was a powerful and helpful experience for me. The role of infant mental health practitioners supporting both infant and parents is different from that of a paediatrician or neonatologist. The collaboration and support of staff, as well as patients, was challenging but clearly needed especially when there was little hope and multiple social, emotional and physical demands on parents and their infants. This role had not existed in the early days of my training in 1980's. I would like to examine some of the skills I learned and perhaps encourage others to understand the perspective of the baby in an intensive care setting.

BOP40.3

#### **CLINICAL GROUP SUPERVISION IN AN ACUTE PERINATAL INPATIENT UNIT**

**Re J.\***

*Monash University ~ Melbourne ~ Australia*

Exploring the experience of offering clinical group supervision for staff in a perinatal and infant inpatient unit over several years is presented. Perinatal and mother and baby units are acute inpatient units for very unwell mothers and their vulnerable infants. The units provide specialised care, and multi-agency liaison fundamental to the mothers' effective treatment and the babies'

wellbeing. Clinical group supervision might be seen as a form of specialist care for the staff who care for these patients. It provides a space for reflection based on confidentiality, safety and respect amongst staff. It is also considered by many, a priority in establishing and maintaining a high standard of clinical practice. A range of themes will be explored outlining the rationale, context and processes enabling effective supervision. Supervision's contribution to preventing and minimising the potential for dangerous acting out will be examined, and also its function in considering self-care with its potential to reduce stress and burnout amongst staff.

243 - BOP40.4

#### **INCREASING THE REFLECTIVE CAPACITY OF HOME VISITING STAFF THROUGH FAN(FACILITATING ATTUNED INTERACTIONS) TRAINING**

**Spielberger J.\*<sup>[1]</sup>, Gilkerson L.<sup>[2]</sup>**

*<sup>[1]</sup>Chapin Hall at the University of Chicago ~ Chicago, IL ~ United States of America, <sup>[2]</sup>Erikson Institute ~ Chicago, IL ~ United States of America*

This oral presentation describes the impact of an intensive, cross-model training in Erikson Institute's FAN (Facilitating Attuned Interaction) approach to enhance the skills and reflective capacity of home visitors and supervisors. FAN training was delivered to staff of 14 Healthy Families America (HFA) and Parents as Teacher (PAT) home visiting programs. Training included a 2-day, onsite core training followed by 18 ongoing trainings. The evaluation sought to (1) understand the impact of training on staff's reflective capacity and practices and (2) compare the effects of training on two different program models. Using a quasi-experimental, mixed-methods design, the study assessed staff engagement and skills through surveys, standardized measures, and qualitative interviews before, during, and after training. By the end of training, 90% of home visitors reported using the FAN approach frequently in home visits. Home visitors showed significant increases in reflective capacity on four scales of the Provider Reflective Process Assessment Scales with increases in self-regulation, collaboration, process (understanding complexity) and authentic attitude (openness, curiosity, and acceptance of client). Home visitors reported an increase in supervision quality and a decrease in emotional exhaustion and depersonalization on the Maslach Burnout Inventory. Supervisors reported in interviews becoming more self-aware, reflective and, in turn, more supportive of staff. Results differed little by program model, although HFA home visitors assessed themselves higher than PAT home visitors on their ability to focus visits on parenting and on encouraging parents to lead visits and solve their own problems. They also felt more comfortable using the FAN approach in supervision. The study provides valuable lessons for designing training to enhance the reflective capacity and skills of home visiting staff in different program models. These have implications for strengthening the home visiting workforce, enhancing parenting capacity, and improving child health and development long-term.

BOP40.5

#### **HAND IN HAND EVALUATION: A COMMUNITY DRIVEN MODEL TO SUPPORT EARLY DEVELOPMENT**

**Kulkarni C.\*<sup>[2]</sup>, Reynolds J.<sup>[1]</sup>, Khambati N.<sup>[2]</sup>**

*<sup>[1]</sup>Queen's University ~ Kingston ~ Canada, <sup>[2]</sup>The Hospital for Sick Children, Infant Mental Health Promotion ~ Toronto ~ Canada*

Improving developmental and mental health outcomes for at-risk children depends largely on the collaboration of multiple systems and disciplines within the community. To ensure successful collaboration, disciplines will likely need to access opportunities to increase their knowledge of infant mental health, become familiar with validated developmental screening tools, and integrate early intervention within their practice. In recognition of this, family and child community agencies

across the Region of Niagara (Canada) were committed to improving physical and social-emotional development of young children through knowledge translation and exchange among frontline Practitioners, creating a common approach to early developmental screening within the community, and to introduce a developmental support planning model as a means to improve developmental outcomes for at-risk children. Frontline Practitioners from Family and Children's Services (FACS), Niagara (n=74) were recruited to the study, following the completion of infant mental health basics, developmental screening, and the support planning model training. All participating Workers were asked to complete a pre- and post-training knowledge questionnaire and a demographic questionnaire evaluating a number of variables. In collaboration with participating parents, Practitioners completed the developmental screening and development support planning model at three time points: Baseline, 90 days after baseline assessment, and another 90 days following the second assessment. Preliminary results demonstrated that following the developmental support planning intervention, at-risk children significantly improved in their performance in problem solving and gross motor domains. Future analyses will assess whether increased knowledge in infant mental health and other Practitioner-specific variables have any bearing on children's developmental outcomes. Preliminary findings suggest the benefits of collaborative community practice in supporting children's early development.

BOP40.6

**TEACHING BASIC SCIENCE IN SOCIO-EMOTIONAL DEVELOPMENT TO HEALTH AND MENTAL HEALTH PROFESSIONALS: THE INTERDISCIPLINARY MA PROGRAM IN CHILD DEVELOPMENT**

**Joels T.\***

*Haifa ~ Israel*

In this presentation, we will share what we have learned from our unique Interdisciplinary MA Program in Child Development at the University of Haifa, Israel as a prism of teaching and sharing knowledge about socio-emotional development in general and infant mental health and attachment theory with interdisciplinary students. The program was designed for experienced health and mental health professionals, (i.e., speech therapists, physiotherapists, occupational therapists, social workers, and nurses) who work with children and their families. The main aim of the program is to expose students to up to date developmental science, with a special focus on infant mental health and attachment theory and its relevance to their day-to-day work. The program consists of courses in basic science, including advanced courses in attachment and parenting. Students exercise the translation of theory and research into practice, by practice observational skills and the construction of assessment, intervention and prevention programs within their professional discipline with a new focus on the emotional needs of children and their families. Equally important is the program's emphasis on creating a secure base for the students by providing a supportive environment as well as a space for reflection on inner processes, including those evoked by the academic material. We will discuss how this program changed the professional identity of the students as clinicians and the way it has influenced the field of professional work with children and families in Israel.

BOP40.7

**DEFINING AND MEASURING INTERACTIONS IN REFLECTIVE SUPERVISION: THE REFLECTIVE INTERACTION OBSERVATION SCALE (RIOS)**

**Watson C.\***

*University of Minnesota ~ St. Paul ~ United States of America*

Use of reflective supervision (RS) is growing rapidly, spanning multiple interventions and disciplines. It is theorized to improve staff competence and morale, intervention efficacy, and ultimately child outcomes. However, there have been few attempts to study the RS process and set the stage for establishing an evidence base for the practice. A research tool was designed to identify critical components and operationalize the RS process. The aim was to develop to a measure to clearly define and operationalize the critical, unique content and process components of RS that set it apart from other forms of relationship-based professional development such as coaching or mentoring. The tool allows researchers to establish the “level” of reflective interaction within a given reflective session and track the development of a dyad’s reflective work over time. A team of clinicians and researchers from across the U.S. participated in the research. Face and construct validity were established via an extensive literature review. A modified Delphi process further affirmed validity. Reliability testing is underway now. The Reflective Interaction Observation Scale (RIOS) articulates five “Essential Elements” of RS that define the content of the conversation between supervisor and supervisee and five operationalized “Collaborative Tasks” that define the process of the dyadic interactions in RS. The RIOS is used to code audio or video recordings. The RIOS charts the interactions with supervision as it unfolds during a session, as well as providing pre-and post- data to track the dyad’s developing capacity for reflection over time. Currently research teams at three universities are using the RIOS to investigate the use of RS with home visitors. In addition, the RIOS is being used as a framework for training staff about RS and for individual and program evaluation.

## **Brief Oral Presentations BOP42 – INTERVENTIONS-BABY WATCHING PROGRAM AND COS**

### **BOP42.1**

#### **THE ATTACHMENT-BASED PREVENTION PROGRAM B.A.S.E.® - BABYWATCHING AND ITS IMPLEMENTATION IN DIFFERENT COUNTRIES, WITH DIFFERENT TARGET GROUPS AND IN DIFFERENT SETTINGS**

**Brisch K.H.\*<sup>[1]</sup>, Keren M.<sup>[2]</sup>**

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B.A.S.E.® - Babywatching is an attachment-based program to prevent aggression and fear, and to promote sensitivity and empathy. It was developed by K. H. Brisch in the Paediatric Psychosomatic Department at Dr. von Hauner Children’s Hospital, Munich/Germany. Participants observe interactions between a mother/father and her/his baby once a week. The observations are accompanied by a B.A.S.E.® group leader who serves as a facilitator and who applies a special questioning technique so that participants learn to empathize with the mother/father and with the child. The focus of this symposium is on the implementation of this program in different countries, with different target groups and in different settings. One talk provides an insight into the implementation of B.A.S.E.® - Babywatching in an early childhood class in New York. Here, the impact of the program on the different participants (i. e. children, their families, mothers/fathers, and B.A.S.E.® group leaders) is described. Another talk focuses on the implementation of B.A.S.E.® - Babywatching for a new target group, namely parents who are at risk of losing custody of their child or who have just regained custody of their child. Here, the aim is to help the parents become more empathic and sensitive to their child’s needs and more competent in their role as parents. Finally, the implementation of B.A.S.E.® - Babywatching for small groups of children in kindergarten showing symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD) will be described. As

children with ADHD often face socio-emotional problems and a high comorbidity rate, it is most important to strengthen empathy and perspective-taking in this particular target group.

BOP42.2

**B.A.S.E.® - BABYWATCHING IN NEW YORK: IMPACT ON CHILDREN, FAMILIES AND STUDENT-TEACHERS**

**Lafontant M.\***

*Medgar Evers College, City University of New York (CUNY) ~ New York ~ United States of America*

Provide an exposé on first B.A.S.E.® - Babywatching programs in United States and how they compare and contrast to those in Europe. The first B.A.S.E.® - Babywatching pilot program in the United States took place in an early childhood class where all children were Black and from middle-class backgrounds in a suburban neighborhood in New York. Children and teacher feedback on the benefits of the program were very similar to the types of responses often heard in Europe. The mother who came with her infant, like mothers in Europe, also reported enjoying and appreciating the attention on the baby and the validation of her maternal efforts. What was distinctly different was the difficulty in recruiting the Mother / Baby dyad. This difficulty was linked to the radically dissimilar lengths in maternity / paternity leave in the United States and Europe, i.e., the typical 6 weeks of "unpaid" leave in the U.S. versus several months of "paid" leave in Europe (Donovan, 2017). Finally, in the fall of 2017, a group of approximately twenty (20) student-teachers who were serving low-income schools received training as B.A.S.E.® Group Leaders. The majority were also of Afro- or Afro-Caribbean descent. Their reactions to this training and how this has transformed their conceptions of their roles as teachers in the classroom will also be discussed.

BOP42.3

**B.A.S.E.® - BABYWATCHING AS A PREVENTION PROGRAM FOR KINDERGARTEN CHILDREN WITH FIRST SIGNS OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)**

**Stöckl R.\*, Landers S., Brisch K.H.**

*Pediatric Psychosomatic Medicine and Psychotherapy, Dr. von Hauner Children's Hospital, LMU Munich, Germany ~ Munich ~ Germany*

This presentation aims to give an overview of the application of B.A.S.E.® - Babywatching as a prevention program for kindergarten children with symptoms of ADHD. Besides touching upon the theoretical background, important practical considerations for the implementation of B.A.S.E.® - Babywatching for this special target group will be provided. As research on B.A.S.E.® - Babywatching has shown, particularly those children with prior deficits benefit well from the program (Haneder, 2011). Taking this into consideration, B.A.S.E.® - Babywatching will be evaluated as a prevention program for kindergarten children with attentional problems or hyperactivity in our new project. Children with ADHD often face socio-emotional problems (Bora & Pantelis, 2016) and show high comorbidity rates with other disorders (American Psychiatric Association, 2013). Therefore, we consider it essential to strengthen these children's empathy and sensitivity and to reduce their anxiety and aggression, which is the aim of the B.A.S.E.® - Babywatching. This presentation will discuss practical issues and the process of implementing B.A.S.E.® - Babywatching for this particular target group. The specific challenges in working with this target group and how we faced them will be described. Furthermore, the presentation will be enriched by descriptions of the children's development during the B.A.S.E.® - Babywatching.

BOP42.4

#### **CIRCLE OF SECURITY PARENTING FOR SDN CHILDCARE MANAGERS AND EDUCATORS**

**Morgan M.\*<sup>[1]</sup>, Connolly L.<sup>[2]</sup>, Chang G.<sup>[2]</sup>**

*<sup>[1]</sup>Occupational Therapist ~ Sydney ~ Australia, <sup>[2]</sup>SDN Children's Services ~ Sydney ~ Australia*

Cooper, Hoffman and Powell in publication on COS in Childcare (COS C) 2017, say, having a secure attachment in early childhood creates clear advantage in learning and the development of school readiness. We describe a specialised project by SDN Children's Services, founded in 1905, which currently runs 24 education and care services for babies and young children in NSW and the Australian Capital Territory. SDN invested in educators' opportunity to enhance overall sensitivity of relational care in childcare. They contracted qualified Facilitator of the COS Parenting Program. Recent educational literature emphasises Reflective Practice, meaning of actions, goals and outcomes in specific situations. SDN in utilising COS P aims to focus on encouraging personal and with-child reflection in each interaction. SDN believes these are fundamental steps needed to positively effect Reflective Practice. Purpose of presentation is to share how COS P with Managers and Educators at SDN has been overwhelmingly positive experience. Since the first group in 2016, to time of writing abstract, 9 groups have been completed, for groups of 6 to 7 participants, attending 4 hours per week, for 5 consecutive weeks, followed by 1 x month follow-up and ongoing seminar supervision. Gray, 2015, suggests regarding Better Mental Health and Attachment Awareness, pathways of effect have still to be demonstrated in infant and toddler care settings. Our intent is to describe anecdotal evidence of reduction in worker stress, increased self efficacy, and enhancement of ability to form secure relationships, including recognising obstacles to children's abilities to engage securely.

BOP42.5

#### **'WISER AND KIND': AN EVALUATION OF THE CIRCLE OF SECURITY PARENTING PROGRAM IN A COMMUNITY MENTAL HEALTH SERVICE**

**Reay R.\*<sup>[1]</sup>, Ringland C.<sup>[2]</sup>, Bragg J.<sup>[3]</sup>, Kelly M.<sup>[3]</sup>, Quinlan E.<sup>[2]</sup>, Palfrey N.<sup>[4]</sup>, Haymes N.<sup>[4]</sup>**

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Children of parents with mental health problems are at greater risk of developing mental health problems themselves. In order to prevent this transmission of risk, we need to support the parents who care for them. We examined the effectiveness of the Circle of Security Program (COS-P) delivered to mothers diagnosed with a mental health disorder and foster carers with parenting difficulties. We investigated whether COS-P would be associated with enhanced parent-child relationships in this population. In particular, whether there would be i) a significant reduction in parenting-related stress and ii) mental health symptoms and iii) improvement in parenting self-efficacy by the end of the intervention. We also tested whether improvements were maintained at six-month follow-up. Participants completed a set of validated self-report questionnaires at baseline, end of treatment and 6 months post-intervention. These included the Parenting Stress Index, 4th Ed, (Abidin, 2012; 120 items), the Karitane Parenting Confidence Scale and the Edinburgh Postnatal Depression Scale (EPDS). Qualitative interviews of the parents were conducted pre and post the intervention by an independent interviewer. Fifty-three participants consented to the study

and 44 (83%) completed the intervention. Results showed a statistically significant improvement in mean scores for parenting-related stress ( $p=.003$ ), parenting self-efficacy ( $p=.022$ ) and mental health symptoms ( $p=.001$ ) with medium effect sizes. These results were maintained at the six-month follow-up. Post treatment interviews highlighted the participants' enhanced observational skills, reduction in negative views of themselves and their children and more responsive parenting behaviours. The Circle of Security Program can be successfully delivered to families affected by mental health problems in the postpartum period and foster carers. It was associated with positive improvements in their perceptions of themselves as parents/carers. Overall, participants reported greater confidence and competence, more responsive parenting and felt better able to understand their children's attachment and exploratory needs. This study provides important data on the feasibility of a larger, controlled trial of COS-P in real world clinical settings.

BOP42.6

#### **A THEORY OF CHANGE FOR CIRCLE OF SECURITY PARENTING (COS-P) INTERVENTION: DEVELOPMENT OF A SCALABLE EVALUATION TOOL AND PRELIMINARY FINDINGS IN AN AUSTRALIAN SAMPLE**

**Huber A.<sup>[1]</sup>, Maxwell A.\*<sup>[1]</sup>, McMahon C.<sup>[1]</sup>, Hawkins E.<sup>[2]</sup>, Reay R.<sup>[3]</sup>**

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COS-P is widely disseminated in Australia (> 10,000 practitioners trained), however there is very limited evidence regarding effectiveness, how it works, and for whom. Aims were to: i) articulate a theory of change specific to COS-P; ii) describe a scalable composite caregiving questionnaire aligned with the theory of change; iii) report changes in parenting self-evaluations in response to COS-P. Experienced COS trained practitioners and attachment researchers conferred to develop an initial theory of change, further informed by a review of published and unpublished studies evaluating COS-P. With permission, brief versions of existing validated questionnaire measures that aligned with the theory of change were incorporated in a Composite Caregiving Questionnaire (CCQ) focused on parent representations of self as parent and of child. Fifty parents of infants referred to parent support services in Sydney, Australia because of perinatal depression and/or unsettled infant behaviour completed the CCQ pre and post an 8-week COS-P group. Paired T-Tests indicated that mothers showed significant increases in empathy,  $t(45) = 6.20$ ; and affection,  $t(47) = 4.44$ , toward their baby; their capacity to keep baby in mind,  $t(48) = 4.34$ ; and overall rating of parenting self-efficacy,  $t(47) = 3.19$ , all  $ps < .01$ . There were reductions in feelings of hostility toward the baby,  $t(48) = -2.04$  and caregiving helplessness,  $t(46) = -4.49$  and they rated their baby as less difficult,  $t(46) = -3.09$ , all  $ps < .05$ . Results support the theory of change and suggest COS-P may improve how parents think and feel about themselves as parents and about their child. Controlled trials of COS-P effectiveness are needed, as well as evidence that changes in parent representations translate into changed parent behaviour and parent-child attachment.

BOP42.7

#### **DOES CHILD ATTACHMENT CHANGE AFTER CIRCLE OF SECURITY PARENTING PROGRAM AND INDIVIDUALIZED VIDEO REVIEW SESSIONS?**

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The Circle of Security (COS) intensive program, consists of psycho-education and participant's individualized video review, and is expensive. The Circle of Security Parenting (COS-P) program provides psycho-education and reflective dialogue with a facilitator using archived DVD footage and is less expensive and easier to use in community practice. The present longitudinal study i) examines improvement in the parent-child attachment after COS-P; ii) whether there is further change after individualized video review and iii) 6 months later. Twenty-seven dyads (pre-school aged children) were recruited from the community from 2013 to 2016. Child attachment behavior was assessed with the Strange Situation procedure (SSP) before intervention (Time1), after COS-P (Time 2), after individualized video review sessions (Time 3), and 6 months later (Time 4). At Time1 and Time 4, the adult attachment interview (AAI) was conducted with mothers. Preliminary analyses (n=20) found that no significant change in child attachment classification between Time 1 and Time 2, nor between Time 1 and Time 3. A significant change was found between Time 1 and Time 4. Among 9 children who were classified as insecure in SSP at Time 1, were classified as secure at Time 4, while among 10 children who were classified as secure at Time1, only 1 was classified insecure at Time 4 (McNemar test=3.125, p=.039 (1tail). We found no significant change in mother's AAI classification. At the follow up assessment conducted at 6 months after both COS-P and video review sessions, children's attachment improved, although mother's state of mind regarding attachment stayed the same. To examine the effect at each time point, we may need to assess more subtle changes in attachment (i.e. rating scales rather than categories) with a larger sample size.

#### **Symposium S98 - FROM PERINATALITY TO CHILDHOOD: THE RELATIONSHIP AMONG MATERNAL, PATERNAL VARIABLES AND CHILD'S TEMPERAMENT AND DEVELOPMENT**

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The symposium offers the opportunity to compare international studies on child temperament, based on the clinical and research evidence that, since the perinatal period, both parent and offspring characteristics play a relevant role for child's mental health and functioning. The symposium will focus on a time range starting from perinatal and going to childhood. The study of early temperamental dispositions is strictly linked to the study of parental factors (e.g. personality, life events, psychopathology) which may influence the expression of the first: how the parents perceive the infant characteristics, in fact, influences their interactive behavior, the nature of the relationship with the child and his/her development (Oberklaid et al., 1993). For what concerns parental psychopathology, it has been shown that maternal perinatal symptoms may contribute to the emotional and behavioral characteristics in infancy and childhood (Glover, 2014). For instance, maternal anxiety has been associated with fetal overexposure to cortisol, which in turn may lead to infant's high temperamental reactivity (Poggi Davis et al., 2012). High reactive infants, who later may become inhibited children, have shown a higher risk, compared to low reactive ones, to develop an anxiety disorder in adolescence and adulthood (Kagan & Snidman, 2004). The talk #1 will focus on early temperamental traits as both measured and perceived by mothers, including the influence of variability based on cultural differences. The talk #2 will explore the role of maternal anxiety on infant temperament up to 18 months postpartum. The talk #3 will analyse the role of paternal variables on the baby's psychomotor development. The talk #4 will consider maternal perceptions of temperament in school-aged children comparing different cultural backgrounds.

S98.2

**PATERNAL SENSITIVITY, ATTACHMENT FORERUNNERS AND THEIR INFLUENCE ON THE PSYCHO-MOTOR DEVELOPMENT OF THE NEWBORN**

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Recent research demonstrates that the psychological characteristics of the father are important for the protection of the family and for the child's development. However, the paternal function is manifested not only by supporting and encouraging his partner to foster a good mother-child bond, but also directly in the relation with the child. Aim of this research was to study the influence of attachment forerunners and parental sensitivity of the father on the child's psycho-motor development. A sample of 61 father-child couples, divided in 34 term and 27 preterm (birth weight < 1500 g) newborns, were assessed during the first 6 months of corrected age. At 3 months of corrected age, the CARE-Index (Crittenden, 2004), a video-recorded procedure of adult-child spontaneous interaction evaluating parental sensitivity and attachment forerunners, was administered to all father-child couples. At 6 months of corrected age, the child's psycho-motor development was assessed through the Bayley Scales of Infant Development (BSID III). In term-born children an association with father's high Dyadic Sensitivity ( $p=.001$ ), father's 'Sensitive' attachment forerunner ( $p=.010$ ) and child's 'Cooperative' attachment forerunner ( $p=.015$ ) emerged. Conversely, father's low Dyadic Sensitivity, father's 'Non-Responsive' attachment forerunner and child's 'Difficult' attachment forerunner were associated with preterm-born children. Both in term and preterm birth, father's attachment forerunners resulted associated with the Expressive Language Scale ( $p=.014$ ) (BSID-III) and the father's dyadic sensitivity resulted associated with the Expressive Language Scale ( $p=.016$ ) and the Motor Scale-Fine Motor Subscale ( $p=0.44$ ) (BSID-III). The results of this study evidence the influence of father's sensitivity and attachment forerunners on the child's development from early stages of life. Poor parental sensitivity and high-risk attachment forerunners resulted associated with a negative child's psychomotor development, in term and preterm newborns. A more sensitive paternal relationship was associated with better child's motor and language performance.

S98.3

**CULTURAL DIFFERENCES IN INFANT REACTIVITY: AN EXAMINATION OF MATERNAL AND OBSERVER RATED BEHAVIOR, AND CORTISOL RESPONSE IN CHINESE AMERICAN AND EUROPEAN AMERICAN 4 MONTH-OLD INFANTS**

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The purpose of this study was to compare observed reactivity, maternal report of temperament, and cortisol response, and their associations between Chinese American (CA) and European American (EA) infants. CA and EA mothers and their 4-month old infants ( $n=114$  dyads, 48.7% male) participated in a laboratory-based observational study. Infants were administered visual and auditory stimuli to distinguish behavioral reactivity levels and cortisol samples were collected over 3 time points during the course of the paradigm. Infant responses including limb activity, arching of

the back, fret/cry, positive vocalization, and smiling were coded. Maternal reported infant temperament was assessed through the Infant Behavior Questionnaire (IBQ-R). AUCg of cortisol was negatively correlated with behavioral observations of Positive Vocalization ( $r=-.33$ ,  $p<.05$ ) only for CA ( $z=-1.94$ ,  $p<.05$ ). AUCg was negatively correlated with maternal reported High Intensity Pleasure ( $r=-.36$ ,  $p<.05$ ) and Low Intensity Pleasure ( $r=-.50$ ,  $p<.001$ ), with a trend observed with Smiling ( $r=.29$ ,  $p<0.1$ ) in CA. Infant reactivity observed in the laboratory, maternal report and cortisol response appears to manifest differently across Chinese American and European American infants. Lower positive affective states in the reactivity paradigm was characterized by fewer positive vocalization and smiling, and those reported by the mother, with lower scores on high and low intensity pleasure associated with higher cortisol output overall during the course of the paradigm for CA. This is striking given previous observations of lower behavioral reactivity in Asian infants overall, and behaviorally inhibited during toddlerhood among CA. Minimization of positive affect with higher cortisol response may demonstrate a different threshold of distress or arousal for CA. The finding of greater cortisol with positive affect only in our CA sample could indicate that concordance between observed behavior and physiology may vary by group and that early cultural values of expression might manifest through cortisol reactivity by 4 months of age.

S98.4

#### **A PROSPECTIVE STUDY OF INFANT TEMPERAMENT AND JOINT ATTENTION ABILITIES EXPLORING THE ROLE OF PRE-AND POSTNATAL MATERNAL ANXIETY**

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Temperament has been found to be related with Joint Attention in infancy (Vaughan Van Hecke, Mundy et al., 2007). Also, temperament seems to be correlated with pre-and postnatal maternal anxiety in infancy (Henrichs et al., 2009). However, the relations between temperament, infant social abilities and maternal mental health have been rarely explored. We aimed to investigate the relations between pre- and postnatal maternal anxiety, infant's temperament, and communicative abilities in infants at 3, 6 and 14-18 months of age. Pre-and postnatal maternal anxiety was evaluated in 108 first-time mothers during pregnancy and in the first year of their infants (at 3, 6, and 14-18 months); also, their infants' (66 M; 42 F) temperament was assessed at 3, 6, and 14-18 months. At 14-18 months of age, the infants' socio-communicative abilities with a new social partner were evaluated in a subsample of 35 children. Maternal anxiety was evaluated by the State-Trait Anxiety Inventory (Spielberger et al., 1968); temperament was measured by the Infant Behavior Questionnaire-Revised (Gartstein & Rothbart, 2003), and we analyzed the socio-communicative abilities with a new social partner using the "Early Social Communication Scales" (Mundy et al., 2003). High pre- and postnatal (at 3, 6, 14-18 months of the infants' age) maternal anxiety scores correlated significantly with infant's Negative Emotionality (fear and sadness). Significant correlations between temperament and infant's Joint Attention Abilities emerged. Specifically, Responding to Joint Attention was negatively correlated with fear and sadness and positively correlated with the duration of orienting. This ongoing study showed interesting correlations between temperament and early infant social abilities. It seems that sad and fearful infants tend to be less responsive in the course of social interaction with a new partner. Maternal anxiety may play a mediating role, by influencing infant's fear and sadness.

S98.5

**MATERNAL PERCEPTIONS OF CHILD TEMPERAMENT: A CROSS-CULTURAL COMPARISON BETWEEN US AND ITALIAN MOTHERS**

**Minelli M.\*<sup>[1]</sup>, Snidman N.<sup>[2]</sup>, Agostini F.<sup>[1]</sup>, Dicorcia J.<sup>[2]</sup>, Tronick E.<sup>[2]</sup>**

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Although many studies have focused on temperament from early to middle childhood, not many have compared objective behavioral measures of temperament with maternal perceptions. A few studies (Bishop et al., 2003; Kagan, 1984) reported medium to low correlations ( $r = 0.2-0.5$ ) between observed measures of child temperament, based on lab assessment, and maternal perceptions based on parent-reports. Even less research has compared the perception of child temperament in different countries even though the socio-cultural context can have an impact on how parents perceive and react to their child's temperament (Chen et al., 1998). Specific temperament dimensions may be appreciated in one culture but not in another. The aim of the current study was to compare maternal perceptions of child temperament between a sample of children from the U.S. and a sample from Italy. The total sample was composed of 92 U.S. mothers (USG) of children aged 5-7 (53.3% males) and 60 Italian mothers (ITG) of children aged 4 (41.7% males). All mothers completed the parent-version of the Child Behavior Questionnaire Short Form (CBQ-SF), characterized by 94 items and 15 subscales (e.g., Activity Level, Shyness, Anger, Sadness) evaluating the adult perceptions of temperament of children aged 3-7. The U.S. mothers completed an online survey with the original version of the CBQ-SF (Putnam & Rothbart, 2006), while the Italian mothers completed the Italian validated version (Albiero et al., 2010) in a paper form. Results from a MANOVA found that the U.S. children were perceived by their mothers to have significantly higher levels ( $p < 0.001$ ) of several CBQ dimensions, e.g. activity level, anger, positive anticipation and both high and low intensity pleasure, compared to the Italian children. Exploring maternal perceptions of child temperament in a cross-cultural perspective is important for our understanding impact of culture on development. Implications for these findings will be discussed.

Sunday 27 May 2018

Poster Sessions

POSTER PRESENTATIONS P01

Advocacy and Infant Mental Health Policy

P01.1

**BUILDING A FRAMEWORK FOR INFANCY/EARLY CHILDHOOD MENTAL HEALTH WORKFORCE DEVELOPMENT THROUGH ADVOCACY AND TRAINING: THE ALLIANCE FOR THE ADVANCEMENT OF INFANT MENTAL HEALTH**

**Dickstein S.\*<sup>[4]</sup>, Brophy--Herb H.<sup>[1]</sup>, Kubicek L.<sup>[2]</sup>, Tomlin A.<sup>[3]</sup>**

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High quality care that supports infant/early childhood mental health (IECMH) requires a well-trained workforce spanning disciplines and systems. Programs, agencies, and State governments need sustainable and strategic methods to build IECMH systems. The Endorsement for Culturally Sensitive, Relationship-Focused Practice Promoting Infant Mental Health<sup>®</sup> is part of a workforce development system that recognizes and documents competencies and reflective practice experiences of infant/family professionals; informs training and reflective supervision/consultation needs; and identifies qualified providers of professional development and reflective practice opportunities. Using a qualitative review of state level data, aims include: 1) Identify themes in 5 areas of IECMH workforce development: Community Collaboration; Training/Higher Education; Reflective Supervision/Consultation; Policy Development/Systems Change; and Sustainability/Funding; and 2) Provide recommendations to guide strategic planning within and between state programs/agencies and systems. We independently reviewed the annual reports of 23 U.S. member states of the Alliance for the Advancement of Infant Mental Health, an organization of infant mental health associations that promote the Endorsement for Culturally Sensitive, Relationship-Focused Practice Promoting Infant Mental Health<sup>®</sup>. Each report was evaluated by one of four researchers to identify themes related to high quality systems-building relative to IECMH strategic planning. A second reviewer evaluated and verified the themes, if warranted. As a group, we reviewed and came to consensus on final themes across reports. Common themes across states in the 5 key areas included: fostering links between state and federal policy; building partnerships between IECMH and other competency systems, including university systems; and, increasing awareness of IECMH using formal and informal media. We present a framework for capacity-building, sustainability, and strategic workforce development and planning. This work has potential to facilitate systems-building initiatives and strategic collaborative partnerships to systematically support the IECMH workforce. This is critical for the well-being of vulnerable children, families, and the workforce that supports them.

P01.2

**EFFECTIVENESS OF FAMILY BASED PSYCHOLOGICAL INTERVENTIONS IN PREGNANCY PERIOD ON INCREASING SATISFACTION OF COUPLES AND ATTACHMENT TO INFANT**

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*University of Tehran ~ Tehran ~ Iran, Islamic Republic of*

The present research is aimed at teaching the program of family based psychological interventions during mothers' pregnancy on increasing the satisfaction of couples and attachment to the newborn. Attachment and affective behavior patterns form before childbirth. Emergence of maternal-fetal attachment is the predicting factor for maternal attitude and function, interaction with infant and attachment patterns after the childbirth. The purpose of current study is to assess the effectiveness of preterm attachment tutorial program on post term maternal fetal attachment. Because Mothers with higher attachment to their fetuses are more satisfied with their lives and have more interactions with the infant. Sample group consisted of pregnant women who visited subspecialty hospital of gynecology and obstetrics. In the end 34 of pregnant women were chosen and distributed randomly in two groups of experimental and control with 17 people in each. Current study is experimental with pretest – post test and control group. In order to collect data, maternal fetal attachment (Cranelly, 1981), marital satisfaction (Enrich, 1989) and mother-infant attachment (Condon and Corkindale, 1998) tests were used. Experimental group participated in 12 tutorial sessions of 60 minutes each and taking place once a week. Data analysis was carried on by using multivariate co variance analysis. Results showed that participating in preterm attachment program has increased mother-infant attachment in post term period and has significantly increased mother – infant interaction. Also marital satisfaction is increased in couples. Taking into consideration the effectiveness of preterm attachment program on increasing mother-infant attachment in post term, executing this program, we can improve the quality of post term period and assure mental health for mother, child and family.

P01.3

#### **INFANT MENTAL HEALTH AWARENESS, KNOWLEDGE, AND BELIEFS: DO ECE PROVIDERS DIFFER FROM THE GENERAL PUBLIC?**

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Early care and education (ECE) providers play an important role in infant mental health (IMH) by developing nurturing attachment relationships with children and recognizing early signs of mental health problems for early intervention referral. However, minimal research has focused on awareness and understanding of IMH among ECE providers. Using the Oklahoma Infant Mental Health Survey (Williamson, Huffer, Morris, & Hays-Grudo, 2015), the current study examines responses from a sample of 199 ECE providers and 826 members of the general public obtained via a national online survey. The survey includes three subscales: Beliefs about Responsive Caregiving, Knowledge of Development, and Awareness of IMH, all measured on a 5-point scale. There is a significant effect of group membership (ECE provider or general public) on Awareness of IMH,  $F(1, 998)=131.154$ ,  $p < .001$ ; Knowledge of Development,  $F(1, 1001)=7.099$ ,  $p < .01$ ; and Beliefs about Responsive Caregiving,  $F(1, 994)=38.882$ ,  $p < .001$ , after controlling for age and gender. These results suggest that ECE providers are more likely to endorse responsive caregiving for infants and toddlers, know more about infant development, and are more aware of infant mental health than the general public. However, 20% of ECE providers still reported that they did not know what “infant mental health” means and 27% reported that they were not familiar with professionals that provide mental health services for babies. Taken together, these findings suggest that significant education and advocacy around infant mental health are still needed, both for reaching ECE providers on these topics, and extending to the general public.

P01.4

#### **TOXIC ENVIRONMENT OF WAR: HEAVY METAL LOAD AND INFANT HEALTH AND DEVELOPMENT**

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Families living in war zones are at risk for contamination of heavy metals from new-generation weapons, including depleted uranium, aluminium and barium. Together with psychological war trauma they can form a severe risks for child development and maternal health. There is evidence of increased rates of birth defects and immaturity among babies born in war areas heavily exposed to new-generation weapons. Less is known about long-term impacts of toxic war contamination on early infant development. This study aims to analyse how heavy metal load in delivering mothers and new-borns influence infants' emotion regulation and wellbeing and developmental. The participants were 502 Palestinian mothers, pregnant for the baby (1st trimester) at the time of the 2014 Israeli military operation. At delivery (T1), the mothers consented for their own and their baby's hair samples to be analysed for determination of the load for 23 toxicant, teratogen or carcinogen metals (e.g. uranium, lead, mercury). At the child's ages of 6-7 months (T2) the mothers reported on child somatic health and growth, cognitive development and temperamental reactivity and stress regulation by Infant Behaviour Questionnaire (IBQ). At the child's age of 18 months (T3), mothers reported IBQ again. Results showed association between maternal heavy metal contamination and infant's emotion regulation. High uranium load significantly increased the likelihood of infant negative emotionality ( $p = .005$ ) and non-optimal orienting and regulatory behaviors ( $p < .0001$ ) at 6-7 months. Chromium load significantly predicted decrease in infants' positive affectivity ( $p = .006$ ) also at 6-7 months. Learning emotion regulation is one of the core developmental tasks in infancy, underlying later cognitive capacities and mental health. The prenatal contamination of heavy metals can thus form severe long-term developmental risks. To help families and children in war, it is pivotal to gain more knowledge about developmental impacts of early toxic contamination due to weaponry remnants. Yet, of utmost importance is to prevent these early life human right abuses and maternal prenatal war traumas.

P01.5

#### **TOWARD INFANT PSYCHOMOTOR AND AFFECTIVE DEVELOPMENT INTEGRATION IN THE TUNISIAN CHILD HEALTH BOOKLET**

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To describe the process of the Tunisian child health booklet updating and the integration of psychomotor and affective milestones and educational messages. The public Tunisian Health booklet has been available for more than 50 years, it has saved many lives by integrating not only prenatal and delivery follow-up and child examination at birth, but also immunization and growth monitoring programs as well as parents psychoeducation about feeding, diarrhea, etc. However, up to now, no reference to psychomotor and psycho-affective development was included in the child health booklet which covered only child under five. In 2017, the BHCD (Basic Health Care Directorate) of the Tunisian Ministry of health has set up in collaboration with the School and University Medicine Directorate a project to update the child health booklet since the prenatal follow-up until the child has 18 years old and by integrating among others, the psychomotor and affective milestones as well as culturally adapted educative messages for parents in order to prevent and facilitate early detection of mental health disorders among children. The changes made during the update will be presented and discussed in light of literature and other countries' experiences in

this field.

P01.6

**DIFFICULTIES OF INTERVENTIONS WITH MOTHERS SUFFERING FROM AFFECTIVE DISORDERS: WHEN PERCEPTIONS, VALUES AND ORGANIZATIONAL MANDATES COLLIDE**

**Hébert L.\*<sup>[1]</sup>, Labonté M.<sup>[2]</sup>, Haché J.<sup>[3]</sup>**

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Many mothers with affective disorders (AD) experience difficulties being involved in therapy centered on the maternal role for fear of being judged or losing their children. Psychiatric interventions generally overlook the maternal role or the mothers' multiproblem environment. In the Canadian province of Quebec, local services for families with difficulties exist but lack coordination and most are aimed at helping children rather than families. This communication is based on two studies on psychiatric care and occupational therapy interventions for mothers suffering from AD. The objectives of the studies, which were conducted with groups and individual patients in a hospital and a social pediatric center in Montreal, were to better understand the issues arising from interventions with mothers suffering from AD and to identify the factors that can support their commitment to therapy. Both studies used a grounded theory approach based on in-depth case studies with participant observation and interviews for data gathering. These studies suggest that the difficulty of establishing and maintaining effective treatment is multifactorial, with explanatory variables found in the mothers themselves, their families' functioning, and the mental health care system. Findings are related to three interacting sets of variables: i) the subjectivity of caregivers and their level of investment in the care relationship, which can lead to the development of negative perceptions towards the mothers and their families and to unsuitable interventions; ii) the patients' characteristics: their low self-esteem and lack of confidence in their ability to fulfill their maternal role, previous experiences with therapy, and ethnic and cultural backgrounds; and iii) characteristics of the mental health care system. Possible solutions include: adopting a more holistic view, increasing collaboration among all agents involved, and using an integrated care approach based on a recovery philosophy that focuses on mothering skills and the needs of mothers and their families.

**Attachment: research, security of attachment and disorders of attachment**

P01.7

**I NEED YOU: THE ROLE OF MOTHERS' EMOTIONAL AVAILABILITY IN MEDIATING THE RELATIONSHIP BETWEEN TRAUMA SYMPTOMS AND ATTACHMENT RELATED PARENTING STRESS**

**Cunningham A., Renk K.\*, Kolomeyer E., Khan M., Stephenson J.**

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Mother-child relationships are dependent on mothers' caregiving systems and children's attachment system working together in harmony (Levendosky, Bogat, Huth-Bocks, 2011). When mothers have experienced trauma, these coordinating systems can become dyssynchronous. Consequently, traumatic experiences and subsequent symptoms can complicate individuals' ability to develop and maintain relationships (Pearlman & Courtois, 2005). For example, mothers who were exposed to violence tend to offer less emotional availability to their children (Holden & Ritchie, 1991). Considering the consequences of trauma on relational abilities like emotional availability,

secure attachment within the parent-child relationship can be derailed. To help further our understanding of how secure attachment may be achieved in such cases, the present study examined the relationships among mothers' trauma symptoms, emotional availability, and parenting stress related to attachment in 126 diverse mothers with young children between 1½- and 5-years of age. In particular, our analyses assessed the mediational role of emotional availability (via the Self-Efficacy for Parenting Tasks Index) in the relationship between trauma symptoms (via the Trauma Symptom Checklist) and parenting stress related to attachment (via the Parenting Stress Index). Overall regression analyses demonstrated that mothers' trauma symptoms and emotional availability predicted significantly mothers' parenting stress related to attachment to their young child,  $F(2,123)=27.44$ ,  $p<.001$ ,  $R^2=.31$ . In testing mediation, mothers' trauma symptoms predicted significantly parenting stress related to attachment ( $p<.004$ ). Upon adding mothers' emotional availability, trauma symptoms became non-significant ( $p<.26$ ), and only mothers' emotional availability significantly predicted parenting stress as it relates to attachment ( $p<.001$ ), suggesting the mediational value of emotional availability. Our findings highlight the potential importance of mothers' emotional availability as a port of entry in achieving secure attachment in the mother-young child relationship, even when mothers have experienced trauma. Thus, addressing emotional availability in trauma-informed and attachment-focused parenting interventions may be particularly important.

P01.8

#### **DISORGANIZED ATTACHMENT: EXPLAINING THE CONNECTION BETWEEN NEGATIVE PARENTING BEHAVIORS IN MOTHERS WITH CHILDHOOD TRAUMA AND YOUNG CHILDREN'S EXTERNALIZING BEHAVIORS**

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The substantial impact of parenting practices on young children's outcomes has been documented extensively. Specifically, parents' poor monitoring, inconsistent discipline, and corporal punishment have been related significantly to children's irritability, externalizing behaviors, and risk for disruptive behavior disorders (e.g., Lengua & Kovacs, 2005). Additionally, mother-child attachment has been related closely to children's behaviors. For example, preschool-aged children with attachment difficulties exhibited an increased likelihood for hostile and externalizing behaviors (Troy & Sroufe, 1987). Unfortunately, mothers who experienced childhood trauma exhibit heightened risk for both maladaptive parenting practices and insecure attachment with children. Thus, the present study investigated whether disorganized mother-young child attachment mediated the relationship between negative/inconsistent parenting behaviors and young children's externalizing behaviors when mothers had childhood trauma. Mothers ( $N=146$ ) of young children between 1½- and 5-years rated their childhood trauma, parenting behaviors, attachment with their young children, and young children's externalizing behaviors. Mothers ( $M=32.08$ -years,  $SD=6.16$ -years) endorsed low levels of childhood trauma. Preliminary regression analyses suggested that mothers' negative/inconsistent parenting behaviors and disorganized attachment predicted significantly young children's externalizing behaviors,  $F(2,143)=55.91$ ,  $p<.001$ , explaining 66% of the variance. Mediational analyses then suggested that negative/inconsistent parenting behaviors alone predicted significantly externalizing behaviors ( $p<.001$ ). Once disorganized attachment was added to the equation, however, negative/inconsistent parenting behaviors became non-significant ( $p<.09$ ), and only disorganized attachment predicted significantly externalizing behaviors ( $p<.001$ ). In sum, disorganized mother-young child attachment mediated the relationship between negative/inconsistent parenting behaviors and young children's externalizing behaviors. This mediation was confirmed with a significant Sobel Test ( $z=5.63$ ,  $p<.0001$ ). These findings have

significant implications for trauma-informed parenting interventions. Specifically, strengthening mother-young child attachment may promote emotion regulation and healthy psychosocial development in young children. Thus, interventions that facilitate secure emotional connections between mothers and young children in response to young children's externalizing behaviors may produce meaningful treatment effects, especially in mothers with childhood trauma.

P01.9

### **THE BUILDING EARLY ATTACHMENT & RESILIENCE (BEAR) STUDY- SUPPORT FOR MUMS AND BABIES: PRELIMINARY FINDINGS**

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Attachment organisation in infancy is an important for the development of relational functioning, affect regulation, and general psychological well-being of the infant. Parental mental health difficulties and psycho-social stressors can disrupt the process of attachment with a new infant. It is unclear whether providing early interventions and what kind of interventions, in addition to treatment as usual, would ameliorate the potentially negative effects of parental mental health difficulties on the attachment relationship. In many ways, the next necessary step in broadening the understanding of issues for vulnerable parents and of early risk factors for infant development is developing and evaluating specific interventions. To examine the effect of 2 early interventions: the Mindbabybody (MBB) and Parenting with Feeling (PWF) programs on: maternal mental health, parental reflective functioning, parent-infant relationship and infant neurodevelopment. The MBB and PWF programs focus on early emotional interaction with the infant. They address unresolved attachment trauma and deficits in parental functioning. Interactional techniques and exercises develop parental self-concept, reflective functioning, emotion regulation and support the psychological adjustment to parenthood. The study is a 4-arm parallel group, quasi-RCT with a repeated measures design. Participants are recruited via the mental health service at a maternity hospital. Participants have a range of mental health risk factors, including background of trauma, a history of mental health problems and psychosocial adversity. Participants are randomised to one of the 4 groups. Two receive one of the experimental conditions; one group receives both and the fourth is the control. An intent-to-treat approach will be used to analyse the data.

Preliminary outcomes data of the first 50 participants in the study will be presented.

P01.10

### **CREATING A COMMUNITY OF ATTACHMENT**

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Describe the city-wide spread of the Circle of Security Parenting model and efforts to create a city-wide "community of attachment". In 2010, New Haven, CT had its first introduction to Circle of Security Parenting and set about to create a city-wide "community of attachment". Recognizing that early relationships between caregivers and children are fundamental to lifelong individual well-being and learning, and thus to community health, the vision was to build a culture of security to promote healthy relationships between children and their caregivers. The Big Vision was to promote lasting community impact by bringing together the city's providers to agree on early childhood outcomes to optimize the social-emotional and cognitive development of infants and young children, supporting the professional development of providers, implementing early intervention

strategies and developing a continuous learning loop to improve capacity and contribute to best practices. No one agency would “own” the model but it would spread, along with a better understanding about parent-child attachment, throughout the city. Thanks to a champion at the CT Department of Children and Families, later joined by The United Way of Greater New Haven, over 175 New Haven providers have been trained in Circle of Security Parenting. United Way of Greater New Haven now serves as a convening entity by hosting meetings, providing support for training, groups, and reflective supervision, and gathering and analyzing pre-and post caregiver surveys.

P01.11

**MATERNAL RESPONSES TO INFANT CRYING: ASSOCIATIONS WITH MATERNAL ATTACHMENT AND CAREGIVING TRAUMA, AND COMPROMISED CAREGIVING**

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Crying is the infant’s most fundamental communication of distress, yet also noxious and demanding (Out et al., 2010). Averse responses lead to caregiver withdrawal, anger, and insensitivity (Leerkes et al., 2011). Child abuse studies showed aversive responses to infant crying in abusive mothers and (Frodi & Lamb, 1980) young abused children (ages 1-3 years) (Main & George, 1985). Maternal responsiveness to infant crying is central to the developing attachment (Ainsworth et al., 1978; Lyons-Ruth, 1996). Overall, the literature suggests that infant crying is a risk factor for compromised care. The aim of the current study was to elucidate risk factors associated with mothers’ responses to infant crying. Mothers (N = 73; M age = 36 years) of 4- and 5-year-old children (M = X mo.; 56% girls) participated in a laboratory study on the development of caregiving. Maternal attachment trauma was assessed using the Attachment Trauma Questionnaire (ATQ, Keeling & George, 2013). Child abuse risk was assessed using the CAPI (Milner, 1986). Caregiving behavior (Britner et al., 1995) was assessed from observations of a 12-minute caregiving situation during which mothers and children dressed and played with a life-like infant doll that cries. Crying response scores were ratios (time response/total time crying). Results showed that in addition to significant associations with physical or emotional childhood abuse, aversive responses were associated with childhood separation from parents and postpartum loss. Maternal caregiving results showed that rejection was associated with heightened negative affect (e.g., disgust, anger); rejection, pressuring child to provide care, and neglect were associated with reduced empathy. Child maltreatment risk was associated with ignoring and reduced responsiveness. These results add to our understanding of the potential risk effects of early child-parent separation on subsequent maternal behavior. They also inform avenues for compromised caregiving interventions specific to responses to infant crying.

P01.12

**ASSOCIATIONS BETWEEN ATTACHMENT REPRESENTATIONS AND EXECUTIVE FUNCTION IN THE CHILDREN OF ADOLESCENT MOTHERS**

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Self-regulation develops early in life partly in response to care experiences. Self-regulation is implicated in positive functioning in social and academic contexts (Blair & Diamond, 2008). Though the attachment and executive function (EF) systems are both thought to mediate the links between care experiences and self-regulation, their associations have not been thoroughly explored. We examined the relations between attachment and EF among children of adolescent mothers, a population at risk for self-regulatory deficits. We explored whether children’s narrative representations could be classified into subgroups based on attachment representations and

whether the subgroups differed on inhibitory control, an EF component related to self-regulation. Our sample was comprised of 331 six year old children enrolled in an evaluation of a home-visiting program for young parents. Attachment was evaluated using the Attachment Focused Coding Scheme (AFCS; Splan 2008) coding of the MacArthur Story Stem Battery. Inhibitory control was assessed using the Head Toes Knees Shoulders task (HTKS; Ponitz et al., 2008). We used Latent Profile Analysis to classify children's representations into attachment subgroups based on the work of Ainsworth, Blehar, Waters, and Wall (1978) and Main and Solomon (1990). Inhibitory control was tested across subgroups using the modified BCH method (Asparouhov & Muthén, 2014). We identified "secure", "insecure-avoidant", and "insecure-disorganized" subgroups. The "secure" subgroup outperformed the "insecure" subgroups on the assessment of inhibitory control. We did not detect differences between the "insecure" subgroups. The robust associations between secure representations and inhibitory control underscores the role of attachment security in the acquisition of self-regulation. Our results also suggest minimal cognitive differences between children displaying different subtypes of insecure representations. Interventions that integrate attachment and EF backgrounds may be the most efficacious in promoting self-regulatory skills.

P01.13

#### **CROSSOVER TRANSMISSION OF ATTACHMENT: QUALITATIVE ANALYSIS OF JAPANESE ATTACHMENT DATA**

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This report focuses on the aspect of attachment security that was not transmitted intergenerationally based on the data of Japanese mothers' Adult Attachment Interview (AAI) and their infants' Strange Situation procedure (SSP). The current dataset based on a non-clinical sample showed a strong AAI-SSP categorical match, consistent with the global norm of intergenerational transmission of attachment reported in meta-analyses. However, very few studies have presented the findings based on qualitative analyses of mismatched cases. No AAI-SSP data from Japan or any parts of Asia, discussing crossover transmission of attachment, have been reported. This is the first study that considers contextual and cultural factors to investigate qualitatively why and how the crossover transmission of attachment had occurred. Forty-five Japanese dyads from Sapporo, Japan, underwent the standard SSP-AAI procedures. Thirty dyads matched and 15 dyads were mismatched. None of seven insecure-ambivalent (C) infants had (expected) insecure-preoccupied (E) mothers. Instead, the majority of mothers of C infants were judged as unresolved (U) or Cannot Classify (CC) as a primary category. Among six infants of insecure-dismissing (Ds) mothers, four were judged secure (B), rather than (expected) insecure-avoidant (A). None of four CC mothers' infants were judged disorganized (D), even though the CC-D match has been previously reported in another Japanese data set and thus was expected. For each mismatched case, we present excerpts that characterize a specific AAI category as well as unique circumstances, backgrounds, or discourse styles, to explore clues as to why mothers' attachment status did not transmit as expected and how it instead produced another attachment category in the child. We discuss whether culture played a role in the transmission process specifically for this sample to help us better understand the mechanism of the transmission process overall.

P01.14

#### **DISORGANIZED ATTACHMENT: OR TRANSGENERATIONAL TRAUMA TRANSMISSION**

**Stefanovic Stanojevic T.\*<sup>[1]</sup>, Blagojevic V.<sup>[2]</sup>, Tosic Radev M.<sup>[1]</sup>**

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A large number of studies conducted abroad, but also here, confirms the transgenerational attachment transmission. Despite unambiguous facts that the transmission occurs, the issue of mechanism of the transmission is still unsolved, which is commonly mentioned in the literature as a transmission gap. The first study of transgenerational transmission of attachment in Serbia was conducted in 2001. It confirmed the expected transmission, but the transversal approach did not allow a deeper analysis. Fifteen years later, equipped with more advanced instruments and newer theoretical constructs, we have decided to approach the problem of the transgenerational transmission from the longitudinal perspective. Namely, mothers and children tested for the first time in 2001 were observed and retested in 2016. In the first study, we used: AAI (Main, Caplan, Cassidy, 1984), for mothers and AQS (Waters & Deane, 1985), for children. In the second study we had an opportunity to test both mothers and children with the same Serbian instrument for assessing attachment: UPIPAV (Hanak, 2004). In this paper, we present the results of transgenerational observation of only one attachment pattern: disorganized attachment. The choice of the most troublesome pattern was conditioned by the fact that the transgenerational transmission of this pattern was the most expressed, and the dimension responsible for the transmission was the most obvious. Namely, the transgenerational transmission of both a negative internal working model of the self and a negative internal working model of others was recorded. The dimension that remained unchained across generations was Unprocessed trauma. What remains is to ask whether this means that, if we experienced a traumatic event in childhood, we are still incapable to process it and to close negative emotions even decades later (even in decent living conditions)?

P01.15

### **THE VALIDITY AND FEASIBILITY OF A NEW CHECKLIST FOR DISTURBED CHILD ATTACHMENT**

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An estimated 15% of all children are affected by a disturbed attachment relationship and encounter developmental problems such as a compromised social-emotional development and psychopathology (Bateman & Fonagy, 2012). Monitoring the quality of the attachment relationship between parent and child is a core task of practitioners in child health care or welfare services. However, a validated screening instrument to identify children with disturbed attachment is lacking. The current study aims at evaluating the feasibility and validity of a Dutch translation of the instrument 'Behavioural Signs of Disturbed Attachment in Young Children' (Boris & Zeanah, 2005). 160 children (age 1-6 years) with their parent will be recruited by four Dutch Health Care and Child Welfare services. Child health care practitioners screen the child's attachment quality with the new checklist. Participating families will be visited at home to observe the child's attachment quality by assessing the Attachment Q-sort, and the Working Model of the Child Interview. Parents complete several online questionnaires on their caregiving experiences and on the social-emotional development of the child. The validity of the attachment checklist will be assessed using the SDQ completed by the caregiver (discriminant validity) and the Attachment Q-sort completed by the researcher (convergent validity). The feasibility of the checklist will be evaluated during focus group interviews with practitioners. This study contributes to the development of a screening instrument for disturbed child attachment. The study provides a fact sheet for practitioners about assessing attachment problems in different settings: psychometric properties are presented as well as practical tools that support the implementation of the attachment checklist into practice.

P01.16

### **A THERAPEUTIC PROGRAM FOR DISORGANIZED ATTACHMENT (SEC)**

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Considering the fact that children in Serbia over the past few decades have passed through numerous and different types of trauma, and that the number of children with a disorganized attachment is on the rise, we have developed and in-home psychotherapeutic program. The program is based on the importance of a safe haven as a framework for developing the capacity to mentalize. The program lasts for a period of six months, and the therapist meets with the parents four times a month. The program has three phases:

1. Listening and reflection (non-directive therapy). The therapist implements the aforementioned techniques, gradually ensuring that the parent senses a safe haven in the therapist.
2. Providing material as encouragement for the parents to establish mentalization. The material is in the form of two childhood photographs (of the parent who has been identified as the obstacle to the process of mentalization during the previous phase), which they consider important, which they love and which make them sad. The therapist analyzes the feelings of the characters in the photograph and encourages the client to take part.
3. During the third phase, the parent is instructed to bring three photographs of his own child. The therapist in this phase analyzes the feelings of the child, in this case the child of his client, by actually helping the parent to understand his own child's feelings.

P01.17

### **PARENTAL STRESS AND CHILD INTERNALIZING BEHAVIORS IN CLINIC-REFERRED PRE-SCHOOLERS: THE PARENT-CHILD INTERACTION AS A MODERATOR**

**Allaire M.\*<sup>[1]</sup>, Gaudreau M.<sup>[1]</sup>, Aliya M.<sup>[1]</sup>, Chantal C.<sup>[1]</sup>, St--André M.<sup>[2]</sup>, Paquette D.<sup>[3]</sup>, Stikavorska I.<sup>[2]</sup>, Mutsuko É.<sup>[2]</sup>, Louise B.<sup>[2]</sup>, Claud B.<sup>[4]</sup>, Puentes--Neuman G.<sup>[4]</sup>**

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Several studies have showed an association between parental stress and higher levels of internalizing behaviors in children (Bayer et al., 2006; Kenneth et al., 1991). Parents with higher levels of stress are likely, through poor interactions with their child, to be unavailable or unresponsive to child needs and in turn, increase their child's risk of developing internalizing behavior problems (Cohen & Wills, 1985; Choate et al. 2005). The current study examines whether a moderating effect of parent-child interaction quality between parental stress and child internalizing problems is also present for a sample of preschoolers recruited in a child psychiatric clinic and where child diagnosis (e.g. ADHD, anxiety, oppositional defiant disorder) are a high source of stress for parents. The sample included 61 mothers and their children (1-5 years, M=3.67, S.D. = 1.01, 72% boys) referred for emotional and behavioral problems. Mothers completed the Parental Stress Index (Abidin, 1983) and fathers the Child Behavior Checklist which assesses internalizing behaviors (Achenback & Rescorla, 2000). The quality of mother-child interaction was coded by an independent observer using a 7 points scale (Moss et al., 2000). Result of a significant regression ( $R^2 = 17.45$ ) showed no main effect of mother-child interaction quality ( $\beta = -0.04$ ). Still, a significant main effect of parental stress ( $\beta = 0.36$ ) and a moderation effect were found (parental stress x mother-child interaction quality;  $\beta = -0.16$ ). Results validate the accepted clinical knowledge of addressing parental stress when working with children presenting internalizing behaviors.

Interventions targeting parent--child interaction are especially important with dyads presenting significant interactional difficulties and with highly stressed parents.

P01.18

**DISCIPLINE, ATTACHMENT, AND BEHAVIOR PROBLEMS AMONG TODDLERS AND PRESCHOOLERS ADOPTED BY GAY FATHERS**

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Authoritarian parents (high control and low warmth) use strict discipline aimed primarily at controlling and correcting child's conduct (Hubbs-Tait et al., 2008). Such a power assertive discipline is a serious risk factor for the development of behavior problems (Alink et al., 2009). However, discipline in the context of a positive affective relationship predicts lower levels of child behavior problems (Maccoby & Martin, 1983). This study examined whether attachment security moderates the link between discipline and behavior problems among toddlers and preschoolers adopted by gay fathers. The sample includes 68 gay fathers and their 34 children (1-5 years, 72% boys). Fathers completed the Child Behavior Checklist (Achenbach & Rescorla, 2000) and the Paternal Involvement Questionnaire (Dubeau et al., 2009) to assess behavior problems and parenting practices. Each father-child dyad was also observed at home to assess child attachment security using the Attachment Q-Sort (Waters & Deane, 1985). Child's age at time of assessment and upon adoption, number of placements prior to adoption, and time spent in the adoptive family were not related to internalizing nor externalizing symptoms. Results of a multi-level regression showed a main effect of attachment security on externalizing symptoms ( $B = -.16$ ). An attachment X discipline interaction was also found for internalizing behaviors ( $B = -.34.36$ ). Fathers who used more discipline reported higher levels of child internalizing symptoms when their child's attachment relationship was less secure. Child attachment security to gay fathers may protect against behavior problems. Promoting secure attachment in the first years could then contribute to prevent internalizing problems among adopted children.

P01.19

**PARENTAL EMBODIED MENTALIZING AND INFANT ATTACHMENT**

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There is empirical support for the association parental mentalization, measured as a verbal capacity, and infant attachment. However, verbal measures of parental mentalization are limited in understanding the impact of parental mentalization from the infant's point of view, on caregiving behavior, and the infant's contribution to this mutual process in the nonverbal parent-infant interaction. Also, the mechanisms to which the parental verbal mentalizing mediates the development of infant attachment has been questioned. To overcome these issues the nonverbal measure of Parental Embodied Mentalizing (PEM) was developed. This literature review examines the empirical support for an association between nonverbal expressions of parental mentalizing and infant attachment. Results are discussed in light of corresponding research. Implications for future research and clinical practice are outlined.

P01.20

**ASSOCIATIONS FOUND BETWEEN ATTACHMENT SECURITY ASSESSED BY THE STRANGE SITUATION PROCEDURE AND DEVELOPMENTAL OUTCOMES IN A JAPANESE SAMPLE**

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The cross-cultural validity of the Strange Situation Procedure (SSP) has been controversial and specifically in Japan since mid-80's. Our recent Japanese AAI-SSP data have successfully shown, however, attachment security does transmit intergenerationally, supporting the universality assumption of attachment theory. This is the first study to show how attachment security assessed by the SSP would predict optimal developmental outcomes in a Japanese sample as have been reported elsewhere in the world. Forty-four Japanese mother-infant dyads from Sapporo participated in the study as a part of a larger Sapporo Longitudinal Study. The dyads came to the lab when the infants were 13 months old to participate in the standard SSP. Mothers were also asked to fill out the "Tsumori Infant Developmental Test" questionnaire – one of the standard developmental tests in Japan to evaluate the performance in everyday activities. The test measures five aspects of infant development; motor activities, cognitive skills, social skills, communication skills, and adjustment skills. The 4-way distribution of SSP patterns (A, B, C, D) was; one A-type infant (2.3 %), 31 B-type infants (70.5%), 7 C-type infants (9.1 %) and 6 D-type infants(13.6 %). Results from a series of Independent-t-test showed that secure group scored significantly higher than insecure group in social skills ( $t=2.041$ ,  $p=0.048$ ), communication skills ( $t=2.769$ ,  $p=0.008$ ), and total developmental score ( $t=2.130$ ,  $p=0.039$ ). When we compared B group vs. non-B group, B group scored significantly higher than non-B-type in social skills ( $t=2.377$ ,  $p=0.022$ ) and total developmental score ( $t=2.430$ ,  $p=0.019$ ). But we found no significant difference between D group and Non-D group in any developmental scales. These results indicate that attachment security assessed by the SSP predicts infant's developmental outcome, which further validates the use of the SSP in Japan. The effect of disorganization, however, was not clearly captured, which will be further discussed.

P01.21

**CHILD-CARER RELATIONSHIPS IN CHILD CARE CENTRES: STUDY OF THE PRIMARY CARE APPROACH**  
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Since the Second World War, many European countries have to face an increasing demand of extra-familial daycare for infants and toddlers and more precisely of child care centres (Le Bouteillec et al, 2014). However, it's well-known that early intensive collective and non-relative care may have a negative impact on child development. The dissemination of the attachment theory has stressed the importance of the quality of daycare in collective centres for young children. Besides, the Pikler-Loczy Institute experience (David & Appell, 1973) has led to the creation of a new practice in child care centres: the primary care approach. Primary care approach consists in assigning a specific carer who will be in charge of each child. This practice is supposed to encourage a more secure child-carer attachment link and to foster child adaptation and development in the daycare setting. However, its relevance and suitability for children is currently subject to debate in French day care centres. To date, the notion of primary care has been largely neglected in international research. The goal of our study is to describe the use of primary care approach in French child care centres and to understand its impact on child development and, specifically, on the creation of secondary attachment relationships. We have carried out a comparative study with 202 parents-children (aged 1 to 3 years old) dyads and 143 carers met in child care centres applying or not the primary care approach. They responded to interviews, questionnaires (IDE ; Duyme, Capron & Zorman, 2010 ; BITSEA ; French validation : Wendland & al., 2014 ; TAQ ; French validation : Violon & al, 2017) and

a development test (Brunet & Lézine-R, 2001). Results of this on-going study will be presented and discussed in terms of their implication for daycare practices.

P01.22

### **MATERNAL ATTACHMENT REPRESENTATIONS OF THE INFANT AT 7 MONTHS POSTPARTUM: THE INFLUENCE OF PRENATAL REFLECTIVE FUNCTIONING**

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During pregnancy mothers undergo a profound process of psychological transformation, including the emergence of both fantasies about the fetus and their internal working model of caregiving system. The current study examined links between mothers' prenatal reflective functioning (RF) and their postnatal mental representations of the infant. Analyses were based on data collected for 47 mothers participating in a larger longitudinal study. During the third trimester of pregnancy, mothers were administered the Pregnancy Interview-Revised (PI-R) (Slade, Grunebaum, Haganir, & Reeves, 1987) and reported on demographics. At 7 months postpartum, mothers' mental representations of their infant were assessed with the Working Model of the Child Interview (WMCI; Zeanah, Benoit, Barton, & Hirshberg, 1996). Multinomial logistic regressions controlling for cumulative demographic risk were used to analyze the data. At 7 months, 36% of mothers were classified as balanced on the WMCI, whereas 36% were distorted, and 27% were disengaged. The mean prenatal RF score for mothers in each WMCI category was: balanced,  $M=3.65$ ; distorted,  $M=2.82$ ; and disengaged  $M=2.46$ . Results revealed that prenatal RF significantly predicted 7-month WMCI classification. Specifically, a low prenatal RF score increased the likelihood of mothers being classified as disengaged, compared to mothers with a balanced representation,  $b=-.84$ , Wald  $\chi^2(1)=5.45$ ,  $p=.019$ .  $OR=.43$ , and marginally increased the likelihood of mothers having a distorted representation  $b=-.55$ , Wald  $\chi^2(1)=3.32$ ,  $p=.069$ . When mothers with disengaged versus distorted representations were compared, their prenatal RF scores did not differ significantly. Theoretically, the results suggest that prenatal RF may be foundational to mothers' ability to establish balanced working models of her infant at 7 months postpartum, and a possible mechanism in the intergenerational transmission of attachment. Clinically, the findings support existing attachment-based interventions targeting maternal RF with implications for targeted treatment strategies for mothers with distorted representations.

P01.23

### **PERINATAL LOSS AND MATERNAL ATTACHMENT TRAUMA: CONTRIBUTIONS TO CAREGIVING DYSREGULATION**

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Loss is one of the most intense and painful experiences any human being can endure (Bowlby, 1980). Developmental, psycho-neurobiological, and attachment literature suggest that loss has significant, long-term effects on neurological functioning and affective processing. Attachment researchers found associations between childhood experiences of loss, current adult trauma, and caregiving dysregulation. Loss research showed associations between childhood experiences of trauma, mothers' unresolved mourning following perinatal loss, and subsequent-born infants' developmental trajectories. However, no studies to date have examined maternal trauma, perinatal loss, and caregiving dysregulation from an attachment theory perspective. The current study sought to fill this gap in the literature. This study aimed to examine the contributions of maternal trauma experiences and perinatal grief outcomes (active grief, difficulty coping, despair) to dimensions of

caregiving dysregulation (helplessness, frightened, child caregiving), and test a mediation model in which attachment trauma mediated the relation between perinatal grief and caregiving dysregulation. Participants were 128 mothers (M=32 years) who experienced perinatal loss and had since given birth to viable children (M=1.75 years; 60% girls). Mothers completed questionnaires on perinatal grief (Toedter, Lasker, & Alhadeff, 1988) and bereavement (Theut et al., 1989), caregiving dysregulation (George & Solomon, 2011), and attachment trauma (Keeling & George, 2015). Regression analysis showed direct effects from perinatal grief (difficulty coping) to caregiving helplessness. The mediation analysis found that attachment trauma fully mediated this relation (Sobel=2.74,  $p < .01$ ;  $a=.200$ ,  $sa=.054$ ;  $b=.244$ ,  $sb=.060$ ). Interestingly, there were no associations between perinatal grief outcomes and frightened or child caregiving dimensions. There was a significant positive association between attachment trauma and caregiving helplessness and a trend for attachment trauma and child caregiving. These results provide insight into how maternal experiences of trauma contribute to mothers' perinatal grief outcomes and caregiving representations. The mediated relation between these maternal factors can inform avenues for compromised caregiving interventions.

P01.24

#### **EFFECTIVENESS OF THE CIRCLE OF SECURITY PARENTING PROGRAM FOR MOTHERS OF CHILDREN WITH AUTISM SPECTRUM DISORDERS: A CASE STUDY WITH 12 DYADS**

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Circle of Security Parenting (COS-P) program is developed to promote secure attachment relationships. Since Autism Spectrum Disorder (ASD) involves impairments in social communication, caregivers of children with ASD tend to have difficulty understanding their attachment needs, which may negatively affect developing secure attachments. The present study examines the effect of COS-P in improving relationships of mothers and children with ASD. Participants were 12 mothers of children, aged 4-12, diagnosed with ASD and/or equivalent symptoms. To support mother's difficulty in understanding her child's possibly misinterpreted obscure attachment behavior, the modified Strange Situation Procedure was administered before COS-P to identify the relational struggle for each dyad and child's particular attachment behavior, following which we supported the mother to recognize her child's attachment needs during COS-P. The Circle of Security Interview was also conducted to grasp mother's internal working models including any trauma from diagnosis of her child's ASD, and we provided therapeutic processes for mother to work through the struggles. To examine the improvement in mothers' perception of children's attachment needs, their parenting efficacy and children's behaviors, the evaluation using COS Parent Feedback Questionnaire, Tool to measure Parenting Self-Efficacy (TOPSE) and Child Behavior Checklist (CBCL), was conducted at Pre, Post, and 6-months after (6MA) COS-P. Majority of mothers reported they could understand children's attachment signals on the Questionnaire (Post: 8 out of 12 mothers, 6MA: 9 out of 12 mothers). TOPSE and CBCL indicated improvements of mother's parenting efficacy (Pre-Post:  $t=3.05$ ,  $p<.05$ , Pre-6MA:  $t=2.61$ ,  $p<.05$ ) and children's behavior (Pre-6MA:  $t=2.25$ ,  $p<.05$ ), respectively. The results suggest that COS-P program is effective in improving mother's understanding of attachment behavior and their parenting efficacy, and decreasing children's unstable behavior, when provided with supports for understanding attachment behavior and dealing with struggles/trauma such as acceptance of ASD diagnosis.

P01.25

**PROCESSING CHILDREN'S FACIAL EMOTIONS: COMBINING NEURAL AND BEHAVIORAL DATA**

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A key factor of parental sensitivity is recognition and accurate interpretation of emotional child cues, e.g. child facial expressions. We examined the processing of children's facial expressions on the neural level (i.e. N170 amplitudes for happy and angry child faces) and on the behavioral level (i.e. latency for recognizing happy, angry, sad or fearful emotions on child faces). Moreover, we tested for associations between neural and behavioral indicators of emotional face processing. The sample included a total of 65 mothers whose electroencephalographic (EEG; N170 was a priori defined) was acquired in response to 144 children's faces (i.e. 48 happy, 48 angry and 48 neutral faces). Mothers also performed an Emotion Recognition Task (ERT), a computer-generated paradigm containing 32 series of quickly changing pictures of child faces with gradually increasing emotional expressions. We measured recognition of 4 emotions: happiness, anger, sadness and fear. Each series starts with a neutral face (i.e. 0% emotion) that changes into an emotional face in ten steps (10% - 100%). Mean amplitudes of the N170 were  $-.31$  (SD = 2.73) for angry faces and  $-.19$  (SD = 2.68) for happy faces. Mean ERT latencies in milliseconds were 3706.01 (SD = 697.42), 3744.32 (SD = 716.71), 4140.51 (SD = 726.27) and 4237.30 (SD = 673.44) for angry, happy, sad and fearful faces, respectively, showing that anger was recognized fastest and fear slowest. Associations between the N170 amplitudes for happy and angry and latency for the recognition of happy and angry emotions did not reach significance, but more detailed analyses are in progress. To understand complex parental behavior a multilevel approach is needed combining neural and behavioral responses to child signals. Bridging the gap between brain and behavior is the big challenge.

P01.26

**A SYSTEMATIC REVIEW OF THE EVIDENCE FOR GENETIC AND G X E ASSOCIATIONS WITH ATTACHMENT STATUS**

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Substantial evidence suggests that the intergenerational transmission of attachment from caregivers to offspring cannot be entirely explained by caregiver sensitivity. Although there is limited evidence for direct genetic transmission, state of the art research suggests that Gene x Environment interactions may be implicated in intergenerational transmission. However, these data have not to date, been systematically reviewed. A systematic review was carried out using literature from the scientific databases; PsycINFO, Embase, Medline, ASSIA, and Google Scholar. Studies were assessed on key variables and appraised for study quality. The systematic review process identified 25 papers, representing 16 cohorts that met inclusion criteria. The total sample represented  $n=5761$  infants and children. Inconsistent results were reported for the effects of genetic markers for serotonin, dopamine and oxytocin on attachment organization. There was also little evidence for GxE interactions influencing attachment organization. However., there was emergent evidence for the impact of genetic markers and attachment impacting on behavior, consistent with a differential susceptibility model of developmental trajectories. Studies often used small samples and were consequently underpowered. Heterogeneity of environmental factors make it more difficult to compare studies. GxE interactions relating to attachment represent an example of complex developmental systems, whereby a number of factors may be influencing development simultaneously. The results of the review suggest a number of pathways for future attachment-related research including exploring differential susceptibility of genetic markers; genome wide

analysis, incorporating small effect genes and pathways, and epigenetic expression of the individual within unique environments.

P01.27

### **MATERNAL SENSITIVITY AND SOCIAL SUPPORT PROTECT AGAINST CHILDHOOD ATOPIC DERMATITIS**

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Many studies have identified associations between qualities of maternal care and childhood asthma, but few have examined associations with childhood atopic dermatitis (AD), a common precursor to asthma. Moreover, maternal psychological distress, including prenatal and postnatal depression, anxiety and stress, may increase risk, while social support may reduce risk for childhood AD.

We sought to uncover the association between maternal-infant relationship qualities (maternal sensitivity towards infant behavioral cues, controlling behavior, and unresponsiveness) and child AD after accounting for risk (i.e., maternal depression, anxiety and stress) and protective (i.e., social support) factors. We conducted a secondary analysis of data collected on a subsample of 242 women and their infants enrolled during pregnancy in the ongoing Alberta Pregnancy Outcomes and Nutrition (APrON) cohort study. Inclusion criteria required mothers to be >16 years of age, English speaking and <22 weeks gestational age at enrollment. Data on depression, anxiety and stress in the prenatal and postnatal periods and infant rash or physician diagnosis of childhood AD at 18 months were gathered via maternal report. Maternal sensitivity, control and unresponsiveness were assessed via the Child Adult Relationship Experimental (CARE)-Index at 6 months of infant age. Higher maternal sensitivity, the ability of the mother to recognize and be attentive to infant cues, predicted reduced odds of AD independent of and in combination with low prenatal and postnatal anxiety and high paternal support. In contrast, higher maternal control and unresponsiveness predicted greater odds of AD. Low maternal sensitivity, or the inability of the mother to appropriately understand and respond to infant needs based on behavioral signals, is a risk factor for childhood AD, independently and in combination with perinatal anxiety and low social support. Thus, interventions that improve maternal-infant relationship quality, anxiety and support could reduce odds of childhood AD.

P01.28

### **MATERNAL SENSITIVITY IS A MAJOR PREDICTOR OF MOTHER-INFANT ATTACHMENT: 3 STUDIES WITH CARE-INDEX AND STRANGE SITUATION**

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According to a dyadic approach, the infant contribution must be considered as part of and as interdependent with maternal sensitivity. Indeed, in positive interactions, children tend to be reciprocal and cooperative, express their feelings openly, and use social and play experiences as opportunities to learn and develop. In the presence of such behaviors one may assume that the child formed a prior expectation of availability, warm affect, gentle and reciprocal behavior from their mother; even if the mother during the observation is acting less sensitively to infant needs and cues under the camera effect. Aim of this communication is to present the results of three independent studies on Portuguese samples where maternal sensitivity resulted as a major

predictor of mother-infant attachment. Maternal sensitivity was assessed using the CARE-Index, a video-recorded procedure based on Crittenden's Dynamic Maturational Model (DMM) that refers to a dyadic (mother-infant bi-directional) and relationship-based construct. In all three studies mother-infant attachment was assessed using the Ainsworth's Strange Situation. In the first study, in Portuguese prematurely born infants, mother-infant attachment at 12 months was predicted by infant self-regulation and maternal sensitivity at 3 months. A replication of this study with 82 full-term infants reproduced the same results. A third study comparing infant attachment with mothers and fathers found that mother-infant attachment at 12 and 18 months was predicted by maternal sensitivity at 9 and 15 months, respectively, and by the amount of time mothers and fathers were involved in caregiving and play with the infant. Maternal sensitivity assessed using the CARE-Index in a DMM perspective results as a major predictor of mother-infant attachment as described by Ainsworth and Bowlby attachment theory.

P01.29

#### **ASSESSMENT OF ATTACHMENT IN MOTHERS AND FATHERS: COMPARING SELF-REPORT QUESTIONNAIRES AND DMM-ADULT ATTACHMENT INTERVIEW**

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The study of parental attachment and its influence on the psycho-physical development of newborns is an important issue in development research. In these cases, self-report questionnaires are commonly used both in research and in screening programs in public services, although many studies have evidenced the limits of their validity and their poorly significant correlation with the outcomes of Adult Attachment Interviews (AAI) (Roisman et al., 2007; Haltigan, Roisman & Haydon, 2014). Considering that the majority of these studies are based on AAI coded following the Berkeley criteria (Main, Goldwyn & Hesse, 1984-2003), the aim of this research is to compare, in attachment assessment, self-report questionnaires with the data of the AAI coded according to the Dynamic-Maturational Model of attachment and adaptation (DMM-AAI). A sample of 89 parents, 45 fathers and 44 mothers ( $M=35.77$ ,  $SD=5.85$ ), was submitted to the AAI and the texts of the interviews were codified using the DMM criteria (Crittenden & Landini, 2011). All the parents were also subjected to 2 self-report questionnaires for the attachment assessment: the Attachment Style Questionnaire, (ASQ) (Feeney, Noller, Hanrahan, 1994) and the Relationship Questionnaire, (RQ) (Bartholomew, Horowitz, 1991). Poorly significant associations emerged between the DMM-AAI outputs and the self-report questionnaire data. Considering the whole sample, the RQ data compared with the DMM-AAI outputs (divided in low-risk and high-risk pattern) resulted at the limit of significance ( $p=.063$ ). In mothers only, the association between the RQ and the DMM-AAI outcomes resulted significant ( $p=.003$ ). No association in mothers and fathers emerged between DMM-AAI and ASQ. This study confirms research data on the limits of self-report questionnaires in attachment assessment and the lack of association with more complex tools like the DMM-AAI. The association increases in mothers, perhaps because these questionnaires were developed mainly taking into account female psychological aspects.

P01.30

#### **ADVERSE CHILDHOOD EXPERIENCES (ACES) AND MATERNAL-INFANT INTERACTION**

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Adverse childhood experiences (ACEs) pose significant risk for long-term negative health outcomes including depression (Spinhoven et al., 2010), substance abuse (Anda et al., 2002) and suicide (Brockie et al., 2015; Cluver et al., 2015; Dube et al., 2001). Recent research shows that individuals who have experienced childhood adversity have greater difficulties coping and responding to stressful life events (McElroy & Hevey, 2013). Parenting may be conceptualized as one such stressful role. While previous research has established that maternal-infant relationship quality plays a role in children's health and development (Conradt & Ablow, 2010; Letourneau et al., under review; Sroufe, 2005), there is paucity of empirical findings examining the relationship between ACEs and maternal-infant interaction quality. This study was a secondary analysis executed using a subsample of 241 women from the ongoing longitudinal Alberta Pregnancy Outcomes and Nutrition (APrON) study. APrON is a longitudinal cohort study of pregnant women and their child(ren) residing in central and southern Alberta (Kaplan et al., 2014). Mothers were eligible for inclusion if they were less than 22 weeks gestational age, greater than 16 years of age, and English speaking. Data were collected via clinic visits and mailed questionnaires in early (13-22 weeks) and late (32-40 weeks) gestation, as well as at 3, 6, and 18-months postpartum. See Kaplan et al. (2014) or [www.apronstudy.ca](http://www.apronstudy.ca) for additional details. Analyses were performed using IBM SPSS Statistics Version 22 (IBM Corp, 2013). There was a positive correlation between adverse childhood experiences and the CARE-Index for controlling behavior ( $r = .121, p < .05$ ). There was a negative correlation between adverse childhood experiences and the CARE-Index for unresponsive behavior ( $r = -.135, p < .05$ ). The higher the ACEs, the higher the controlling and the lower the unresponsive parenting behaviors during maternal-infant interactions.

P01.31

### **CHILDREN'S REPRESENTATIONS OF RELATIONSHIP QUALITIES IN RESPONSE TO FAMILY AND CLASSROOM NARRATIVE STORY-STEM SCENARIOS**

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Narrative Story-Stem Tasks (NSSTs) assess young children's perceptions of close relationships through their responses to standardized story stems that present familiar interpersonal scenarios. Recently, NSST research has expanded to specifically study children's relationships with teachers. This study examined 3 new story-stems representing familiar classroom scenarios. The principal aim of this study was to explore thematic similarities and differences in children's NSST responses to family and classroom story-stem scenarios. Thirty-nine children (20 male; mean age 90 months) were recruited from 2 school systems in Louisiana (18/21), representing lower and higher socio-economic circumstances and African-American and Caucasian racial diversity. The NSST protocol consisted of the 5-story Attachment Story Completion Task, which focuses on family themes, and 3 new story-stems depicting classroom themes of bullying, academic performance, and rule-adherence. NSST responses were coded for: Relational and physical peer aggression; teacher caregiving; parental caregiving; attachment to teacher; attachment to parents. Parents reported family demographic information and completed the Perceived Teacher Responsiveness sub-scale of the Head Start Family and Child Experiences Survey, which assesses perceived qualities such as warmth and responsiveness in teachers. Multivariate analyses revealed that: 1) Girls were more likely to enact relational (not physical) aggression in their narrative responses toward peers than boys; Children in the higher SES school were more likely to represent teacher (not parental) caregiving; Children's representations of attachment behavior enacted toward teachers (not to parents) were associated with parents' reported positive perceptions of the teachers. The 3 new classroom story-stems appear to capture aspects of children's perceptions of qualities of peer aggression and their regard for teachers as sources of protection and care. Future research with

these story-stems should expand to larger samples to further our understanding of children's perceptions of their classroom environments.

P01.32

**ATTACHMENT FIGURES ACTIVATED DURING ASCT SITUATIONS: "WHO" AND "WHEN"**

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As attachment theory and research has expanded to consider a variety of attachment figures with overlapping, although not identical, spheres of influence there have been conceptual as well as empirical discussions of attachment "networks", and the effects of secure vs. insecure relationships across all (or most) members of these networks. van IJzendoorn (2005) and others have argued that the attachment network is integrated, even if not exactly additive, and that the child's construction of an internal working model of attachment is influenced to varying degrees by all of her/his attachment relationships. This study was designed to explore the resolutions presented by children on the Attachment Story Completion Task (ASCT, Bretherton, Ridgeway, & Cassidy, 1990) specifically which parental figure is used and if it depends on the type of story. Participants were 132 children from two pre-schools, in the district of Lisbon. Five stories from the Attachment Story Completion Task (ASCT) were used to assess children's attachment security. Each story was coded by two independent observers using a simple taxonomy about parental resolution (e.g., father, mother, both, brother/sister). Results show that which parent is used on the resolution depends on the theme of the stories. Our results hope to contribute to the discussion on how internal working models are built.

P01.33

**THE IMPACT OF THE ATTACHMENT-BASED PARENTING PROGRAM SAFE© ON MOTHERS' EMOTIONAL AVAILABILITY**

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Maternal sensitivity and emotional availability has been shown to be a predictor of infant attachment security (Easterbrooks & Biringen, 2000; Altenhofen et al., 2013). The attachment-based parenting program SAFE© (Safe Attachment Formation for Educators; Brisch 2007) focuses on promoting parent's sensitive caregiving by video feedback sessions. In this training parents are positively reinforced regarding sensitive interactions with their baby. Mothers in the SAFE©-group were more frequently found to be emotionally available in a diapering interaction with their 4-month-old infant compared to mothers in the control group who didn't get a guided video-based sensitivity training. Our aim is to assess the longitudinal impact of guided video-based sensitivity training in the follow-up at the child's age of approximately 7 years. We investigate whether the video feedback training in the SAFE©-program promotes emotional availability at the follow-up at 7 years or not. In a non-clinical subsample of approximately N=50 mothers of an ongoing longitudinal study mothers were videotaped during a diapering interaction with their 4-month-old infant. In the follow-up at the child's age of 6.7 – 8.22 (M=7.44) years, a structured play-interaction between mothers and children was videotaped. Diapering and play interactions were coded by a blinded and reliable coder with the EA Scales (Biringen, 2008). Data of a subsample that indicate long-term effects of early intervention will be presented. We are still collecting data from the follow-up. We will discuss the long-term effect of the parenting program SAFE© concerning emotional availability and also discuss whether positive effects of the video feedback sessions are robust until the time-point of the follow-up.

P01.34

**SOCIO-EMOTIONAL FUNCTIONING IN CHILDREN WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD): WHAT ROLE DOES MATERNAL REFLECTIVE FUNCTIONING CAPACITY PLAY?**

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There is a growing body of literature providing evidence for impairments in socio-emotional functioning in children with ADHD (Bora & Pantelis, 2016). Yet, only few studies have dealt with the role of parental affective and relational aspects in this context. There is evidence for a positive impact of parental Reflective Functioning (RF) on the overall adjustment and on the socio-emotional functioning of children. The study takes an attachment-theoretical perspective and aims to clarify the role of mothers' RF in the adjustment of children with ADHD. Possible mediating or moderating effects of maternal RF on the relationship between children's socio-emotional functioning and children's ADHD symptoms will be tested. The sample will comprise 50 children, aged 4 – 5 years and showing symptoms of ADHD, and their mothers. Children's attentional deficit and hyperactivity/impulsivity is rated by their mothers and educators on the FBB-ADHS-V (Breuer & Döpfner, 2008). Parent and educator ratings on the SSIS Rating Scales (Gresham & Elliott, 2007) as well as children's score on the subscale socio-emotional competence of the intelligence and development scales (Meyer, Hagmann-von Arx, & Grob, 2009) will indicate the children's level of socio-emotional functioning. To assess the degree of maternal RF, mothers will complete the PRFQ (Luyten, Mayes, Nijssens, & Fonagy, 2017). Preliminary results of a pilot study indicate anticipated relationships between ADHD symptomatology and aspects of socio-emotional functioning. Results of the main study including findings on maternal RF will be presented. If our study shows a significant impact of maternal RF, this will highlight the role that an understanding environment plays in developing socio-emotional skills in the context of ADHD and may point out maternal RF as a protective factor. Our findings will therefore have important implications for future prevention of and therapy for ADHD.

P01.35

**ATTACHMENT DEVELOPMENT IN DAYCARE SETTINGS: NON-PARENTAL CAREGIVERS' ATTACHMENT REPRESENTATIONS**

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The impact of caregivers' attachment representation upon child development (e.g. Coppola et al., 2006; van IJzendoorn, 1995) and the interaction with the child (e.g. Holmes & Lyons-Ruth, 2006) has been copiously documented. In daycare settings there is very little knowledge regarding the non-parental caregivers (Hilmer, 2015). Thus far, the distribution of the non-parental attachment representation has been scarcely studied (Constantino & Olesh, 1999; Harmon, 2006). The aim of the study was to investigate the distribution of the attachment representations in daycare providers. A non-clinical subsample (control group of the evaluation study SAFE® in daycare) of 40 non-parental caregivers (Mage= 34.3 years, range= 19-57 years) was examined. An adjusted version of the SAFE® -program was used for this study. The Adult Attachment Projective Picture System (AAP; George & West, 2012) was employed to assess attachment representations. 20% of the AAP-transcripts were evaluated by a second reliable person. The inter-rater-reliability was  $\kappa = .78$ . The state of mind of ten daycare providers (25%) was autonomous (F). The attachment representation

from sixteen (40%) caregivers was enmeshed (E) and eight (20%) day care providers were dismissively (Ds) attached. Six (15%) had an unresolved attachment representation. The distribution of the attachment representation (15% secure vs. 75% insecure) in this sample seems to be similar compared to other samples that used the AAP (Krause et al., 2016; George & West, 2012). The results of this work imply that it might be useful to confront daycare providers with their own attachment experiences in order to ensure high-quality in daycare centres.

P01.36

### **SCHOOL ATTACHMENT MONITOR (SAM): A NEXT GENERATION TECHNOLOGY TO AUTOMATE ATTACHMENT MEASUREMENT IN MIDDLE CHILDHOOD**

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Attachment relationships are known to play a critical role in mental and physical health as well as social and cognitive skills of children. The existing methods of attachment measurements require intensive and lengthy training as well as laborious administration and rating afterwards. Attachment research is currently limited to studies of moderate sample sizes and only to research teams with appropriate qualifications. We present work in progress which aims to develop a novel technology, School Attachment Monitor (SAM), to automate key steps and features of the validated Manchester Attachment Story Task (MAST). SAM is being designed and developed with active input from children and clinicians. Our latest prototype involves smart dolls equipped with motion measurement units, and a new generation of camera to record sessions with the capacity to capture imperceptible data for computing information, such as proximity of dolls. We have developed a child-friendly software which guides the child through the task via a pop-up avatar. So far, sixty 4- to 8-year-olds participated in Phase 1 where they received SAM and MAST with approximately 10 weeks' interval. Social Signal Processing (SSP) technique is used to produce algorithms for analysing and modelling observed behavior to produce automatic ratings of attachment classifications. We will present the result of our SSP analysis and evaluate the accuracy of the algorithms for identifying attachment categorisations, and the level of details which they afford. Significant behavioural features identified by our computational technique for discriminating children's attachment classifications will be presented and discussed. We will suggest academic and clinical contexts in which SAM may be an effective and useful alternative to MAST. We will discuss in particular whether SAM may offer a paradigm shift in future studies to permit investigation of epidemiological scale into the origins and trajectories of attachment formation in child development.

P01.37

### **DOES PRE-SCHOOL ATTACHMENT EFFECT DEVELOPMENT?**

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The term "attachment" identifies a relationship between the child and his/her primary caregiver in which the child feels safe and free for discovery behavior that enables the child to grow up, walk and speak. The studies that examined the relationship between infant-mother attachment and development showed that there is a relationship, albeit a weak one, between infant attachment and developmental characteristics. The relationship between the pre-school attachment style and the developmental characteristics of the child is yet to be studied. Participants were 39 mothers and their children aged between 44-51 months (mean= 47,9±2,0 months). Sociodemographic data form, the pre-school strange situation test coded according to MacArthur Attachment Coding, Ankara

Development Screening Inventory (ADSI) and Turkish Expression and Receptive Language Test (TERL) were applied. There were 13 insecurely attached preschool children; 5 of them classified as anxious-avoidant (A), 3 dependent-resistant (C) and 5 controlling-disorganized (D), and 25 securely attached (B). There were no significant differences in terms of developmental characteristics including language - cognitive development, fine motor skills, development of gross motor, social, self-care skills and expressive and receptive language among secure and insecure children. Attachment is a changing and evolving process and developmental processes are multi-factorial. These factors in combination might have led to the disappearance of the direct causal relationship between infant's attachment patterns and development. There is a need for broad sample studies assessing the impact size of various factors affecting development –including preschool attachment.

P01.38

**THE CLINICAL COMPLEXITIES OF USING AN ATTACHMENT-INFORMED MODEL OF CHILD-LED PLAY TO ENHANCE CHILDREN'S FELT SENSE OF SECURITY: THE CHILD TEAM COMPONENT OF THE MOM POWER PROGRAM**

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This poster will illuminate the clinical complexities of using an attachment-informed model of child-led play to increase infant and young children's reliance on primary caregivers to regulate distress and to develop or enhance a felt sense of security in the world. Mom Power (Rosenblum et al., 2017) is a multifamily group intervention indicated to improve parenting among high-risk mothers with young children. The program utilizes an experiential curriculum through which the facilitators create a warm and welcoming environment for participants to experience the concepts that are addressed. The first arm of the intervention is the Mom's Group, led by two clinicians. The Child Team is the second component: while the mother's attend group, their children each spend individual time with a caregiver (sometimes community volunteers, but more often students training to be psychotherapists, teachers or nurses). Through a model of child-led play, this arm of the intervention targets the child's attachment system and capacity to accurately signal attachment related needs. Theoretically, this focus contributes to the children's development of more an internal sense of security, and flexible and adaptive emotion regulation skills. Illuminating the intervention's model of parallel process, the poster will describe the theory and pillars of the intervention, elaborate the process through which attention is paid to the children's need for physical and psychological safety, and the training and supervision necessary for those caring for the children in this intervention model.

P01.39

**MOTHER- CHILD RELATIONSHIP IN WILLIAMS SYNDROME - A COMPARISON WITH AUTISTIC AND NORMAL CHILDREN**

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Williams Syndrome (WS) is a rare neuro-genetic disorder with distinct medical, cognitive, behavioral and psychiatric features. It is well known that the individuals with WS tend to display maladaptive and over-friendly social behaviors and relative strengths in language and facial processing, that is a core characteristic of the syndrome. Thus, some researchers or clinicians describe WS as the opposite phenotype of Autism Spectrum Disorder (ASD) which is characterized by social withdrawal and lack of interest in socially relevant information. In terms of mother-child relationships, the parent-child dyads in WS are much interactive, whilst ASD children tend to show less involvement than typically developed (TD) children. However, WS does share several problems with ASD; inflexibility, obsessiveness, ritualism, and pragmatic communication, which affect a social relationship. Moreover, whilst WS children may show social engagement at a surface level, they have deficits interpreting socio-perceptual cues (e.g. Jones et al., 2006; Plesa Skwerer et al., 2006), and it leads to the difficulties in maintaining relationships with others (Dykens & Rosner, 1999). Therefore, it was hypothesized that WS child would have characteristic quality of relationships and some of them would be seen in ASD. This research aimed to explore the mother-child relationship in WS and highlight the features through comparing with ASD and TD. We observed interactions between WS/ Autism /TD preschool children and their mothers. The quality of relationships between mother and child was assessed by Emotional Availability Scales, and the scores were compared. Despite their distinct patterns in interactions, WS pairs showed some similarities to ASD pairs and they were not shared in TD pairs. We discussed the child-mother relationship and the features of WS.

P01.40

#### **TRAJECTORIES OF MOTHER AND INFANT CORTISOL REACTIVITY RELATED TO SECURITY OF ATTACHMENT AT 14 MONTHS POSTPARTUM**

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The mother-infant attachment relationship covaries with cortisol reactivity during stress. Insecure infants display elevated cortisol levels during the strange situation procedure (SSP) and either fail to return to baseline or demonstrate increases in cortisol levels following the SSP. Yet, mothers' cortisol levels during and after the SSP have not been sufficiently examined. The goal of this study was to investigate mothers' and infants' cortisol reactivity during the SSP and security of the mother-infant attachment, with four saliva sampling collections. Mixed model ANOVAs (4 attachment by 4 saliva sample) revealed a main effect of sample on mother's cortisol ( $\mu\text{g/dL}$ ),  $F(2.36, 184.27) = 15.93$ ,  $p < .001$ . Mothers' cortisol was significantly different ( $p < .05$  for following significant contrasts) at baseline ( $M = 0.15$ ) and 30-minutes ( $M = 0.10$ ) post-separation and baseline and 60-minutes post-separation ( $M = 0.09$ ), but there was no interaction with attachment security. There was a significant interaction between infants' cortisol and attachment,  $F(7.58, 197.14) = 2.92$ ,  $p < .01$ , indicating that cortisol levels differed across the four samples over time for avoidant, secure, ambivalent, and disorganized infants. Secure and insecure infants had different trajectories of cortisol reactivity and regulation. Disorganized infants ( $M = 0.12$ ) significantly differed ( $p < .05$  for following significant contrasts) from secure ( $M = 0.06$ ) and ambivalent infants ( $M = 0.06$ ) at baseline. Furthermore, disorganized infants ( $M = 0.10$ ) were significantly different from secure infants ( $M = 0.06$ ) 15-minutes post-separation (i.e., the end of the SSP), and secure infants ( $M = 0.09$ ) were significantly different from avoidant infants ( $M = 0.05$ ) 30 minutes post-separation. In line with previous research, insecure, specifically disorganized infants compared to securely attached infants displayed different patterns of cortisol reactivity, suggesting these infants' HPA axis is organized in a way that reflects the context of the insecure mother-infant relationship.

P01.41

### **WHAT IS THE THING WHICH WE CALL ZERO-STAGE INTERSUBJECTIVITY?: A STUDY OF JAPANESE MOTHER AND BABY**

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We hope to work out a system of preventive intervention in early relationship disorders. As a basic study, we have videotaped scenes of mother-infant interaction in 6 pairs from 4 months. We presented the 1st year at 4 pairs in Prague. In that process we found out that ① each mother-infant interaction at 4 months had been completed with their own unique pattern and it affected at 8 months and 1 year-old. ② at 4 months, while talking to their babies face-to-face gaze avoidance was frequent, but attention to the mother and vocalizations increased while the baby was being held by the mother like a kangaroo and she was talking to others. ③ most of the mothers were pleased that their babies talked to others in lively way, without a feeling of jealousy (Kobayashi & Izaki, 2016). We suggest calling this interaction (where a baby is held by its mother, its attention is directed away from the mother) <Zero-stage intersubjectivity>. Zero-stage intersubjectivity is based on a feeling of mutual satisfaction without vocal communication. A baby relates to not only its mother but also the field made by a mother and others being together. This might be a prototype of Amae. For defining Zero-stage intersubjectivity, we videotaped 4 infant-mother pairs once a week or every two weeks. We started at A) 27days-old, B) 1month 13days-old, C) 1month 11days-old, D) 2months 17days-old. We will show these films at the congress and hope to define the meaning and significance of Zero-stage intersubjectivity.

P01.42

### **THE DEVELOPMENT OF ATTACHMENT IN THE FIRST YEAR AMONG INSTITUTIONALIZED CHILDREN IN JAPAN**

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Although the importance of foster care is currently highlighted, institutional care has dominated over the alternative care of children in Japan. Yet it has long struggled with providing the appropriate environment for children's psychological and physical growth, especially since 2011 when family-like care was promoted and implemented in child care institutions. For infants in their first 12 months, supporting their attachment formation is the most important challenge for care-workers. The aim of this study is to investigate the attachment development during their first year with the data obtained by longitudinal observations at infants' homes. Psychologists observed and video recorded life-scenes at three infants' homes. Four infants with full 12 months data were chosen to be the subjects of analysis. These four infants were healthy with no record of physical or psychological illnesses. The total length of videos analyzed was 2614 minutes, and the average length per infant was 654 minutes. Attachment behaviors were checked based on the indexes by Ainsworth (1967) and Bowlby (1969). As the inter-rater agreement of the data from the first infant was sufficient ( $r=.82$ ), we rated the rest of them individually. The achievement ratio at three phases (phase1 to 3) of attachment formation during the first 12 months was 75.0%, 78.1%, and 77.5% respectively. The consistency between the phases was examined and found that the ratio dropped to 69.2% at 4 months, the beginning of phase2. Later it increased and stabled at 5 months, sustained more than 75.0% as a whole. The highest ratio was obtained at 0 and 1 month, which are respectively 100% and 85%. The beginning of each phase differed individually, however, relatively

high achievement ratio was obtained on each phase. Thus it was concluded that their appropriate attachment development was generally apparent.

P01.43

#### **THE INFLUENCE OF PRENATAL RISKS ON CHILDREN'S SOCIO-EMOTIONAL COMPETENCIES IN MIDDLE CHILDHOOD**

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Attachment security is an important protective factor for children's emotional development as the attachment relationship is one of the main developmental contexts for children's emerging emotional competencies. Deficits in this domain are closely linked to the development of psychopathology. So far the influence of the postnatal environment on the development of attachment security is well researched, but little is known about prenatal influences. There is emerging evidence that common risks during pregnancy like maternal depression and fetal alcohol exposure negatively influence children's subsequent attachment development with boys seeming particularly vulnerable. But results aren't homogenous, though further studies are still needed. The major objectives of this study were to assess long-term effects of said early risk factors on children's attachment security and behavioral and emotional problems and to investigate the moderating/mediating role of children's sex/attachment security for the development of problems. The Franconian Cognition and Emotion Studies have been following a sample of 96 mother-child dyads (n=28 with fetal alcohol exposure, n= 32 with prenatal maternal depression, n = 36 control group) since the last trimester of pregnancy until the children's age of 8 to 10 years. Maternal depression was assessed during pregnancy, six months and 8 to 10 years after birth via maternal self-report, fetal alcohol exposure was assessed during the last trimester via an objective biomarker ethyl glucuronide extracted from infant's meconium. At age 8 to 10 attachment was assessed using the Attachment story completion task. Children's emotional and behavioral problems were assessed using the Strength and Difficulties Questionnaire. Analyses are still running, first results reveal deficits in children's attachment security for boys in both risk groups even controlling for postnatal and current maternal depression. Additional analysis will be conducted to investigate effects on children's emotional and behavioral problems and possible mediating and moderating processes.

P01.44

#### **FAMILY RISK EXPOSURE AND EARLY ATTACHMENT DEVELOPMENT: A GERMAN LONGITUDINAL STUDY**

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Child attachment security has been widely shown to be a protective factor for a healthy later development. According to previous research, parents exposed to (multiple) risk factors tend to have children with less attachment security. Especially the negative impact of cumulative risk on attachment development is discussed. Evidence shows that parenting behavior, e.g. sensitivity, is a reliable but moderate predictor of attachment security. The association between risk factors and attachment seems to be mediated by parenting behavior: Parents of high risk samples seem to behave less adequately in interactions with their children in comparison with low risk samples. In

this longitudinal study with a cohort sequential design correlates of early distal and proximal risk factors in a German sample of 197 primary caregivers and their toddlers were examined. In a 7-month interval, two semi-structured home observations of the families were performed and videotaped (12 and 19 months in cohort I, 19 and 26 months in cohort II). Family risk exposure was assessed using self-report questionnaires. Trained observers coded children's attachment security using the attachment Q-sort. Parental responsiveness of primary caregivers was analyzed from videotaped free play and structured play situations. Child temperament, e.g. effortful control, was assessed as a covariate. Early distal and proximal risk factors were negatively associated with attachment security. In terms of risk status a dose-response relation was found: Only in the presence of at least 4 risk factors children's attachment security was strongly impaired. However, attachment security was found to be stable over time. Furthermore, regression analyses revealed that the impact of distal, but not proximal, risk factors on attachment security was substantially mediated by parental responsiveness. In this context children's effortful control seems to be a moderator. Results will be discussed in terms of consequences of cumulative risk on children's attachment development.

P01.45

#### **AN ATTACHMENT FRAMEWORK FOR MEASURING DYSREGULATED AFFECT IN EARLY CHILDHOOD TEACHERS: THE TEACHER CARE PATTERNS QUESTIONNAIRE**

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Research demonstrates that caregiving helplessness in important relationships poses a risk to young children's development. Young children in the US spend an average of 30 hours per week in non-maternal care. The Teacher Care Patterns Questionnaire (TCPQ; Shine, 2015) is a 25-item self-report that assesses teachers' caregiving helplessness, using subscales of integration, rumination, and overwhelm. The purpose of this study is to further validate a measure of caregiving helplessness in a sample of infant-toddler teachers. Pretest data were used from teachers (N = 46) in a study of an attachment-based program of professional development, Hearts and Minds on Babies. Teachers completed surveys, Secure Base Scripts (SBS) and the Teacher Reflective Functioning Interview (TRFI). Consistent with expectations, the three-factor structure of the measure was intact, with alphas above .80 for the rumination and overwhelm subscales. Teachers' TCPQ summary scores were positively correlated with the CES-D ( $r = .36, p < .05$ ), emotion dismissing ( $r = .47, p = .05$ ), and intrapersonal conflict ( $r = .75, p < .01$ ), and negatively correlated with mindfulness ( $r = -.59, p = .01$ ). Rumination was positively correlated with emotion dismissing ( $r = .58, p = .01$ ) and intrapersonal conflict ( $r = .39, p < .05$ ), and negatively correlated with mindfulness ( $r = -.45, p = .01$ ). Overwhelm was positively correlated with the CES-D ( $r = .33, p = .05$ ), emotion dismissing ( $r = .32, p = .05$ ), and intrapersonal conflict ( $r = .77, p = .01$ ). Contrary to expectations, TCPQ summary scores were positively correlated with the TRFI ( $n = 24, r_s = .42, p < .05$ ). No relations were found between TCPQ scores and the SBS ( $n = 26, r_s = .14, p = .40$ ). These results serve as a useful contribution to the ongoing effort to define caregiving helplessness in early childhood teachers.

P01.46

#### **PSYCHOLOGICAL ADAPTATION, ATTACHMENT AND REFLECTIVE FUNCTIONING IN MIDDLE CHILDHOOD: A COMPARATIVE STUDY**

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Insecure attachment and impaired mentalization have received increasing attention as general risk factor for the development of child and adolescent psychopathology (Madigan et al., 2016; Ensink et al., 2016). However, the extent to which these factors contribute to the emergence and developmental course of psychopathology, specifically in middle childhood, remains under-researched. This is despite the growing recognition of the importance of middle childhood as a phase marked by considerable advances in psychological and interpersonal development and maturation (Bosmans & Kerns, 2005). The current study sought to address this by examining associations between attachment, psychopathology (measured as internalizing and externalizing problems) and mentalization, operationalised as Reflective Functioning (RF), in middle childhood. Two samples of children: a clinical sample of children diagnosed with Somatic Symptoms Disorders (SSD) and Disruptive Behavior Disorders (DBD) (N=71; M=11.06, SD=1.87) and a normative comparison sample (N=46; M=10.86, SD=1.69) were recruited with each child completing a battery of measures including the Child Attachment Interview (CAI), the Child Behavior Checklist 6-18 (CBCL 6-18), and Child Reflective Functioning Scale (CRFS). In line with predictions, children drawn from the clinical sample were more likely to be assigned an insecure attachment classification, had significantly higher level of internalizing (those with SSD) and externalizing problems (those with DBD), and were less likely to score high for RF than children in the normative sample. Moreover, closer examination of the correlations between CAI scales, RF and internalizing and externalizing scores confirmed our predictions. For example, CAI Anger and CAI Idealization, considered dimensional indexes of attachment insecurity, were negatively correlated with externalizing problems; RF general and RF self were negatively correlated with externalizing problems. Taken together these results suggest that attachment representations and RF are significantly associated with psychological adjustment in middle childhood. The implication of the findings and future directions will be discussed.

P01.47

### **THE MODULATION EFFECT OF ATTACHMENT RELATIONSHIP ON WORKING MEMORY AND LEARNING**

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In this study – based on a previous pilot study – the relationship between cognitive, learning abilities and attachment style has been empirically evaluated. It is possible to suppose that children with a secure attachment to the caregiver and/or the teacher have higher skills in school adaptability. The present work was conducted with to widen the pilot study's sample, making the outcomes more valid and reliable. The recruited sample (130 children of ages 6- 7 and 81 children of ages 8-11) was tested with the Linguistic Assessment Test (6-7) or Peabody Picture Vocabulary Test Revised (8-11), the short version of the Automated Working Memory Assessment (6-7) or Wechsler Intelligence Scale for Children IV, the Separation Anxiety Test, the Reading Trials MT – AC-MT 6-11- Calculation Ability Assessment Test, and Stories (8-11). The results show a significant connection between learning performances and verbal and visual-spatial trials, and a significant moderating effect of attachment style upon this connection. The results underline the importance of a secure relationship in learning processes, as the parent-child and teacher-child relationship regulates the child's emotional skills and scholastic development, having a significant influence on the child's skills deficit or enhancement.

P01.48

### **MENTALIZATION AND DISSOCIATION IN THE CONTEXT OF TRAUMA: IMPLICATIONS FOR CHILD PSYCHOPATHOLOGY**

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Dissociation is a common reaction subsequent to childhood sexual abuse (CSA) and has been identified as a risk factor for child psychopathology. There is also evidence that mentalization contributes to resilience in the context of abuse. However, at this stage little is known regarding the relationship between mentalization and dissociation, and their respective contributions to psychopathology. The aim of this study was to examine pathways from CSA to depressive symptoms, externalizing behaviour difficulties and sexualized behaviour through mentalization and dissociation. These pathways were examined in a sample of 168 mother-child dyads, including 74 dyads where children (aged 7–12) had histories of sexual abuse. Maternal mentalization was assessed using the Parent Development Interview-Revised and children's mentalization was assessed using the Child Reflective Functioning Scale. Children completed the Child Depression Inventory and parents completed the Child Dissociative Checklist, the Child Behavior Checklist and the Child Sexual Behavior Inventory. Direct and indirect paths from CSA to child psychopathology via children's mentalization and dissociation were examined using Mplus. Distinct paths from abuse to psychopathology were identified. Child mentalization partially mediated the relationship between CSA and depressive symptoms. The effects of CSA on externalizing symptoms and sexualized behaviour difficulties were sequentially mediated through mentalization and dissociation.

P01.49

### **REFLECTIVE FUNCTION, MIND-MINDEDNESS AND ATTACHMENT IN ADOLESCENT AND ADULT MOTHERS: WHICH IMPACT ON INFANT-MOTHER RELATIONSHIP?**

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Early motherhood is a risk factor for the mother-child relationship (Aiello & Lancaster, 2007). Despite the confirmed relationship between maternal sensitivity and mentalization (Slade et al., 2005), there are few studies on this theme in relation to early motherhood. Moreover there are few studies on the relationship between different aspects of maternal mentalization such as reflective function and mind-mindedness and sensitivity. The aim of the study was to evaluate the association between maternal attachment, reflective functioning, mind-mindedness and emotional availability. 44 adolescent mother-infant dyads were compared with a sample of 41 adult mother-infant dyads. At infant 3 months mother-infant interaction was coded with the mind-mindedness coding system (Meins et al., 2010) and EAS (Biringen, 2008); maternal attachment and reflective functioning were evaluated with the AAI (Fonagy et al., 1998). Data analysis shows that adolescent mothers (vs. adult mothers) had lower reflective functioning, were more insecure and were less sensitive towards their infants. They also used fewer attuned mind-related comments. In adult mothers RF was associated to their sensitivity and to infant responsiveness unlike the case with adolescent mothers. In both groups there were no associations between sensitivity and mind-mindedness. The study shows in the adult mothers the association between RF and the quality of the infant/mother relationship at 3 months. The lack of association between RF and sensitivity seen in the adolescent mothers leads to the hypothesis that other factors, such as frequent adverse childhood experiences, affect their sensitivity (Riva Crugnola et al, 2017). The results concerning the link between RF and sensitivity in adult mothers, but not between mind-mindedness and sensitivity

highlights that RF measures a more general maternal competence with respect to mind-mindedness, the latter being considered as more dependent on the activity and responsiveness of the infant.

P01.50

#### **THE ORIGINS OF A DISRUPTED ATTACHMENT: A CASE REPORT**

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To illustrate through a case of a reactive attachment disorder (RAD), the factors at the origin of its emergence as well as the means of therapeutic management. M.A.B. is a 3 year-old boy, who was referred to our department by the kindergarten's educator for behavioural problems. He was the only child of the couple and his conception was not desired. A fetal pyelectasis was diagnosed at the 2nd-trimester and the mother believed that it was heralding a diabetes, as the father had diabetic nephropathy. The threat of premature delivery forced the mother to a 4 months hospitalization. Childbirth was concomitant to the dismissal of the father with 9 months of unemployment. The mother had suffered from a postpartum depression that evolved towards chronicity. Early mother-infant interactions were very disturbed. She confessed that "she didn't want to hold him so he won't get attached to her". According to her, troubles had started at a very young age: irritability, angry outbursts, avoidance of physical contact and rejection of the caregiver as well as defiant and provocative attitude. The educator also complained about social withdrawal. A RAD was retained according to DSM 5 criteria. Mother-infant psychotherapy has brought to light a transgenerational psychopathology. Interventions on the mother's mental representations and emotional availability to the child's needs significantly improved the child's symptoms during follow-up.

P01.51

#### **MATERNAL PERCEPTION OF INFANT EMOTIONS AND OBSERVED MOTHER-INFANT INTERACTION AT 8 MONTHS – FINNBRAIN BIRTH COHORT STUDY**

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Adults ability to identify and interpret infant facial and vocal cues is argued to be a crucial element of the parent-infant relationship (Young & Parsons et al., 2012; Parsons et al., 2011; Arteché et al., 2011; Stein et al., 2010). The objective of this study was to examine how parents' perception of infant emotions is associated with quality of mother-infant interaction at 8 months. The adult population in FinnBrain Birth Cohort Study (see Karlsson et al., 2017) was invited to participate in an online task, assessing interpretation of infant facial expressions. Participants were presented with fifty infant facial expressions, ranging from sad/negative to happy/positive, and asked to rate the infant face using two scales: Arousal and Valence. The mother-infant interaction data was collected from a focus cohort, who were invited to a neuropsychological visit at 8 months of age. The mother-infant interaction study consisted of 20 minute Free play Situation, which was videotaped. The interaction data was analyzed using the Emotional Availability Scale (Biringen Z., 1998, 2008). Seventy mothers participated in both the online infant emotion interpretation task and the Free play Situation when their baby was 8 months of age. Preliminary results showed negative correlations in mothers ratings of 'Arousal' in infant facial expressions and the Emotional Availability of maternal behavior in the free play situation. Specifically, mothers who rated infants' negative emotions as intense showed less sensitive ( $r = -.276, p < .05$ ) and more intrusive ( $r = -.314, p < .01$ ) behaviour in the interaction situation. Our preliminary findings suggest that maternal

perception of infant emotion intensity is associated with differences in observed maternal caregiving behavior. Measures of maternal emotion perception might be useful predictors for difficulties in mother-infant interactions.

P01.52

#### **HAVE YOU EVER SEEN A HAIR DRYER AS A TRANSITIONAL OBJECT?**

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Transitional object remains an important developmental phenomenon. According to Winnicott, it facilitates the development of separation-individuation and emotion regulation. Some authors consider a secure attachment to the mother as an important condition for the development of a soft object attachment. So what about children with attachment disorders? The patient was 4 years and 7 months old, living with his parents in Qatar since two years, where he was diagnosed with autism spectrum disorder. He was referred to our department for speech disorders. The mother suffered from depression during pregnancy and the first year of the patient's life. She was violent and careless. Later, she noticed certain disturbances in her child behavior: he could not stand to be separated from his favorite object, his hair dryer. He took it with him everywhere, cuddled it, spoke to it, and was inconsolable when they tried to take it away from him. The diagnosis of reactive attachment disorder was retained and we were challenged by the strangeness of this transitional object that, may be, recalls the emotional drought of his mother. In some studies, a high proportion of children with secure attachment had as transitional object soft ones, while anxiously attached infants were less likely to be attached to them. Other researchers are less specific about the differences between the two types of attachment patterns. The phenomenon of the transitional object is not well understood. Its particularity in the attachment disorder is little studied. It raises several questions. Further studies could better explore this topic

P01.53

#### **JOINT ATTENTION OBSERVED IN MOTHER-INFANT INTERACTIONS, ATYPICAL MATERNAL BEHAVIOUR, AND INFANT ATTACHMENT**

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Infants' capacity to engage in joint attention emerges at around 9 months of age, enabling the infant to share object- and event-related experiences with a social partner during triadic interactions. Besides maturation, quality of interactions with the caregivers may also influence the development of individual differences in joint attention skills. The few studies investigating the relationship between infant joint attention, quality of care-giving and attachment have so far been inconclusive. Mothers and their 9-month-old infants (n=40) were observed during semi-structured play. Bids for establishing triadic attention and episodes of joint attention behaviours were recorded. At 12 months, maternal atypical behaviour and attachment disorganisation were assessed in the Strange Situation. Associations with preceding joint attention variables were tested. Longer duration of parallel (simple) joint attention was associated with less passive maternal monitoring, more maternal entertaining initiations (labelled as animation), and with more initiations accompanied by looking at the infant's face. The higher-level coordinated (shared) joint attention, on the other hand, was best predicted by the most complex infant response type to a maternal bid, involving a gaze shift between the mother and the newly engaged object. Joint attention behaviours were related neither to atypical maternal behaviour, nor to disorganised infant attachment. Interactions of insecurely attached dyads, however, were characterised by above-average level of parallel joint

attention, which might be explained by insensitive care-giving imposing control over the child's interest and autonomy. Coordinated joint attention observed at 9 months of infant age is more likely to be determined by infants' developing abilities (e.g., rapid gaze shifts between an object and the partner), than by the variations in mothers' interactive behaviour. This could explain why individual variability in early coordinated joint attention – in contrast with parallel joint attention – was not associated with the quality of mother-infant attachment.

P01.54

### **PARENT-CHILD ATTACHMENT AND CHILDREN'S AFFECTIVE EXPERIENCES: A SERIES OF META-ANALYSES**

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Parent-child attachment relationships may play an important role in children's development and organization of the expression and experience of their emotions. Our meta-analytic review aimed to examine the strength of associations between parent-child attachment patterns and children's experiences of positive and negative affect, in global or specific emotion-eliciting contexts. Fifty studies (N's ranged from 216 to 9,167 children) were identified for inclusion in a series of meta-analyses. More securely attached children were found to experience more global positive affect, less global negative affect, and express less elicited negative affect. More avoidantly attached children were found to experience less global positive affect. More ambivalently attached children were found to experience more global negative affect and express more elicited negative affect. Lastly, children with more disorganized attachments were found to experience less global positive affect and more global negative affect. Our findings provide evidence that parent-child attachment relationships may provide an important context for children to develop and organize their positive and negative affective experiences. Further research is needed to examine if patterns of attachment are associated with distinct expressions of elicited positive affect.

P01.55

### **TRANSITION AND ATTACHMENT**

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Whether children are emotionally secure in out-of-home care and develop psychically and physically well enough, is decisively influenced by the transition process. A soft or gentle transition respecting the child's basic needs for attachment is an essential part of the process quality in day-care centers.

(1) What kind of patterns of attachment (secure, organized insecure, and disorganized) do infants develop in out-of-home care to their caregivers in Berlin Germany?

(2) Does a 6 day training for caregivers on transition and attachment of infants result in:

(a) more organized (B, A, C) and less disorganized (D),

(b) less infant problem behavior

(c) more caregiver sensitivity with the group?

This randomized, controlled, double-blind longitudinal study (2016-2018) investigates 62 infants and 36 caregivers. The intervention group takes part in this special training. The control group does not take part in the training until the data collection is complete. The following data is collected:

The transition process, socio-demographic data, caregiver's observation (Caregiver Interaction Scale/CIS, Arnett 1989), infant temperament (Temperament Scale/TTS, Fullerd et al. 1984), problem behavior (Child Behaviour Checklist/C-BCL 1 ½-5, Achenbach & Recorla 2000) and the patterns of attachment (SSP, Ainswort et al. 1978). The data collection and the data analysis will be completed

by April 2018. We already have the results from 38 infants, 21 caregivers from 14 day-care centers. 58 % of the infants are secure, 8 % are insecure organized and 35 % are disorganized attached to their caregivers. The results of this study could be meaningful for the present discussion regarding the question whether infants in out-of-home care develop an attachment or only a relationship to their caregivers. An attachment oriented approach during transition seems to be essential in order that the infants can rely on their caregivers as a "secure base".

P01.56

**ON THE ROOTS OF EMOTIONAL PROCESSING AND ATTACHMENT: INFANTS AND MOTHERS CLASSIFIED AS INSECURELY-AVOIDANT SHOW A PREFERENCE FOR LOW AROUSAL EMOTIONAL FACES IN A VPC PARADIGM**

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There is considerable individual variation in the nature and extent of emotional influences on information processing. Namely, both adults and children have shown attachment-related differences in emotional processing biases. In this study, we aim to understand how infants' attachment classification and mothers' attachment style influence how emotional information captures their attention. A total of 30 mothers and 12-month-old infants participated in two laboratory procedures. Infants' attachment was assessed using the Strange Situation Procedure (SSP) while mothers completed the Experiences in Close Relationships (ECR), the State-Trait-Anxiety Inventory (STAI), the Difficulties in Emotion Regulation Scale (DERS), and the Mother-Infant Bonding Questionnaire (MIBQ). Moreover, both mothers and infants participated in a visual-paired comparison paradigm, with angry and happy faces selected from the Nim Stim face stimuli set. Faces were selected according to 4 conditions: High Happy (HiHA), Low Happy (LoHA), High Angry (HiHA), and Low Angry (LoAN). Thus, categories of valence, arousal and valence x arousal were included. In this protocol first a LoHA face was presented (habituation) followed by 6 trials composed of two contrasting emotional faces (one new and the other was the same they were habituated with). Data was collected using an eye-tracker. Infants classified as avoidant in the SSP showed a preference for LoHA (low arousal, happy) compared to HiHA (high arousal, happy) faces. Mothers with higher scores in the avoidance dimension of the ECR exhibited the same visual pattern. Furthermore, mothers who revealed (1) more emotional regulation difficulties in DERS, (2) higher scores in negative bonding towards their babies in MIBQ, and (3) higher scores in the STAI-anxiety-trait scale - showed a preference for angry (vs. happy faces). Our findings support the notion that infants' early social-emotional experiences with the mother, as well as mother's own attachment style, are related with social-information processing and attention-engagement towards emotional-salient stimuli.

P01.57

**CASE REPORTS OF TWO GIRLS FROM THE PEDIATRIC OUTPATIENT CLINIC PROCESS OF TREATMENT ON THE CONCEPT OF ATTACHMENT THEORY**

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Introduction: The chief complaint with the difficulty in the intersubjective relationship between the mother and the child suggested the existence of the trouble of attachment in the background. Aim: The process of reconstruction of intersubjective relationship is shown. Method: It is the retrospective study of the treatment process of two cases. Case A was diagnosed somatic symptom disorder and schoolphobia. A had been sexually abused by an uncle of A's new father in the presence

of A's mother repeatedly since A was 4 years old. But A's mother could not notice the emotional change of A. The abuse had prolonged and became worse. It was two years later that A confessed everything. CaseB: B's son was suffering from school phobia with family dysfunction. B tried to hurt her husband with a kitchen knife when B's son was a preschooler, and B's son was always aggressive to B; kick and hit B. Through the treatment, it was revealed that B had charged with massaging B's step grandfather L since B was 2 years old until L's death to avoid L's violence after flipping. It was so frightening a burden. B clearly had wished to kill L by the age of 7. Result There was intergenerational transmission of the attachment disorder relationship pattern. The violence existed in the families. Conclusion Treatment on the concept of attachment theory was suspected to be effective for them.

P01.58

**RISORSE E VULNERABILITA' PSICOLOGICHE DELLE FAMIGLIE RICOVERATE IN : UNA RICERCA ESPLORATIVA IN EMATOLOGIA ONCOLOGICA PEDIATRICA**

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Scopo dello studio e' comprendere quanto le risorse e le vulnerabilita' psicologiche specifiche e aspecifiche possano fare luce sulla traumaticita' dell'esperienza vissuta dai genitori di bambini ricoverati in un reparto di ematologia oncologica pediatrica e sottoposti a trattamento chemioterapico e consentire una maggiore compliance alle terapie mediche e alla prevenzione della sofferenza psichica delle famiglie. Ricevere una diagnosi di malattia oncoematologica relativa al proprio figlio e' un evento traumatico che mette alla prova l'equilibrio del paziente e dei genitori, che riportano emozioni analoghe a quelle che si provano in una condizione di lutto (shock, negazione, tristezza, rabbia, disperazione e confusione). Nella ricerca condotta presso l'ospedale pediatrico Bambino Gesù sono state somministrate 30 interviste con n. 4 questionari o checklist strutturati (Parent Stress Index, 2008; Family Adaptability and Cohesion Scale IV, 1985; Impact Event Scale, 1979; Coping Orientation to Problems Experienced, 1997) a 17 madri e 14 padri di 17 bambini ricoverati (età media 7.9 anni, DS 4.5, range 2-17 anni, M 52%, con diagnosi di LLA nel 70%, LAM nel 15%). L'analisi statistica delle variabili consente di misurare risorse e vulnerabilita' attive alla comunicazione della diagnosi. I genitori hanno riconosciuto bassi livelli di evitamento ( $p < 0.001$ ) e alti livelli di stress genitoriale ( $p.001$ ) e relazionale nell'interazione col figlio ( $p.003$ ). La comprensione di queste funzioni mentali e comportamentali potrebbe migliorare la compliance alle terapie mediche, le reazioni di stress alla gestione dei ricoveri e la percezione di sofferenza psichica connessa, nonché auspicare ad un miglioramento nella percezione della malattia.

P01.59

**REVIEWING INFANT COSLEEPING AND ATTACHMENT**

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Infant co-sleeping is a complex and often controversial topic of discussion considering the risks of SIDS and benefits of attachment. Relationships between infant sleep patterns, infant sleeping arrangements and development both in the short and long term, whether having positive or negative outcomes, is anything but simple and the traditional habit of labeling one sleeping arrangement as being superior to another without an awareness of family, social and ethnic context is not only wrong but possibly harmful. We review the infant co-sleeping and bed-sharing practices from countries around the world along with USA by google search and compile data with survey of

parents in USA.

P01.60

### **MATERNAL MIND-MINDEDNESS AND ITS ASSOCIATION WITH ATTACHMENT: THE CASE OF ARAB INFANTS AND MOTHERS IN ISRAEL**

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Mind-Mindedness (MM) focuses on mothers' attunement to their infant's mental states as reflected in their speech to the infant (Meins, 2013). Previous studies in Individualistic Western societies found that appropriate MM comments are associated with attachment security, but few if any such studies were conducted in collectivistic societies such as the Arab population in Israel. The goal of the study was to examine whether the associations between MM and attachment in the Arab culture in Israel are the same as in Western samples. An additional goal was to examine whether appropriate and non-attuned MM comments could, together, distinguish among mothers of children in the different attachment classifications. 76 Arab mothers and their infants between the ages of 12 and 18 months were observed in the Strange Situation Procedure (49 secure (B), 11 ambivalent (C), 14 disorganized (D), and 2 avoidant (A) infants). MM was coded from an 8-minute free-play sequence. Mothers of B infants used more appropriate and less non-attuned MM comments than mothers of D infants, with no significant differences with mothers of C infants. Also, mothers of B infants used less non-attuned MM comments than both mothers of D infants and mothers of C infants. Also, (1) Mothers of B infants were most likely to show the combination of high appropriate and low non-attuned MM comments; (2) Mothers of D infants were most likely to show the combination of high non-attuned and low appropriate MM comments; and (3) A non-significant trend indicated that mothers of C infants were most likely to show a combination of high appropriate and high non-attuned MM comments. Maternal MM was associated with attachment in the Arab culture in Israel with combinations of appropriate and non-attuned MM comments distinguishing between different attachment classifications.

P01.61

### **CHILDREN AND PARENTS EXPOSURE TO ADVERSE CHILDHOOD EXPERIENCES (ACE) IS ASSOCIATED WITH CHILDREN'S PSYCHOLOGICAL AND COGNITIVE OUTCOMES IN PRESCHOOL**

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Exposure to adverse childhood experiences (ACE) has been found to have a profound negative impact on multiple child outcomes, including academic achievement, distorted social cognition patterns, and behavioral maladjustment. The present study aims to examine the links between the caregiver's and child's exposure to ACE and multiple child outcomes including the ways by which exposure to ACE is associated with children's attachment representations, social information processing (SIP), Executive Functions (EF), and social behavior in school. The sample included 35 children (ages 3-4) enrolled in a Therapeutic Nursery Program (TNP). Children are referred to this TNP due to significant delays in their social emotional development that result in difficulty functioning in multiple settings. Caregivers completed the Adverse Childhood Experiences questionnaire (ACE; Feliti et al., 1998; caregiver and child versions); Children were interviewed with a set of well validated measures to examine children's representations, SIP, EF, and other outcomes;

the preschool staff (teacher, social worker, and assistant teacher) completed a set of well validated questionnaires assessing the child's social and academic behaviors. Significant associations were found between exposure to ACE (both child's and caregiver's) and children's attachment representations, executive functions, social information processing patterns, and behavioral maladjustment in preschool: children exposed to higher levels of ACE, had lower EF capacities, more distorted SIP and attachment representations, and more behavior and learning maladjustment, than children with less exposure to ACE. Similar association (although smaller in magnitude) were found between the caregiver's exposure to ACE children's outcomes. Children exposed to ACE are at a risk of developing multiple behavioral and perceptual problems that are likely to significantly impair their normative developmental pathway. In these cases, interventions such as those occurring at the TNP are a necessary step to put these children back on a more secure developmental track.

P01.62

### **ANGER RECOGNITION: GENETIC AND LONGITUDINAL RELATIONSHIP EFFECTS IN A NON-CLINICAL SAMPLE**

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Secure attachment and optimal affective environment are considered to be fundamentally important for the development of emotion regulation, whereas early deprivation of close relationships has been linked to altered emotion processing and recognition. COMT Val158Met genotype has also been indicated in processing negative emotions. The present study investigated both genetic and longitudinal social environmental effects on recognition of anger in a population sample. Forty eight first-born, healthy adolescents from low-social risk families were completing the computerised version of the Facial Expressions of Emotion – Stimuli and Tests (FEEST) paradigm. COMT genotype, infant attachment quality (Strange Situation), quality of maternal affective communication (as assessed by the AMBIANCE coding scheme) at 12 months and 6 years, attachment quality (MCAST) at 6 years of age were available for all subjects. Anger recognition was the poorest in boys with mothers showing atypical affective communication at 12 months. Secure attachment at 6yrs was related to better identification of anger. Adolescents homozygous for the Met allele were more successful than those with Val/Val genotype, while heterozygotes scored in the middle range. In a multiple regression analysis, anger recognition was significantly ( $F[5, 47]=5.965, p<0.0005, \text{adj } R^2=0.346$ ) predicted by COMT genotype ( $\beta=0.324, p=0.010$ ), S vs IS attachment at age 6 ( $\beta=0.327, p=0.021$ ), and by the interaction of infant sex and maternal atypical behaviour at infancy ( $\beta=-0.482, p=0.006$ ). Association of anger recognition with the COMT genotype, attachment security and relationship measures (maternal behaviour and child attachment) in a low-risk population is in line with previous results pointing at emotion recognition being influenced by affective experiences and also by some biological factors, such as sex and genotype.

### **Caregiving contexts**

P01.63

### **FAMILY CONFLICT AND PARENTING: INVESTIGATING THE RELATIONSHIPS AMONG FAMILY ENVIRONMENT, PARENTING BEHAVIORS, AND EXTERNALIZING BEHAVIORS IN CHILDREN 1½- TO 5-YEARS**

**Stephenson J.\*, Renk K., Kolomeyer E., Cunningham A., Khan M.**

Family conflict clearly can impact how parents interact with their young children (Kitzmann, 2000). Further, young children are better able to manage family conflict when parents engage in healthy conflict resolution (Kitzmann, 2000), with parents serving as the model for appropriate emotional responses when their young children are confronted with challenging situations (Cassidy, 1994). For example, parents who utilize authoritative parenting behaviors provide emotional support, shared communication, and support for exploration for their children (Darling & Stienberg, 1993). Thus, overall, such parenting behaviors help parents encourage overall, healthy development for their children (Querido, Warner, & Eyeberg, 2002) and may serve as a protective factor in the context of difficult family situations. To understand the connections among these variables further, this study investigated the relationships among family conflict (via the Family Environment Scale), authoritative parenting behaviors (via the Parental Authority Questionnaire), and externalizing behavior problems in young children (via the Child Behavior Checklist), with a particular focus on authoritative parenting as a mediator. Mothers (N = 79) of children who were 1½- to 5-years of age rated their family environment, their parenting behaviors, and their young children's emotional and behavioral functioning. Overall analyses suggested that family conflict and authoritative parenting behaviors predicted young children's externalizing behavior problems,  $F(2,76)=5.89$ ,  $p < .05$ ,  $R^2 = .13$ . When examining mediation, family conflict alone predicted significantly young children's externalizing behavior problems,  $F(2,76)=7.15$ ,  $p < .01$ . Once authoritative parenting was added to this equation, family conflict became non-significant ( $p < .08$ ), and only authoritative parenting predicted significantly children's externalizing behavior problems ( $p < .05$ ). These findings highlight that, despite the presence of family conflict, authoritative parent behaviors may play a critical role in buffering young children from the development of externalizing behavior problems. Therefore, trauma-informed parenting interventions should work to enhance protective parenting behaviors, particularly in the context of family conflict.

P01.64

**IT'S ALL MY FAULT: UNDERSTANDING THE ADDED VALUE OF REFLECTIVE FUNCTIONING IN THE RELATIONSHIP BETWEEN DEPRESSIVE TRAUMA SYMPTOMS AND SELF-CRITICISM**

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Depression is one of the most common types of psychological difficulties that impact parenting (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Both childhood abuse and trauma exposure serve as risk factors for depression (Ritchie et al., 2009). Symptoms of depression following adverse experiences can be translated into forms of self-critical, self-condemning, and self-devaluing feelings and cognitions (Gilbert, Hempel, Miles, & Irons, 2004). Further, symptoms such as depression can impact an individual's ability to reflect on their emotional experiences (Slade, 2005). In fact, reflective capabilities play a central role in parenting and providing children with appropriate representations of emotional experiences, responses, and social understanding (Fonagy et al., 1991). Our study aimed to better understand the importance of reflective functioning in the context of depressive symptoms and self-criticism. Specifically, this study examined the relationships among depressive trauma symptoms, reflective functioning, and self-criticism in 126 diverse mothers who had young children ranging from 1½- to 5-years of age. For the present study, we examined the role of reflective functioning (via the Parental Reflective Functioning Questionnaire) in the relationship between mothers' depressive trauma symptoms (via the Trauma Symptom Checklist) and self-criticism (via the Tennessee Self-Concept Scale). Overall regression analyses suggested that mothers' depressive trauma symptoms and reflective functioning predicted significantly self-

criticism,  $F(2,123)=15.71$ ,  $p<.001$ ,  $R^2=.20$ . In examining incremental variance, mothers' depressive trauma symptoms predicted significantly self-criticism ( $p<.001$ ,  $R^2=.13$ ). When adding mothers' reflective functioning to the equation, depressive trauma symptoms remained significant ( $p<.001$ ), and mothers' reflective functioning provided added value ( $p<.001$ ). With both depressive trauma symptoms and reflective functioning being important predictors of self-criticism, these findings highlight the importance of considering mothers' mentalizing in the context of their depressive trauma symptoms when trying to understand their self-criticism. Thus, interventions that target mothers' trauma symptoms may benefit from incorporating a focus on reflective functioning abilities.

P01.65

**HELPING YOUNG CHILDREN SUCCEED: THE IMPACT OF MOTHERS' PSYCHOLOGICAL SYMPTOMS, SENSE OF COMPETENCE, AND PARENTING BEHAVIORS ON YOUNG CHILD ADAPTIVE FUNCTIONING**

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Young children's adaptive functioning (including communication, self-care, social, and motor skills) is a prerequisite for successful, independent functioning at home, in school, and in the community (Oakland & Algina, 2011). Achievement of these skills relies on invested caregivers (Riley et al., 2009), making parents' characteristics an important consideration. Thus, the present study examined the relationships among mothers' characteristics and young children's adaptive functioning in 125 mothers of 2- to 5-year olds. Specifically, we examined the mediational role of mothers' sense of competence in parenting (via the Parenting Sense of Competence Scale) in the relationship between mothers' psychological symptoms (via the Adult Self-Report) and young children's adaptive functioning (via the Adaptive Behavior Assessment System-II). Overall regression analyses indicated that mothers' psychological symptoms and sense of competence predicted significantly their young children's adaptive functioning,  $F(2,123)=6.43$ ,  $p<.003$ ,  $R^2=.10$ . Mediation analyses showed that mothers' psychological symptoms predicted significantly young children's adaptive functioning ( $p<.05$ ). When mothers' sense of competence was added, mothers' psychological symptoms became non-significant ( $p<.96$ ), and only mothers' sense of competence predicted significantly young children's adaptive functioning ( $p<.005$ ). These findings confirmed mothers' sense of competence as a mediator. Analyses also suggested that mothers' positive parenting behaviors (via the Alabama Parenting Questionnaire-Preschool Revision) and mothers' sense of competence predicted significantly young children's adaptive functioning,  $F(2,120)=19.17$ ,  $p<.001$ ,  $R^2=.24$ . Mediation analyses suggested that mothers' sense of competence predicted significantly young children's adaptive functioning ( $p<.001$ ). With the addition of positive parenting behaviors, mothers' sense of competence was reduced to non-significance ( $p<.14$ ), and only positive parenting behaviors remained significant ( $p<.001$ ). Overall, results supported the notion that parents' characteristics interconnect through interesting pathways to predict young children's adaptive functioning. In particular, mothers' psychological symptoms may predict mothers' sense of competence, which in turn may predict the positive parenting behaviors that mothers use to foster young children's adaptive functioning.

P01.66

**HUG YOUR BABY: INNOVATIVE INTERVENTION PROMOTES PARENT-CHILD RELATIONSHIP, BOOSTS PARENT CONFIDENCE, AND ENHANCES NEWBORN CARE**

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Research indicates that misunderstanding newborn behavior undermines a new parent's confidence, decreases breastfeeding success, and adversely impacts parent-child attachment. Today's families want to work with professionals who understand their challenges and speak their language. Growing out of the work of Dr. T. Berry Brazelton and other researchers, HUG Your Baby presents key child development concepts in an effective, innovative, family-friendly manner. First, this presentation describes three newborn "Zones": The "Resting Zone" (sleeping states), the "Ready Zone" (ready to eat or play), and the "Rebooting Zone" (fussing/crying). Understanding "Zones" helps parents and baby get a better night's sleep, focuses parents' attention on their baby's social abilities, and offers families skills to calm a fussy baby. Second, the presentation describes how a baby sends out an "SOS" (Sign of Over-Stimulation). "SOSs" include body changes in color, movement or breathing, and three behavioral "SOSs": "Spacing Out," "Switching Off," and "Shutting Down." Avoiding over-stimulation increases a newborn's ability to eat and play and decreases the "Shutting Down" response. HUG Your Baby, translated into five languages, has been well received in twenty countries and is used around the world. Research confirms that HUG Your Baby facilitates breastfeeding, engages fathers, enhances parent-child interaction, and boosts the knowledge and confidence of birth and parenting professionals. This inclusive, multicultural presentation offers engaging case studies, award-winning instructive video and effective educational activities to enhance the care professionals provide young families.

P01.67

#### **THE TRAUMAS OF PARENTS AND INFANTS: LESSONS FROM THOSE IMPACTED BY THE GREAT EAST JAPAN EARTHQUAKE**

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This is a record of 21 cases of young children and their families who were impacted by the Great East Japan Earthquake of March 11, 2011. This earthquake and the resulting tsunami caused significant damage to coastal areas. Of the 21 cases considered, the first need for help has been classified into three categories: PTSD symptoms in the child (9 cases), developmental problems in the child (5 cases), and poor health in the mother (7 cases). With respect to PTSD symptoms in the child, 5 cases involved children experiencing hyperarousal symptoms immediately following the earthquake, and 4 cases involved children experiencing dissociative symptoms and not crying. In 6 of the 7 cases involving a mother's poor health, children of the mother also had developmental problems. In 6 of the 11 cases where young children experienced developmental problems, their mothers had conceived them following the Great East Japan Earthquake. In all 21 recorded cases, children recovered from all PTSD symptoms or developmental problems as a result of psychological treatment by the second author. These case studies showed that young children were traumatized by the auditory impact of the earthquake and tsunami. The cases also showed that any delay in the parents' mourning work with respect to their losses affected their children's developmental problems and delayed their children's recovery from PTSD. This delay in parents' mourning work also affected children conceived following the Great East Japan Earthquake.

P01.68

#### **PSYCHOLOGICAL PROFILES OF ADULTS WITH HISTORY OF CHILD ABUSE AND NEGLECT DURING PREGNANCY**

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Child abuse and neglect (CAN) is known to have long-term consequences and its effects may be particularly salient during challenging periods such as pregnancy. Little is known about the antenatal experience of adults exposed to CAN. The present study aims to evaluate whether adults awaiting a child exposed to CAN differ from adults without such traumas in terms of parental experience and mental health symptoms. Future parents (n= 137), the majority being primiparous mothers (76%), were recruited during prenatal meetings or in perinatal services for high-risk parents. Of these, 41 (30%) experienced CAN (assessed with the Childhood Trauma Questionnaire). During the third trimester of pregnancy, participants responded to self-report measures about their perception of parenthood (Maternal Confidence Questionnaire; Maternal and Paternal Antenatal Attachment Scales) and about their current clinical symptoms (Edinburgh Postnatal Depression Scale; Personality Diagnostic Questionnaire; PTSD Checklist for DSM-5). ANCOVAs controlling for education showed a marginally significant difference between parents with history of CAN and parents without trauma regarding parental confidence [ $F(1,134)=2.96, p=.09$ ] and no significant difference regarding attachment to the future child [mothers:  $F(1,88)=1.47, p=.23$ ]. On the other hand, soon-to-be parents who experienced CAN reported significantly more symptoms of psychological distress in the four dimensions assessed: prenatal depression [ $F(1,133)=3.84, p=.05$ ], personality disorders [ $F(1, 114)=9.90, p<.01$ ] and symptoms of post-traumatic stress [ $F(1,129)=9.26, p<.01$ ]. Results suggest that adults exposed to CAN present significant psychological vulnerabilities during pregnancy. However, they report being similarly confident in their parental abilities and similarly attached to their child than parents without CAN. Future research is needed to clarify whether the parents exposed to CAN, who present an apparent vulnerability in terms of mental health, have limited awareness of the impact of their past and current difficulties on their parenting role or are resilient and will adapt well to parenthood.

P01.69

#### **ANALYSIS OF MOTHER'S MENTAL HEALTH UNDER CHILD-REARING IN ADAPTION TO SOCIAL CHANGE**

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Globally, the importance of mental health is recognized in the time with unstable politics and economics. To maintain mental health among the child-rearing mothers in Japan, it is clear to be emphasized in the workplace and the school. There is no specific system for the mother who does not belong anywhere and concentrating on child-rearing. Therefore, mother's irritation develops that may easily become angry at her child and ultimate may abuse. The purpose of this study is to clarify the causes and ease of getting angry at child-rearing evolved from service and to examine the supportive method which can be adapted for changing of social practices. The contents regarding which the mothers consulted and the survey of the mothers' anger who had been rearing child aged over one year and less than three years were used. Investigation consisted of anger, tendency, recognition, and fatigue about a child-rearing practice. Multiple linear regression analysis was conducted by considering anger as the purpose variable. A disposition, fatigue, and time urgency were used for the explaining variable. The mothers' consultation about a nursery school became 25.9% from 8.53%. The consultation number to a child-rearing method (45.1%) was decreased to 37.9%. In the items, work-life balance increased from 9.7% to 19.7%. In investigation of anger, 105 mothers cooperated. The mother who did not work was 77.7%. Mothers' anger was related to time urgency ( $\beta= 0.212, p=0.044$ ) and to the unpleasant eyesight ( $\beta= 0.280, p=0.047$ ),  $R^2=0.157$ . The problem of nursery school, workplace and home is increasing from mothers' contents of consultation. It has suggested that the mother of child-rearing should engage in the suitable job. If

a mother works, in order to feel a child calmly, the support to reduce the mother's time urgency is required.

P01.70

#### **THE NECESSITY IN MANAGING ANGER OF THE MOTHER FOR CHILD REARING IN JAPAN**

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Globally, society is being unstable and the consequences are the persons with anger continue to increase in number. Japan is not an exception, either. It is not desirable that a mother gets angry during child's development period. In order to aim at a mother's stability, it is necessary to examine mental health. The purpose is to clarify the situation relevant to a mother getting angry, and to consider the support method of strong mental health. The objects of a questionnaire survey were the mothers having children more than 1-year-old, using service for child-rearing. The investigation consisted of anger, tendency, recognition, and fatigue related to the child rearing practice. Fatigue was categorized by the discomfort of head and eyes, sleepiness, irritation, and feeling languid. Correlation analysis was carried out for relevance and judged by the correlation coefficient of Pearson. There were 105 mothers who cooperated in this investigation. When "a child eats a meal for a long time", there were many mothers who answered "got angry and might get angry" (64.7%), and 49.0% replied when "leaving a disagreeable thing". The situations related to anger were irritation ( $r= 0.275$ ,  $p= 0.004$ ), discomfort of head ( $r= 0.209$ ,  $p= 0.032$ ), discomfort of eyes ( $r= 0.249$ ,  $p= 0.010$ ), and a time sense of urgency ( $r= 0.292$ ,  $p= 0.002$ ). Anger of the mother who rearing children was related to fatigue and a time sense of urgency. Also in fatigue, mental tiredness was related. A time sense of urgency produces irritation. It shows that the function to suppress anger is falling by mental fatigue. Therefore, mothers need to be aware of the relation of getting angry with these factors, and control stresses in respect to child's situation. The aid-for-childcare staff has to have the technology for suggesting the method of controlling stress.

P01.71

#### **EVALUATION OF SERVICE FOR MAINTENANCE OF CHILD-REARING MOTHERS' MENTAL HEALTH**

**Kawasaki M.\*, Kawasaki H., Yamasaki S.**

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Child-rearing mothers received services in the interchange places of gathering center for mothers and kids. The staff provides consultation and support of playing for both mother and child together. Although mother does not necessarily have shown a model for playing with child, the services are expected to prevent her depression and isolation. The effect of this service is not exactly clear. The purpose is to evaluate the effect of a mother's mental health using the services of gathering center and to examine and evaluation of services. Evaluation consisted of anger, tendency, recognition, and fatigue about a child-rearing practice. Fatigue was subcategorized into sleepiness, irritation, feeling languid, and, discomfort of head and eyes. These items were compared in two groups of mothers about the frequency where they use the service. Mann Whitney-U test was used for comparison. There were 105 mothers who cooperated in this investigation. The mother who did not work was 77.7%. There were 50 mothers who attended once or more in one week. Compared with the two groups of mothers who received the services frequently, an irritation score found significantly low ( $p= 0.031$ ). A sense of urgency was also significantly low ( $p= 0.037$ ). It is considered that irritation reduces when the mother concentrates on child-rearing interchanges with persons other than a family frequently. For visiting the place of exchange often, it is important that a time sense of urgency is low. It is found that a mother does not think about following the time. Therefore,

it is necessary to share the feeling, which is not followed in time with mother. In order to use services by child-rearing mothers for once a week or more, the number of reservation and staff according to the number of childbirths of the area are required.

P01.72

### **IMPROVING INFANT MENTAL HEALTH: WHY FATHERS SHOULD BE INVOLVED FROM THE START**

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Increasingly the importance of a father's involvement in his child's life is receiving recognition. The positive involvement of fathers is linked to subsequent development of fewer behaviour problems and improved cognitive outcomes for children. A lack of paternal responsiveness is also associated with indicators of poor child outcomes, including social and academic impairments. Fathers having trouble in their relationship with their infants are the target group for the Mellow Dads programme, it supports families with additional health and social care needs. Both the father and their infant attend the group, with separate activities for the infant. A variety of techniques are used, including strength-based video feedback, at the core of the programmes are the psychological theories of attachment, social learning and CBT.

P01.73

### **ADULT OUTCOME OF CHILDREN AFTER LONG-TERM TREATMENT IN 4 THERAPEUTIC FOSTER CARE UNITS: QUANTITATIVE & QUALITATIVE ANALYSIS OF SUBJECTS' DISCOURSE AND SOCIAL FUNCTIONING**

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This research estimates the outcome of grown-up patients who had been admitted between 1971 and 1996 in 4 French Therapeutic Foster Care Units. These child-psychiatric units are hospital run facilities for infants presenting -or at very high risk of- mental disorders coupled with a severe impairment of infant/parent interaction due to parenting disorder; they admit fewer children (5 to 20) and for a longer stay than traditional foster care facilities run by child protection agencies. During our research, the 33 former foster children we interviewed were 29 (3,25SD) years old, they were separate at 22 (13.25SD) months, admitted in units at 30 (17.25SD) months and stayed in units during 13 (2.10SD) years of continuous care, including treatment of infant/parent bonds. The quantitative part uses questionnaires: Mini International Neuropsychiatric Interview, Functional Status Questionnaire and CaMir (which estimates representations of attachment). The qualitative part uses the Grounded Theory (GT) and the Edicode (which assesses narrativity). Results: In our sample, narrativity (coherence, fluidity, appropriateness, reflexivity, authenticity), representations of attachment (58% with a Secure attachment), and social functioning (except for sexual functioning) are comparable to those of the general population, unlike what is found in researches on the outcome of children placed in traditional, social foster care. The GT analysis revealed the importance for these young adults to be given the opportunity of a planned interview, after care has been ended. Such a planned interview, a few years after the care, could provide young adults, who have been cared for, with a means of taking stock of their life story, of how they may see themselves and are able to express their past or present difficulties.

P01.74

**MOTHER INSIGHTFULNESS TO HER CHILD WITH A SEVERE MOTOR IMPAIRMENT AND THE ROLE OF AUGMENTATIVE AND ALTERNATIVE COMMUNICATION**

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Maternal insightfulness, namely mothers' capacity to consider the motives underlying their child's behavior and taking into consideration her/his perspectives, plays a central role in maternal sensitivity and children's secure attachment. Yet, little is known regarding maternal insightfulness in the context of children with special needs, and there is no known research regarding children with severe motor impairment (SMI). Functional impairments limit the clarity with which children with SMI can communicate mental states and may hinder maternal insightfulness. Augmentative and Alternative Communication (AAC), i.e., forms of communication other than oral speech, may help these children express internal experiences and facilitate maternal insightfulness. Yet, no research examined this issue. The study goals were to learn about the daily experiences of mother-child with SMI dyads, and examine maternal insightfulness and the contribution of AAC. A mixed-method design was used to collect data on three mother-child with SMI dyads (2 girls; aged 4-8 years; normal IQ; cannot speak orally; use AAC). Maternal Insightfulness was assessed using the Insightful Assessment (Koren-Karie & Oppenheim, 2004) followed by a semi-structured interview addressing daily experiences with the child, the use of AAC and its effects on the child and the family. Variability in maternal insightfulness was similar to the one found in community samples. Mothers described themselves as "normal" mothers to children with needs that are similar to those of typically developing children, and dealing with normative parenting issues (e.g., siblings rivalry; discipline). Mothers described AAC as the bridge to their child internal world but also discussed drawbacks of using AAC and concerns regarding growing challenges in their child social interactions as the child develops. Mothers of children with SMI demonstrated insightfulness to their children. AAC facilitated children's emotional communication and mothers' insightfulness. Thus, guiding parents to use AAC for emotional communication with their child is important.

P01.75

**'FOR ONCE WE ARE THE MAJORITY': MOTHERS' EXPERIENCES OF A BREASTFEEDING SUPPORT GROUP BASED ON THE SOLIHULL APPROACH**

**Rheeston M., Tan M., Douglas H., Thelwell E.\***

*Solihull Approach ~ Birmingham ~ United Kingdom*

Breastfeeding rates in the UK are among the lowest in the world, making it important to better understand what can make breastfeeding support helpful. Anecdotal reports of a West Midlands breastfeeding support group noted the benefits of using a psychosocial model called 'Solihull Approach' in their staff training. Generally, the training of breastfeeding supporters does not incorporate a theoretical model. The study aim was to formally explore the mothers' perceptions of a breastfeeding support service where all the peer breastfeeding supporters had been trained using the Solihull Approach as the foundation model. Subgroup sampling resulted in the selection of nine mothers (four from an economically-deprived area, five from an affluent area) attending a breastfeeding support group in Solihull. Semi-structured interviews were conducted and inductively analysed with Thematic Analysis. Three prominent themes were found and arranged in a conceptual model: 'Isolation of the breastfeeding mother amidst a bottle-feeding culture', 'Coming for the informational support, staying for the emotional one', and 'Reconciled with breastfeeding and

empowered to help others'. Although mothers from the affluent area were generally more familiar with breastfeeding, all participants felt isolated due to their feeding practices. The Solihull Approach helped create safe spaces, figuratively (between supporters and mothers) and literally (atmosphere of trust and acceptance in the venues). It also ensured tailored informational support and attuned emotional support, which sustained the mothers' attendance to the support group. Breastfeeding support groups can gain in consistency from being underpinned by a model, and the Solihull Approach could contribute to this, as its influence can be helpful to the emotional wellbeing and breastfeeding outcomes of all mothers regardless of their socioeconomic background.

P01.76

### **PEER BREASTFEEDING SUPPORTERS' EXPERIENCES OF USING THE SOLIHULL APPROACH MODEL AS THE FOUNDATION FOR THEIR TRAINING: A QUALITATIVE STUDY**

**Rheeston M., Thelwell E.\*, Douglas H.**

*Solihull Approach ~ Birmingham ~ United Kingdom*

Increasing the rates of breastfeeding is high on the UK Government's agenda. Training peer breastfeeding supporters is one way to support women to breastfeed. However, peer breastfeeding supporter training is rarely underpinned by a strong theoretical model. This study aimed to gain insight into breastfeeding peer supporter's experiences of using the Solihull Approach. The main objectives of this study were to explore breastfeeding peer supporters' motivation to volunteer, their experiences of the Solihull Approach peer supporter breastfeeding training, their experiences of putting the Solihull Approach training into practice, and to identify factors which could contribute to improving the service. This was a qualitative study. Three voluntary and four paid peer supporters were interviewed using a semi structured schedule and data were analysed using Thematic Analysis with an inductive approach. Three key themes and their sub-themes emerged:

Motivation to volunteer: I realised what a journey breast feeding was, I didn't breast feed at first, and that was literally down to the support that I didn't get the last time, but did get this time, and I thought how I need to pay that back.

Peer experience of being a peer supporter: So they feel like actually that we really do care, that's the thing.

Practical and personal applications of the Solihull Approach: I think it's made me very aware of when I need containment.

Several benefits have been highlighted when incorporating the Solihull Approach into peer professionals' practices including increased confidence levels and improved team communication, as well as positive outcomes in their personal lives.

P01.77

### **MOTHERS' ENCOURAGEMENT OF FATHERS' INVOLVEMENT IN FAMILIES WITH INFANTS**

**Kato M.\*, Kamiya T.**

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Mothers' encouragement of fathers' involvement may stimulate harmonious co-parenting. The purpose of this study was to depict using qualitative data how mothers with infants encourage fathers' involvement in child-rearing. Interview participants were 6 Japanese mothers whose eldest children were 2 or 3 years old. Results indicated that mothers encouraged fathers' involvement directly and indirectly. When fathers took care of children to allow mothers to enjoy free time, mothers directly complimented the fathers. Likewise, mothers were grateful to fathers when fathers participated in the discussion regarding their child's education. (e.g., which nursery school to choose). On the other hand, mothers' indirect encouragement of fathers was addressed as follows:

(1) if fathers made effort to care for children, mothers expressed their pleasure toward the fathers indirectly by talking to the child (e.g., "It was father to have done it for you, and you are so happy, aren't you? "), (2) if fathers played with children, mothers spoke to the fathers about the children's positive reactions, (3) mothers told the children about their requests or thanks to fathers where the fathers could hear, and (4) mothers encouraged the children to want to play with the fathers (not with the mothers). Researchers have suggested that triangulation in family systems may reflect child involvement in parents' conflict. Thus, these findings suggest that mothers act as mediators between fathers and children to regulate supportive co-parenting and the triadic family relationship. Cultural context needs to be discussed.

P01.78

### **CAREGIVER EDUCATION AND EMPOWERMENT IN A DEVELOPING CARIBBEAN NATION**

**Honigman R.\***

*reachwithin ~ New York City ~ United States of America*

Aim of presentation is to demonstrate how an international NGO can effectively assist local child caregivers in their efforts to improve early childhood development and outcomes. Child caregivers in Grenada, a developing low-middle income nation in the Caribbean have many obstacles to providing a positive development environment for their young children. Poverty, overcrowded housing, emotional neglect, physical and/or sexual abuse are not uncommon and there are very few community mental health or positive parenting resources available to the general population. Additionally, many children are removed from their biologic families and placed in long term residential care homes where they encounter many different caregivers with varying degrees of knowledge regarding the needs of child exposed to trauma. Reach Within, a New York City based NGO, has worked with various official and private stakeholders in Grenada for over a decade to improve childhood outcomes through a combined approach of caregiver education/empowerment and childhood psychosocial interventions. This poster presentation documents reachwithin's work in providing child caregivers (biologic, residential home, preschool teachers, and/or early intervention workers) with background knowledge and practical skills to enhance their caregiving capacities and capabilities and so help to further improved childhood outcomes.

P01.79

### **THE EFFECTIVENESS OF INFANT MENTAL HEALTH TRAINING ON HEALTH WORKERS IN DEVELOPING COUNTRIES**

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The "Protect, Nurture, and Enjoy" or PNE is a four-day course, consisting of in-class lectures, videotape examples and study guides for health care workers, which seeks to mitigate the impact of early childhood adversities in developing countries by promoting positive caregiver-child interactions.

- 1.To compare the clinical interaction style of nursing students who received PNE training to a control group of nurses.
- 2.To determine the effectiveness of the PNE training through a) questionnaires for mothers that evaluate supportive behaviors and emotional tone of nurses; b) an assessment comparing the nurses' knowledge of the maternal role in early child development; and c) a questionnaire that

evaluates the nurses' attitude towards caring for newborns and their parents.

3.To demonstrate the need for community-based awareness programs and interventions that promote infant mental health.

The study will take place at Christian Hospital Kasganj in Uttar Pradesh, India where clinical interactions of 45 PNE trained nursing students will be compared to 45 of their untrained peers through questionnaires administered to the mothers in the maternity ward. We hypothesize that the nursing students who completed the PNE will exhibit more behaviors that support the infant-parent relationship. The control group will be evaluated from Dec 2017 to Jan 2018. The PNE course will be administered in the first week of February 2018 and data collection of the PNE group will occur from mid-February 2018 to April 2018. Data analysis will continue in April 2018. The project is estimated to be ready for presentation by May 2018. The effectiveness of PNE, a course designed to equip healthcare workers with the knowledge and motivation needed to facilitate positive caregiver-infant interactions in developing countries, will be studied and presented.

P01.80

### **POSTPARTUM DEPRESSED MOTHERS' SENSITIVITY CHANGE AFTER STILL-FACE: EFFECTS OF PARENTAL REFLECTIVE FUNCTIONING, AND COMORBID PERSONALITY DISORDERS**

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Parental reflective functioning (PRF), defined as the capacity of caregivers to reflect upon their children's internal mental states and intentions, is seen as crucial for maternal sensitivity, especially in emotionally distressing mother-infant interactions. Maternal sensitivity as the adequate behavioral response on the infant's signals precedes infant's secure attachment, and might be impaired in mothers experiencing postpartum depression (PPD). In a clinical context, PPD is often associated with comorbid Personality Disorders (PD). The present study investigated the impact of PRF on maternal sensitivity change in a clinical sample of 50 mothers experiencing PPD with infants aged three to ten months in an emotionally distressing mother-infant interaction. PPD was assessed by means of the BDI, comorbid PD by means of the SCID-II. Maternal PRF was assessed using the Parental Reflective Functioning Questionnaire (PRFQ), scaling Interest and Curiosity in Mental States, Certainty about Mental States (i.e., the recognition of the opacity of mental states), and Pre-Mentalizing Modes (modes that antedate full mentalizing, i.e., attributing the infant's behavior as intentionally against her own person or interests). As distressing mother-infant interaction, the still-face procedure was used. Sensitivity was evaluated twice (pre and post still-face) by the Maternal Behavior Q-Sort (Mini-MBQS-V). Findings revealed increases and decreases in maternal sensitivity due to still-face, with a significant overall decrease. Pre-Mentalizing Modes predicted the overall decrease in sensitivity, whereas no effects of Interest and Curiosity in Mental States and Certainty about Mental States were found. Further analyses revealed decreases and increases depending on comorbid PD. The results identified Pre-Mentalizing Modes predicting sensitivity to distress in mothers with PPD. Implications for mother-infant treatment were discussed.

P01.81

### **DEFINING THE ROLES OF PARENTING AND CULTURE IN PROMOTING HEALTHY CHILD DEVELOPMENT IN IMMIGRANT FAMILIES IN TORONTO**

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While it has been established that parenting quality significantly affects child developmental outcomes, analyzing parenting in diverse groups is challenging since similar parenting behaviours may lead to differing child outcomes depending on cultural context (Mesman et al., 2012). The current research discusses implications for child development of parenting differences observed in three immigrant communities in Canada. Part one of this study used quantitative data to evaluate parenting style and its association with infant development in three groups: Latin American (n=34), Chinese Canadian (n=48), and European Canadian (n=47). This study's second objective was to contribute to a knowledge base about the influence of traditional cultural values on parenting in the Latin American immigrant community in Canada (n=30), an immigrant community which has been largely neglected by Canadian parenting researchers (Ginieniewicz et al., 2014). Authoritative parenting style was associated with higher scores of infant socio-emotional development, an effect which interacted with cultural group. Specifically, the strongest benefits of authoritative parenting were observed in Chinese Canadian mothers, and the weakest were seen in European Canadian mothers. In part two, quantitative data uncovered a relationship between the Latin American value of familism and authoritative parenting style, which was in turn associated with higher scores of child socio-emotional development, implicating this traditional cultural value in resilient parenting practices. Qualitative data provided insight into the importance of additional cultural values, including *confianza*, and *respeto*, and how the acculturation process shapes the expression of these values within the parenting context. Findings from this study corroborate the contention, in the field of cross-cultural parenting, that ideal parenting varies as a function of culture, and support a move away from a one-size-fits-all approach to parenting interventions. These results have noteworthy implications for the provision of culturally-sensitive services by highlighting the importance of incorporating traditional cultural values as "best practice".

P01.82

#### **FATHER AND MOTHER READING AND CHILD VOCABULARY IN LOW-INCOME MINORITY FAMILIES**

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The socioeconomic gap in language skills has been partly attributed to differences in parents' talk addressed toward their children (Hoff, 2006). Although most of this research is focused primarily on maternal reading and communicative input, a handful of studies suggest that father-child reading contributes to toddler's language skills, over and above the contribution of mothers (e.g., Malin et al. 2013; Panscofar & Vernon-Feagans, 2010; Rowe et al., 2004). Still relative to research with mothers, research with fathers is limited. Moreover, these studies mainly focus on toddlerhood and less so on infancy, a period where important practices such as reading and taking conversational turns are robustly related to children's language skills (see Zauche et al, 2016 for review). Guided by Vygotsky's (1978) interactional theory, we focus on low-income minority fathers' and mothers' reading with 9 months to understand: (1) its frequency and quality, 2) association with background factors, and 3) association children's vocabulary development. Fifty-two videotapes are being collected, as part of a NIH-funded intervention that includes an ethnically diverse sample of fathers and mothers interacting with their 9-month-old babies during shared reading. The videotapes are being transcribed and coded for quantity and quality of parent language (e.g., wh questions, conversational turns) during reading. All children completed the PLS-4 language assessment. Preliminary data with another sample suggest wide variation in the quantity and quality of paternal language, with fathers using higher quality language than mothers. Moreover, mothers report reading more than fathers (M=4.65, SD=1.19, M=3.73, SD= 1.46, respectively), but fathers use higher reading quality than mothers ( $t(63) = 8.48, p < .001$ ). These findings have the potential to yield

insights into when inequalities emerge, the quality of the linguistic paternal interactions of low-income infants, and how each parent contributes to infant language skills.

P01.83

**HOW DO WE BEST NURTURE YOUNG CHILDREN IN FOSTER CARE AFTER MALTREATMENT? VIEWS FROM FOSTER CARERS, TRAINERS, ASSESSORS AND THERAPISTS IN THE CHILD WELFARE SYSTEM**

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Amongst a multitude of different maltreatment experiences and care pathways, children who have suffered maltreatment in early life share the common thread of going into foster care whilst difficult decisions are made about their future. This leads us to ask how this pivotal care-giving experience is impacting on the mental health and development of maltreated young children and how the foster care system sits with the complex needs that are often displayed by this vulnerable group. During the course of BeST?, our qualitative process evaluation has discovered that the trial places a particular spotlight on foster care, evoking substantial discussion and debate amongst key stakeholders in the system about the match and discrepancies between 'what children receive and what children need.' This study aims to qualitatively extrapolate key themes from the data regarding the degree to which there is coherency in the system about what maltreated infants need from foster care and the best ways that the system can deliver this. The findings are based on interviews and focus groups with foster carers, foster carer trainers and those tasked with the responsibility of assessing and treating cases of maltreatment. Findings suggest that there are common perceptions in the child welfare system about what children need, e.g. a timely progress onto permanency where required and a healthy attachment with 'forever families,' yet there are barriers to meeting these needs in a system where delays are common and where foster care is structured in a way that promotes temporary relationships between children and carers. There are also discrepancies between stakeholders about the value of short-term placements with a debate between 'short-term care as essential therapy' and 'short-term care as always harmful.' These findings spark a dialogue about aspects of the foster care system that facilitate recovery and development against those that are seen to hinder (and potentially further traumatise) children who need stable nurturing care. Maintaining a focus on the needs of the child may be more adequately facilitated by achieving better coherency in foster care about how the needs of maltreated infants can best be met.

P01.84

**WE NEED TO TALK: HOW TODDLERS' COMMUNICATION CUES INFLUENCE PARENTS' MENTAL STATE TALK**

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Parents' mental state talk - language about perceptions, thoughts, feelings, desires, and other internal states - influences children's language, social, and cognitive development (Meins & Fernyhough, 1999). This study looks at how parents' mental state talk changes over time and how the toddlers' communication, including nonverbal cues, influences parents' mental state talk. Caregivers' interpretation of the intentions behind children's behaviors using mental state talk motivates the child to communicate further (Buckley, 2003). In early toddlerhood parents focus their comments on children's desires, then shift to talk more about emotion and cognition in later toddlerhood (Taumoepeau & Ruffman, 2006). Child nonverbal communication, particularly gestures, influences parent's language (Goldin-Meadow et al, 2007). However no study has looked at how children's nonverbal communication influences parents' mental state talk. A sample of 62

parent-child dyads was followed throughout toddlerhood. Transcripts of parent and child talk were created from videos of 5-minute free play interactions when children were 12, 18, 24, and 30 months. In addition to the frequency and variety of words used, parents' mentalizations and children's nonverbal cues were coded. Parent mentalizations were coded consistent with prior studies, with the addition of perceptions. Child nonverbal cues were coded including gestures (pointing, showing, etc), gaze, and actions. We found that parents' frequency of mental state talk increased over time, and corroborating with previous studies, results showed mentalizations shifts from more talk about perceptions and desires to more about emotions and cognitions. Preliminary analysis showed that in early toddlerhood (12, 18 months) children's more frequent vocalizations predicted less frequent parent mentalization at the next wave; this may be the result of the child having the ability to communicate their own internal states which would decrease the need for parent labeling of internal states. Further analyses will examine theories of children's nonverbal cues in eliciting parents' mentalization.

P01.85

### **INTERGENERATIONAL TRANSFER OF MOTHER ROLE AND ATTACHMENT**

**Bingöl F.\***

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Intergenerational transfer is important in the role of mother. The attitudes of previous generations are the determinants of the role of the mother in later generations. The aim of this study is evaluate transferred of mother role and treat the pathologies with the psychodrama method. An 8-session psychodrama group study was conducted on generational transfer of mother role. To evaluate the emotional closeness with their mothers members of the group "spectrogram" is made. In this report was presented Mrs. N, the protagonist in the second week of group work. Mrs. N. reported that she had felt emotionally distant from her mother despite close contacts. Mrs. N. reported to her 5-year-old that she could not immediately bonding her at birth. Therefore Mrs. N. stated that she felt himself inadequate and bad. In the study, it was determined that Mrs. N.'s grandmother had left her baby very young, so she experienced intense regret and pain and could not connect her emotionally with her daughter. It was determined that this was caused by the fact that Mrs. N.'s mother was unable to connect with Mrs. N. It was confirmed that her grandmother's emotional heritage of traumas passed on to her daughter and granddaughter. Mrs. N and her mother were found to have difficulty in attachment to infants when they were mothers. In the spectrogram she assessed her emotional closeness to Mrs. N., she gave 30 points at week 1 and 100 points at week 8. In the study, it was determined that Mrs. N.'s past emotional heritages and traumas affected the mother role. It was seen that this work contributed to the awareness of Mrs. N.'s emotional heritage. It is thought that this work has prepared the ground for the to increase the emotional closeness with the mother of Mrs. N, to have a healthy mother role and to establish healthy relationships with children.

P01.86

### **THE MEDIATING ROLE OF EMOTION DYSREGULATION IN THE RELATIONSHIP BETWEEN CHILDHOOD ADVERSITY AND CHILD MALTREATMENT POTENTIAL FOR MOTHERS WHO ARE SUBSTANCE-INVOLVED**

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Childhood adversity is considered an intergenerational dilemma (Berlin et al., 2011), particularly for mothers who are substance-involved. Compared to the general population, mothers who are

substance-involved present with higher levels of childhood adversity (Macleod et al., 2012; Mersky et al., 2013) and higher levels of involvement with child welfare systems as adults due to child maltreatment allegations (Kelley et al., 2015). At the intersection of the issues of childhood adversity, substance use, and child maltreatment potential lies emotion dysregulation. To better understand the intergenerational transmission of adversity within this population, this study examined emotion dysregulation as one mechanism of action linking childhood adversity to child maltreatment potential. This study also examined the predictive utility of two different measures of childhood adversity (i.e., childhood maltreatment and general adverse childhood experiences) in the prediction of child maltreatment potential for mothers who are substance-involved. Mothers (N=127; mean age=30.03-years) with at least one child between 0- and 5-years completed a packet of questionnaires at the substance use treatment facility where they were receiving services (61.4% outpatient; 38.6% residential). Mothers' emotion dysregulation mediated the relationship between their childhood maltreatment and child maltreatment potential. A significant Sobel Test confirmed this mediation ( $z = 2.49, p < .01$ ). In contrast, mothers' general adverse childhood experiences (i.e., ACEs) predicted their child maltreatment potential directly; emotion dysregulation did not mediate this relationship. Given that women in substance use treatment who report high levels of childhood maltreatment are likely to exhibit heightened child maltreatment potential due to elevated emotion dysregulation, professionals are encouraged to target emotion dysregulation as a key point of intervention with this population. However, given that ACEs predicted child maltreatment potential directly, a systems-level preventive stance aimed at reducing children's exposure to ACEs altogether is necessary to decrease rates of both substance use and child maltreatment.

P01.87

### **EMOTION REGULATION MEDIATES THE IMPACT OF INFANT CRIES ON PREDICTIONS OF PARENTAL STRESS**

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Cry interventions generally focus on calming an infant's cry to reduce parental stress. Others incorporate emotion regulation strategies when maternal psychopathology and trauma histories are present. Distress tolerance is not usually targeted specifically. This study examined the relation between a child's cry intensity and parents' emotional states. Participants (N=188) ranged in age from 18-54 years (53% male, Mage = 32.41 years), and were parents of children under two. Participants reported demographic information, their experience of their child's cry and were assessed on three measures of emotion regulation through an online survey. Serial multiple mediator models were used. Linear regression analysis tested the hypothesis that distress tolerance followed by difficulties in emotion regulation in series mediate the effect of the child's cry intensity on parent's stress. Results confirm the hypothesis as all indirect pathways were significant. The child's cry intensity was not a significant predictor of parent's perceived stress after controlling for the mediators, distress tolerance and emotion regulation in series ( $b=1.637, t(184)=4.258, ns$ ), consistent with full mediation. There was a significant indirect effect of the child's cry intensity on the parent's perceived stress through the parent's distress tolerance and difficulty in emotion regulation, serially ( $b=1.11, CI [0.54, 1.70]$ ). The mediators accounted for 68% of the total effect of the child's cry intensity on the parent's perceived stress. Results suggest that parents' outcomes are driven first by their ability to tolerate discomfort and second by their skill in modulating negative affect over and beyond the impact of the infant's cry characteristics. Infant mental health practitioners may increase the impact of their work to bolster wellbeing by supporting distress tolerance skills as the core focus of building a toolkit of parental responses to infant stress, rather than solely focusing strategies for soothing the infant.

P01.88

**PARENTAL COPING AS A POTENTIAL BUFFER OF STRESS ON CHILDREN'S INTERNALIZING BEHAVIORS FOR STUDENT PARENTS**

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There can be both biological and environmental contributors to young children's internalizing behaviors of anxiety and depression. There is substantial research concerning work-family spillover and parenting stress. High levels of stress, anxiety, and depression can interfere with positive parenting and subsequent child outcomes. Student parents experience stress from both the demands of continuing their education, as well as continuing to provide care and support for their young children. However, student parents' ability to cope with demands may play an important role in protecting children from negative outcomes. This study investigated the interaction between parental stress and coping to help identify potential buffers for young children's internalizing behaviors. Low income full-time college students with toddlers participated. Parenting stress was assessed with the Parenting Stress Index (PSI; Abidin, 1990). Parents' perceived demands and ability to cope with those demands, was assessed with the Stress Overload Scale: A Measure of Day-to-Day Feelings (S.O.S.; Amirkhan, 2012). Child internalizing behaviors were measured using parent's report on the Infant-Toddler Social and Emotional Assessment (ITSEA; Carter & Briggs-Gowan, 2000). Multiple regression analyses indicated that when parent's stress is higher, child internalizing behavior was higher after taking into account child gender. The interaction between parent stress and parent coping was found to be statically significant. Post hoc analyses indicated that students with the highest demands and lowest ability to cope with demands differed from other groups who had lower demands, higher ability to cope, or both. Student parents often encounter many demands on their time and other resources. Children of student parents who do not have coping skills to meet the demands may be especially vulnerable during this time of high stress. Implications and strategies will be discussed.

P01.89

**INTERVENING WITH CAREGIVERS: CAN WE IMPACT LANGUAGE AND SOCIAL OUTCOMES OF TODDLERS?**

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Caregiver-child interactions are an important factor to consider when evaluating the quality of toddler classrooms, as access to responsive, sensitive caregivers who expand children's language skills is critical, particularly for impoverished toddlers (Burchinal et al., 2008; Howes et al., 2008). Caregiver-child interactions are an important factor to consider when evaluating the quality of toddler classrooms, as access to responsive, sensitive caregivers who expand children's language and social skills is critical, particularly for impoverished toddlers (Burchinal et al., 2008; Howes et al., 2008). This pilot study hoped to investigate the impact of providing on-site training in responsive and scaffolding interactions to caregivers of toddlers on children's language and social outcomes in governmental child care centers in Ecuador. A mixed method design was implemented, using a quasi-experimental approach (two intervention centers; one control) in 3 similar governmental child care centers serving infants and young children in poverty from ages 3 months to 4 years of age. Before and after the intervention, we evaluated the level of child and child caregiver interactions using the PICCOLO, children's language level (using language IGDIs) and social development skills

(using the DECA toddler, completed by parents). Undergraduate students implemented a weekly intervention for 12 weeks focused on the importance of social and language interactions of caregivers with children for their optimal development. Results indicated that teachers increased their level of interactions with children over the course of the intervention, toddlers had low levels of language and social development at baseline, and that intervention toddlers, but not control toddlers, increased their language skills more than expected as a result of the intervention. Social skills did not predictably increase, although children at the lowest levels appeared to have the highest increases overall. These results will be discussed in the context of designing future intervention with caregivers. It appears that a short-term intervention implemented by bachelor level students can positively increase interactions between caregivers and children, and that impoverished children's language skills increase as a result.

P01.90

**MORE THAN JUST MILK: DOES MATERNAL SENSITIVITY MEDIATE THE EFFECTS OF BREASTFEEDING BEHAVIOR ON CHILD'S SOCIAL-EMOTIONAL AND LANGUAGE DEVELOPMENT?**

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Breastfeeding has significant effects on both the mother and the developing child (Drake, 2007). In prior studies, a positive association was found between the duration of breastfeeding and its sequelae (infant cognitive development, attachment, maternal sensitivity) (Tharner, 2012). Further, an Australian population-based study suggested maternal responsiveness predicts early child language outcomes (Hudson, 2015). In our study, we a) examined which aspect of maternal sensitivity is influenced by breastfeeding including warmth, responsiveness, and cognitive stimulation, and b) tested whether the association between breastfeeding behavior and a child's social-emotional and language development is mediated by these aspects of maternal sensitivity. We proposed that maternal sensitivity mediates this relationship due to its association with breastfeeding behavior and child language development. In our multi-country study, participants from U.S. and Chile were selected from childcare centers. Maternal sensitivity data was assessed via a 5-minute mother-infant free play at 12 months postpartum, which was recorded and later coded. The duration of breastfeeding was collected through a self-report questionnaire. Child's language skills were evaluated using the Bayley Language Scale (Bayley, 2006). Social-emotional skills were measured by parental report using the Bayley Scales of Infant Development. Linear multiple regression analyses were used to investigate the effects of maternal sensitivity between the duration of breastfeeding, and child's social-emotional and language development. The analyses were controlled for potential confounders (maternal education, socioeconomic status, gender, cultural differences between U.S. and Chile). We found breastfeeding duration predicts one aspect of the maternal sensitivity, responsiveness, but not warmth or stimulation. Further analyses will be conducted to examine the hypothesis that maternal responsiveness mediates the relationship between breastfeeding behavior and child outcome.

P01.91

**DOES TEACHER RESPONSIVENESS MEDIATE THE RELATIONSHIP BETWEEN TEACHER EDUCATION LEVEL AND TODDLERS' LANGUAGE DEVELOPMENT?**

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Children's first years are crucial to language and social-emotional development, yet parents often entrust their children to non-parental care environments with great variability in quality (Lamb, 1998). Past studies investigated associations between childcare structural features and process quality, generally finding that smaller class sizes and teachers' stronger educational backgrounds encourage more sensitive, nurturing, and intellectually stimulating interactions (Thomason & La Paro, 2009). However, most studies focus on school-age children, with little focus on infants and toddlers. Also, given variability in the time children spend in childcare, further study is needed on moderators of these relationships. This study examines the impacts of teachers' responsiveness and richness of their language during teacher-child interactions as mediators of the relationship between education level and child language development between 12 and 30 months. Seventy-two US infants, their parents, and teachers were observed when children were 12 and 30 months old. Language development was assessed twice with Bayley Language Scales, and five-minute free-play sessions between children and teachers were recorded. Play materials were provided and teachers were encouraged to play as they would if they had free time. Transcripts documenting the language used during these sessions by both teachers and children were analyzed for richness of language. In particular, teacher and child language-types (unique number of words), language-tokens (overall number of words), and the type-token ratio (a proxy for richness of language). Preliminary analyses show that teachers' education level is associated with greater warmth, responsiveness, and richness of their talk, whereas length of early-childhood professional experience predicts more talkativeness but lower richness and responsiveness. Regression models explaining language development between 12 and 30 months reveal that teachers' warmth is a stronger predictor than teachers' education, experience, or talk. Additional analyses will test whether these relationships are moderated by the amount of time children spend in childcare.

P01.92

### **MEDIATING ROLE OF THE QUALITY OF MOTHER-TODDLER INTERACTIVE BEHAVIOURS ON SOCIAL EMOTIONAL FUNCTIONING OF TODDLERS ON THE AUTISM SPECTRUM AMONG HONG KONG CHINESE**

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The quality of the caregiver-child reciprocal interaction is significant for a young child's healthy social-emotional and cognitive development. This study aimed to investigate the impact of maternal depressive symptoms and toddlers' developmental functioning on toddlers' social emotional competence and problems. Quality of mother-toddler interactive behaviour was considered as a mediator. A total of 104 toddlers aged from 24 to 35 months were recruited from a psychiatric clinic and from nurseries in the community. Mother-toddler free-play interactions were videotaped in a room at their respective places, and coded using the Coding Interactive Behavior system (Feldman, 1998). Toddlers' social and emotional competence and problems were measured by the Chinese version of Infant-Toddler Social Emotional Assessment. Results indicated that positive interactive behavior was significantly associated with toddlers' competence, but not with toddlers' problems. Partial mediation between toddlers' developmental functioning and their competence through interactive behavior was established. However, no such mediating relationship was found between maternal depressive symptoms and toddlers' competence. Further analysis was done to divide the full sample into two groups, i.e. the autism spectrum disorder (ASD) and the non-ASD groups, based on the results from Autism Diagnostic Observation Schedule and Checklist for Autism in Toddlers. When comparing the ASD group with the non-ASD one, mothers in the non-ASD group who had more depressive symptoms were more likely to have less positive interactive behaviors. In the ASD group, higher functioning toddlers appeared to engage in more positive mother-toddler interactive

behavior. The current study findings suggest that early interventions designed to supporting positive caregiver-toddler interactions are more likely to facilitate children's social-emotional competence. Caregivers are encouraged to fit in their interaction styles to follow their toddlers' lead. This is particularly significant for caregivers having young children at risk of ASD, who often find it very challenging to get in tune with them. A developmentally-based approach addressing each child's individual differences and the relationship between caregiver and child seems to be a promising direction of early intervention for young children at risk. The current research was the first of this kind of observational study of very young children with ASD in Hong Kong.

P01.93

**TODDLER'S DIURNAL CORTISOL PROFILES AT HOME AND IN CHILDCARE – ASSOCIATION WITH CHILD'S TEMPERAMENT AND CAREGIVING CONTEXTS - THE FINNBRAIN BIRTH COHORT STUDY**  
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Children vary in their stress reactivity and vulnerability to the consequences of stress due to genetic, temperamental and family environmental issues. Entering childcare may enhance child's stress reactions due to changing caregiving environment and the characteristics of the childcare itself such as being without parents, complex relationships with peers and novel daily routines. Furthermore, child's temperament has been observed to be one of the predictors of stress reaction profiles in the context of childcare settings. This study compares saliva cortisol profiles between children in out-of-home childcare and children at home-care. We are interested in individual variability and temperament characteristics which associate with diurnal cortisol profiles at home and in the childcare. We hypothesize that the diurnal cortisol secretion profiles differ between the childcare and the home-care groups of children and that child's temperament modifies these associations. The background population comprises all the families (N=3808) attending the FinnBrain Birth Cohort Study. For this study, we recruited a total of (N=217) children. The mean age of the children was 26 months (SD=6.7). The children were divided into two different groups; those who were attending childcare and the comparison group of children who were at home-care. Saliva cortisol was used to measure diurnal secretion profiles. Saliva samples were collected over two days per child, four samples during each day. The follow-up samples will be collected at the age of 42 and 60 months. Child's temperament was assessed at 12 and at 24 months by Rothbart's temperament questionnaires (IBQ-R, ECBQ). All baseline data has been collected and the results are currently being analyzed. Detailed results will be presented in the conference. Longitudinal research will reveal the significance of various cortisol diurnal secretion profiles for child's later socioemotional development. It is very important to identify how growth environment and individual characteristics together affect child's wellbeing.

P01.94

### **DRAWINGS-BASED ASSESSMENT OF AN ANXIOUS CHILD CLIENT WITH INFANTILE TRAUMA**

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A child, fearful of her own feelings due to her infantile trauma, sometimes communicates her state of mind more eloquently by drawings than words. Winnicott(1968) wrote "psychotherapy has to do with two people playing together," and that " the work done by the therapist is directed towards bringing the patient from a state of not being able to play into a state of being able to play." This presentation demonstrates how drawings helps a therapist to better accomplish this task. A client named Mai, born by far the youngest of her siblings, had to grow faster than her own terms. Fear of rejection had discouraged her from expressing herself and disabled her from managing her own emotional surges. Mai started her play therapy at seven. She was so stringent that she even proposed to grade her drawings. As the therapist (henceforth TH) proposed a more lenient alternative, Mai relaxed and digressed into producing stories featuring characters from her drawings. But her subsequent drawings of mass game with esoteric rules made little sense, indicating that Mai still kept to herself, desparately struggling to cheer herself up within the confine of her self-imposed rules. TH intervened by sympathetically describing her predicament. Mai responded by producing a drawing-story featuring a dog capable of showing her weakness in a safe environment. Mai started sharing journal and secrets with TH, presumably a token of her wish to play with TH. Her previously commanding mannerism also changed. She gradually grew able to complain without supressing herself.

P01.95

### **USING LANGUAGE ACQUISITION DEVICES TO INFORM PARENTS ABOUT THE IMPORTANCE OF TALKING TO BABIES**

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A child's early language environment not only predicts linguistic abilities but also sets the foundation for social, emotional, and cognitive development. Language abilities at age three are correlated with working memory, cognitive development, and later academic and economic success. Therefore understanding and increasing the quantity and quality of parent-child communication is critical. The current study seeks to delineate differences in the home language environment among a sample of low-income mothers and their young children living in an urban Midwest City in the United States. In addition we will report associations between LENA data, parenting maternal mental health, and children's social-emotional development. Data collection and analysis is ongoing with a goal of 50 participants, and a current sample of 19 children (18 to 25 months of age) and their mothers. English and Spanish speaking mothers are both included in this sample. Mothers are asked to use language environment analysis devices (LENA) to record words spoken in the home for 2 full days. Recorded data is analyzed by LENA software, and provides counts of adult words spoken, conversational turns, and child vocalizations. The LENA report also details the amount of television/electronics the child is exposed to as well as the amount of background noise and overlapping speech in the home. Initial data analysis indicates that this sample is below average compared to normative rates in previous studies. The average adult word count over the two-day recording period was in the 32nd percentile with an average of 9,899 words spoken. The average child vocalizations were in the 27th percentile with 1,499 vocalizations. Conversational turns were in the 16th percentile and averaged 244 turns. LENA technology provides a unique opportunity for

researchers to learn about the home language environment in an unobtrusive manner and may be an effective tool to improve early parent-child communication.

P01.96

**THE PSYCHOLOGICAL JOURNEY OF CAREGIVING AND PEDIATRIC TRAUMA IN THE GULF REGION**

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Complex trauma as a construct has been increasingly documented through clinical observations and recently through empirical findings, albeit it continues to be in its neonate stage of development. This presentation will briefly introduce and define complex trauma, with an emphasis on manifestations of intersecting traumas in medical settings. The primary objective will be to illuminate cross-cultural aspects of complex pediatric trauma in the Gulf region. The impact of intertwining diversity and clinical elements within the Gulf culture on attachment and caregiving will be overviewed. Within the Gulf community, it is imperative to integrate the nature of the family unit into treatment planning and management including gender roles and generational processes. Supporting preliminary empirical highlights from an ongoing current study on Emirati caregivers of children with chronic illness will be summarized. System of care strengths and challenges to mental health service provision, and implications for trauma-informed prevention and intervention approaches in the region will conclude the presentation.

P01.97

**QUALITY OF LIFE AMONG PARENTS OF CHILDREN WITH RARE DISEASES: A SYSTEMATIC REVIEW**

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Parenthood can be a challenge. In particular, parents of ill children are faced specific problems that may have an impact on the quality of life (QoL) of these parents. This study aims to review the existing literature about the QoL and related influencing factors of parents of children diagnosed with rare diseases. A literature search was conducted in PubMed, PsychINFO, Psycindex, Web of Science and Wiley online library, from inception to April 2017. 12 publications (published 2008 - 2016) met the inclusion criteria, of which most were of European in origin. The sample sizes of these studies varied between n=33 and n=753. Parents of children with different rare diseases reported similar levels of QoL in comparison to other chronic conditions. With the exception of one study, parental QoL was reported to be lower than that of parents of healthy children. Results of this study confirm the lack of knowledge about the quality of life of parents of children with rare diseases. Studies that did investigate this phenomenon only covered a small spectrum of rare diagnoses. Most studies also do not distinguish between diagnoses nor make comparisons of the QoL of fathers and mothers. Because of the reports of caretaker burden and low QoL, this study confirms the need for health providers to not only consider the health of the affected patient, but also the impact of the condition on the health and QoL of their parents.

P01.98

**QUALITY OF LIFE AMONG PARENTS OF CHILDREN WITH ESOPHAGEAL ATRESIA**

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The diagnosis of a rare disease of one's child means an enormous challenge for the parents. Esophageal Atresia (EA) as a rare malformation of the esophagus needs surgical treatment. Affected children may suffer from feeding difficulties, chronic cough, wheezing and recurrent airway infections. This cross-sectional study aims to evaluate the Quality of Life (QoL) of parents of children born with Esophageal Atresia, as well as explore the influencing factors that may impact the parental QoL. 70 parents of children (ages 2-18 years) diagnosed with EA were recruited to complete QoL assessments (SF-8 and PedsQL). The parental QoL scores were compared with reference values. QoL scores of mothers and fathers were also compared. Correlation analyses were conducted between parental QoL and sociodemographic and clinical data, as well as with the parent-reported and self-reported QoL of their children. Both mothers and fathers reported a significantly restricted mental QoL. An association between the ages of the affected child with parental mental QoL was found. The severity of EA was also found to be associated with both mental and physical QoL. Although no associations were found when comparing child-reported QoL with parental QoL, an association was found when comparing parent-reported QoL with parental QoL. This study confirms the disease burden of EA on the parents of affected children, which highlights the need for health services to provide appropriate support for this group. Although an association was found between parental QoL and parent-reported QoL of their children, none was found when comparing parental QoL with child-reported QoL. Because of this finding, future research should be done to determine factors that influence reliability of proxy sources for reporting their children's QoL.

P01.99

#### **QUALITY OF LIFE CHANGES IN FIRST TIME MOTHERS OF TODDLERS AFTER PARTICIPATION IN A LOW-THRESHOLD COUNSELLING SERVICE**

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Parenting poses a diversity of challenges and burden-especially for first time parents. This study investigates how the quality of life (QoL) of first time parents changes after participation in a low-threshold counselling service. This observational study collected data at three time points: before participation in the counselling (T1), during (T2), and three months after the end of the counselling. 150 first time mothers were recruited and asked to complete several assessments, including those that assess quality of life (SF-8) and parenting stress (PSI), at T1 and T3. At T1, first time mothers reported experiencing significant limitations in the Mental Component Score (MSC) in comparison to norm values, but not in the Physical Component Score (PCS). The MSC significantly increased from T1 and T3, while the PCS did not change during this time period. Despite these results, the QoL scores reported by the mothers were still significantly lower than norm values of the MCS. This may reflect a relationship between decreases in parental stress and increases in mental QoL. This study observed that participants still report impaired mental QoL even after participation in a counselling service. Limitations to this study include lack of a reference group that distinguishes between (first-time) mothers and women without children. Therefore, a reference group for mothers is necessary for future studies dealing with this population group. Although the duration of the counselling service was brief, a reduction in the PCS and increase in QoL was still observed in its participants.

P01.100

## **QUALITY OF LIFE OF MEN AND WOMEN IN A PARENTING PROGRAM AND THEIR TRANSITION INTO PARENTHOOD**

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The transition into parenthood can be rewarding and fulfilling, but draining and stressful too. A novel early intervention program is designed to assist parents in this phase up to the child is 18 month using both group and individual sessions. This study investigates how expecting parents experience the transition into parenthood during an 18-month parenting program. This observational study collects data from both parents (mothers and fathers) who have participated in a parenting program. This program began during the prenatal period, in which parents are lead in 4 group courses as well as 9 individual session over the course of 18 months. Each family were asked to complete several questionnaires at several time points. Among other outcome measures, the quality of life of the parents (SF-8) and their children (PedsQL Infant Scales), as well as the attachment of the parents (ASS-R) were assessed. Based on the first results, the parenting program was largely well received for its support at prenatal stages of pregnancy and well into post-partum. This program focused on preparing expecting parents for parenthood, and early results on its effect on enhancing sensitive and responsive parenting behavior appears promising. It was also reported that starting such a parenting intervention at an early stage is an optimal way to improve the parental quality of life and the mother/father-infant relationship. This ongoing study investigates the effects of an early and preventive attachment-based intervention and provides a scientific base for the justification of starting infant intervention programs during the prenatal period.

P01.101

## **IT'S NOT JUST CHILD'S PLAY: HOW PARENTAL DEPRESSION INFLUENCES PARENT-CHILD INTERACTIONS**

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Parental involvement in child's play impacts cognitive, social, and language development (Nokali, Bachman, & Votruba-Drzal, 2011). The quality of parental practices must be high to sustain healthy development (Goodman & Gotlieb, 1999); this is compromised when parents are depressed. Parents' roles in children's play (e.g. parent-centered, child-centered, or as a coplayer) influences future child behavior with peers (Russell & Saebel, 1997). Parental depression has been linked to more hostile interactions and lower levels of engagement, along with less warmth and responsiveness. These patterns are seen from infancy through adolescence. Most studies of the effects of depression on mother-child interaction focus on etic level micro-behavioral shifts (e.g., facial expressions, vocalizations), while in this study we are looking at effects of depression on emic level roles mothers take in infants' and toddlers' play related to their levels of engagement. Mother-infant dyads (n=29) were observed during a 5-minute free-play at two waves, and mothers reported on their mental health (multiple aspects of depression, stress) via the Parenting Stress Index. We coded the level of engagement and mothers' roles during play (director, facilitator, coplayer, disengaged; Russell & Saebel, 1997). Preliminary correlations reveal relationships between mothers' perceived competence and the amount of time spent in directing versus facilitating infants' play. Depression and life stress were associated with level of engagement, while mothers' stress related to their parenting competence and their health symptoms were related to roles mothers take in play. Further analyses using the micro-analytic coding, nested within dyads across the 5-minute

observation, will test whether depression and stress moderate the relationships between parents' level of engagement and roles taken during play at each moment. We expect that depression reduces engagement in infants' play and moderates the relationship between engagement and roles, such that for depressed mothers, when they are engaged they are directing infants' play.

P01.102

**“THE VALUE OF REFLECTION AND CONTAINMENT IN HOSPITAL PAEDIATRIC SETTINGS-THE DANGERS FOR THE INFANT IF LOST, THE WORK OF AN INFANT MENTAL HEALTH TEAM TO FIND WAYS TO RECOVER AND GET THROUGH”**

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This presentation aims to describe, through case examples, the ways in which unreflected and uncontained affects lead to “acting out”/reflex responses in staff and parents, who care for infants with ongoing, complex medical needs in the acute hospital setting. The authors will describe ways to navigate this territory and to place the infant back in a rightful position, within the centre of the minds of all. Parents in this setting experience very high and ongoing levels of stress. Staff too are pressured with demands, influenced not just by their own responses to witnessing the vulnerability of their young patients but by hospital culture and practices. In this pressured context the reactions in staff to their patients and parents frequently exist without reflection, otherwise known as being on “auto-pilot” This creates fertile ground for misunderstandings, and derailment of the collaborative partnership between parent and staff necessary for optimum care of the sick infant. This can result in differential treatment of the infant, sometimes over investigation, overtreatment even child protection concerns. The parent can commonly feel “dismissed, blamed, helpless or unheard by staff. Staff, at all levels of influence report feeling similar emotions and thwarted in their efforts to provide treatment for the infant and education and consultation with the parent. Amidst all of this, the infant can become lost, unseen, unheard and to some extent alone. It is at this point of impasse when a consultation is requested from the Infant Mental Health Specialist.

P01.103

**INFLUENCE OF THE PARENTAL SMARTPHONE USE ON PARENT-CHILD INTERACTION**

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Nowadays smartphones are an integral part of our daily life. Besides the many advantages of using smartphones, they can also be a risk for mental health (Montag et al., 2015). Smartphone use involves the danger to be a flow-killer, which means the focus on a situation is distracted by the smartphone (Montag, 2017). This matters in terms of parent-child interaction, as a sensitive and differentiated focus of attunement of the parent with the child is a highly important factor for the development of a secure attachment. Being aware of the child's feelings, reading the infant's needs and reacting to those in an immediate and appropriate way is crucial for a healthy mental and physiological child development (Meins, Fernyhough, Fradley, Tuckey, 2001). Parental use of digital media during childcare correlates with sleeping and feeding disorders (Riedel, Büsching, & Brand, 2017). This study aims to determine the impact of parental use of smartphones on the interaction with their baby, while proving an adjusted method of observation. The procedure to measure this impact is an adapted still-face paradigm invented by Tronick and colleagues (1978). A natural scene

of smartphone-use is added to the original procedure of the still-face paradigm, in which the parent is asked to solve a demanding task on the smartphone. Simultaneously, the parent's behavior on the phone and child's reaction is observed. In addition, the parent's average use of the smartphone (measured by an application installed on the smartphone) is quantified. Preliminary data of a pilot study will be presented. Our findings will have important implications for future digital education and healthy mental child development.

P01.104

### **EARLY MOTOR DEVELOPMENT: BIOLOGICAL AND ENVIRONMENTAL INFLUENCES ACROSS THE FIRST TWO YEARS OF LIFE**

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Great variability is described in the delay and achievement of motor growth's milestones, due to the influence of both genetic/inborn and contextual variables (e.g., socioeconomic status, parent-child interactions). According to the differential susceptibility model, specific temperamental traits, such as infant negative emotionality, define the perimeter of environmental effects on child development, limiting or extending parental effects. The principal aim of the present study is to investigate the interdependence of dispositional (child's negative emotionality) and environmental (maternal depression) factors in determining the motor development's quality across the first two years of children's life. Using a cross-sectional study, we assessed 299 infants, 0 to 24 months old, and their mothers. Infants' motor development was assessed with the Peabody Developmental Motor Scales, 3rd Edition; maternal depression was measured using the Center for Epidemiological Studies - Depression, and Negative Emotionality with the Italian Questionnaires for Temperament. Results highlighted that child's overall motor growth is differently shaped by the interaction of infants' negative emotionality and maternal depression across time. In particular, infants low in negative emotionality display no effect of depression on motor development. Conversely, infants with high negative emotionality are likely to be affected by maternal depression. Specifically, high maternal depression tends to foster the negative effect of infant's negativity on motor development across time, while the absence of maternal depression significantly buffers infant's negative temperament. Taken as a whole, our findings suggest a role of maternal depression and child's temperament (negative emotionality) in shaping motor development trajectories. It appears that the temperamental trait of negative emotionality constitutes an individual vulnerability for the motor growth only when a child's environment is unfavorable. Results are in line with the current neurobiological models of child development, where the infants' inborn disposition of negative emotionality makes them more susceptible to the effects of the relational context.

P01.105

### **THE INDIRECT PATHWAY FROM MATERNAL DEPRESSION TO CHILD INTERNALIZING PROBLEMS THROUGH PARENTING STRESS**

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Maternal depression and parenting stress have been linked to child behavioral problems. It remains unclear how maternal depressive symptoms and parenting stress associate with each other and jointly confer risks for child behavioral problems. The purpose of this study was to examine an understudied indirect pathway—from maternal depression to child behavioral outcomes through parenting stress. Participants included 58 mothers (mean age = 27.9, SD = 6.39) from poverty-level families in a southern US city whose children (mean age = 3.6, SD = 1.2) were assessed for behavioral

disturbances at a state mental health and support program for young children. Maternal depressive symptoms, parenting stress, and children's behavioral problems were assessed using the Beck Depression Inventory (BDI), the Parenting Stress Index-Short Form (PSI-SF), and the Child Behavior Checklist (CBCL), respectively. Both the BDI and PSI-SF scores were positively correlated with scores on the Internalizing Problems subscale of the CBCL,  $r = .29$ ,  $p = .03$ , and  $r = .68$ ,  $p = 0.0001$ , respectively. The two maternal measures, the BDI and PSI-SF, were correlated,  $r = .48$ ,  $p < .005$ . Regression analysis using the BDI and PSI-SF as predictors for CBCL internalizing problems indicated that when PSI-SF was held constant, the relation between BDI and CBCL internalizing problems became nonsignificant,  $t(55) = -0.42$ ,  $p = 0.67$ , suggesting a mediating role of parenting stress in the link between maternal depression and child internalizing problems, indirect effect = 0.34, CI [0.158, 0.554],  $p = .000$ . Maternal depression may lower the threshold of distress tolerance, leading to elevated levels of perceived parenting stress and subsequent undermining of parenting effectiveness, which result in child behavioral problems sharing the internalizing nature with maternal symptoms. Potentially fruitful approaches to helping children with internalizing disturbances with a focus on ameliorating maternal parenting stress will be discussed.

P01.106

### **INTRODUCING THE SOLIHULL APPROACH TO AUSTRALIA**

**Stevens H.\***

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This presentation highlights the adaptability of the Solihull Approach to different contexts and how Australian training is being well received to the extent of being considered as an approach that government funding bodies are advocating as an appropriate training for Australian maternal and child health nurses. The depth, breadth and popularity of the Solihull Approach since its 1991 inception, now sees government funded training across the United Kingdom. The popularity, longevity and research findings has captured interest world-wide. In 2014, a unique training opportunity for an Australian residential parent-infant unit saw a report in the fit of the approach with their philosophies including reflective practice and enhancing infant-parent relationships. In early 2017, a Solihull Approach UK trainer trained a group of maternal and child health nurses in Australia. This created interest in both this mostly unheard-of approach and subsequent trainings. Since then, trained Australian trainers have been training clinicians from social workers to psychologists in Australia. Attendees of the training report shifts in clinical practice and a sense of satisfaction with work when using the basic themes of the approach of containment and reciprocity when affecting behaviour management and change, within themselves and the families they work with. Feedback has been encouraging, to the extent of government policy makers recommending funding be made available to train maternal and child health nurses in the Solihull Approach.

P01.107

### **THE INFLUENCE OF POST-PARTUM DEPRESSION ON MOTHER AND CHILD RELATIONSHIP AND ON THE COUPLE ADAPTATION**

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Transition to parenthood is a particular process of the life cycle in which the quality of the couple relationship is one of the most implicated factors (Cowan & Cowan 1992; Delmore-Ko, Pancer, Hunsberg, & Pratt, 2000; Lis, Zennaro, Mazzeschi, 2000). During pregnancy, there may be risk factors that may foster the emergence of depressive and anxious symptoms in the post-natal period,

compromising the quality of the couple's relationship (Karney & Bradbury, 1995). The aim of this research is to evaluate the influence of post-partum depression on the adaptation of the couple (Benazon & Coyne, 2003) and on the mother-child relationship (Beebe et al., 2012; Field, 2010; Tronick et al., 2005). 84 mothers (mean age 33.25 years) were evaluated at 3 and 6 months after childbirth using a test battery to estimate the couple adaptation (with DAS scale, Spanier, 1976; Gentili et al., 2002), depression (with EPDS test, Cox et al., 1987; Benvenuti et al., 1999) and the relationship between mother and child (with CARE-INDEX, Crittenden 1994, 2000). The incidence of depressive risk in the sample is 20%, 9% high risk and 11% low risk. Through the analysis, we found a significant association between the perceived quality of the couple relationship and the depression: the increase in depression decreases the satisfaction and the couple adaptation (both at 3 and at 6 months of post-partum). The maternal depression influences the dyadic relationship at 3 months of child's life, but not at 6 months of postpartum. The study highlights how maternal depression in the first 6 months of child's life has influence on the perception of couple adaptation and on the mother and child relationship, but only in the first 3 months of the child's life.

P01.108

### **MANAGING SEPARATION IN NURSERY SCHOOLS: A PRELIMINARY STUDY ON THE ROLE OF MOTHER-CHILD INTERACTIONS**

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Nursery schools play a fundamental role in children's development. The settling-in phase constitute a particularly sensitive period for parent-child relationships: parents are required to delegate the role of auxiliary caregivers to professional educators, taking care of their children's physical and emotional needs, whereas children are exposed to potentially stressful factors (the presence of unfamiliar people and separation from their parents) likely to activate negative emotions. Considering the quality of p-c interactions and dyadic emotion regulation strategies built during non-stressful situations could be fundamental to understand how p-c dyads manage more challenging conditions (i.e. separation). The study aimed to investigate the impact of the settling-in phase on p-c relationship considering quality of p-c interactions both during free-play and during separation from the caregiver at arrival. The study involved 16 m-c dyads (7 boys and 9 girls) with children aged 11-32 months (M=20.13, SD=8.43), during admission to nursery school. The dyads were videotaped during 20-min free-play sessions (FP-condition) and during separation (SEP-condition) at arrival in daycare. Quality of m-c interactions was assessed through the Emotional Availability Scales (EAS – Biringen, 2008), six scales aimed at evaluating the global affective quality of adult-child emotional exchanges, considering both the adult and the child's contribution. The scores were then compared. No significant differences were found between the FP-condition and the SEP-condition with respect to the EAS scores ( $p > .05$ ) suggesting that although separation represents a more stressful situation the same strategies of dyadic emotion regulation are maintained in both conditions. The systematic observation of the period that covers the settling-in phase of children's admission to nursery schools is fundamental to understand the impact that this delicate process has on infants and on p-c relationships. Moreover, assuming a wider perspective and considering the quality of p-c interactions and dyadic emotion regulation strategies built during non-stressful contexts could be useful to understand how dyads manage more stressful situations.

P01.109

### **RELATIONAL EXPERIENCES IN NURSERY SCHOOLS: INFANT TEMPERAMENT, QUALITY OF ADULT-INFANT INTERACTIONS, AND BEHAVIORAL/EMOTIONAL PROBLEMS**

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Early experiences in nursery schools play a determinant role on infant development. These experiences rely both on quality of professional educators (PE)-child interactions (Elicker et al., 1999), and on children's constitutional characteristics, such as temperament, which have been shown to moderate the influence of child care on later development (Watamura et al., 2003). This study aimed to assess quality of PE-c interactions in nursery schools and its associations with infant temperament and the presence of behavioral/emotional problems in children. The study involved 45 children (20 boys and 15 girls) aged 14-36 months ( $M=25.31$ ,  $SD=6.62$ ), attending nursery school. Children were videotaped during 30-min interactions with their PE during everyday routines. Quality of PE-c interactions was assessed through the Emotional Availability Scales (EAS – Biringen, 2008), six scales (adult sensitivity, structuring, nonintrusiveness, nonhostility and child responsiveness, and involvement), aimed at capturing the global affective quality of adult-child emotional exchanges. PE were administered questionnaires to assess infant temperament (QUIT – Axia, 2002) and presence of behavioral/emotional problems in children (CBCL – Achenback, 2001). Correlations were found between quality of PE-c interactions, infant temperament and child behavioral/emotional problems. More specifically, significant associations were found between child motor activity and adult structuring ( $r=-.357$ ,  $p=.02$ ), and between child negative emotionality, adult structuring ( $r=-.340$ ,  $p=.02$ ), ch. Responsiveness ( $r=-.327$ ,  $p=.03$ ), and ch. Involvement ( $r=-.341$ ,  $p=.02$ ). Moreover, PE sensitivity and nonhostility respectively correlated with the CBCL emotionally reactive ( $r=-.32$ ,  $p=.03$ ) and somatic complaints ( $r=-.32$ ,  $p=.03$ ) scales. Admission to nursery schools constitute a delicate process which could play an important influence on later child development. The assumption of a global perspective that considers together the role played by child intrinsic characteristics, such as temperament, and quality of PE-c relational experiences could help to better understand this process and its impact on developmental trajectories both for research and prevention purposes.

P01.110

### **SLEEP PROBLEMS AND PARENTS' BEDTIME BEHAVIOUR IN INFANTS WITH DIFFICULT TEMPERAMENT**

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Sleep and settling problems are common among infants with difficult temperament, defined especially by high negative affectivity. Less is known of parents' bedtime behaviour related to better sleep quality of these infants. Usually minimal parental involvement during the bedtime has shown to support infants sleep consolidation. This study aimed to examine differences in parents' bedtime behaviour between infants with more versus less difficult temperaments. Particularly, the factors differentiating the infants with difficult temperament with and without sleep problems were of interest. The sample [ $n = 1060$  healthy children; 50,8 % boys; aged 7 – 9 months ( $M = 248$  days,  $SD = 9.58$ )] was a part of the population-based longitudinal Child Sleep birth cohort study. Sleep and

bedtime behaviour were measured with the Infant Sleep Questionnaire (Morrell, 1999), the Infant Sleep Questionnaire (Sadeh, 2004) and the Parental Interactive Bedtime Behaviour Scale (Morrell & Cortina-Borja, 2002), and infant temperament with the Infant Behavior Questionnaire-Revised-Short Form (Gartstein & Rothbart, 2003). Infants rated 1 SD or above the mean in negative affectivity were categorized as having a difficult temperament. Infants with difficult temperament had greater variation in sleeping arrangements and bedtime routines compared to infants with less difficult temperament, and their parents were more active in settling. Their sleep problems emerged as longer sleep onset latency, more awakenings, and shorter sleep duration. In contrast, better sleeping infants with difficult temperament had more regular bedtime routines and their parents were less active in settling. Infants' difficult temperament may lead to greater variation in bedtime routines and sleeping arrangements, and increased parental involvement. Thus, informing parents about effective settling strategies and supporting them to create consistent bedtime routines and strengthen infants own soothing skills are especially important for parents of infants with difficult temperament.

P01.111

### **CULTIVATING HEALTHY INTENTIONAL MINDFUL EDUCATORS: IMPLEMENTING A PILOT INTERVENTION IN EARLY CHILDHOOD CENTERS**

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While great efforts are made to improve children's social emotional well-being in child care environments, less attention has been given to early childhood educator's own well-being. Mindfulness-based interventions are promising and feasible ways to prevent and mitigate the stress of teachers and improve early childhood environments. This pilot project examined the acceptability, feasibility, and effectiveness of a 12-week mindfulness-based informed program, Cultivating Healthy Intentional Mindful Educators (CHIME), delivered to 43 early childhood educators working in 4 different centers serving children 0-5 years. Two programs served families where 82% of the families live below the poverty line. The CHIME program uses formal and informal mindfulness and reflection activities to equip educators with stress reducing skills and increase their ability to connect reflective practices to practical childcare applications. Early childhood educators (N=43) agreed to participate in a 2-hour overview of the CHIME program and meet in small groups for one hour every other week for 6 weeks. Self-report pre and post-surveys were collected along with bi-weekly journal reflections, as well as salivary cortisol and salivary amylase collected over a period of three days, morning and afternoon at both pre- and post-program participation. While we are finalizing data collection for this pilot project, at pre-test results reveal that higher teacher mindfulness was significantly and negatively associated with burnout ( $r=-.51, p=.00$ ). Seventy-seven percent (N=33) of the participants completed the program and all of the participants indicated the CHIME program was "very or somewhat helpful." One infant teacher wrote, "The CHIME program taught me to react better. I liked everything about the program. I am stepping back more and thinking before talking/reacting." The integration of reflective practice and mindfulness-based strategies is a promising approach to reduce stress and deepen skills of reflective practice among early childhood educators.

P01.112

### **SUPPORTING MOTHERS WITH INFANTS: DEVELOPMENTAL HOME VISITING QUALITY IN RELATION TO THE HOME ENVIRONMENT OF CHILDREN WITH MOTHERS AT HIGH AND LOW RISK FOR DEPRESSION AND PARENTING STRESS**

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Mothers' psychological health can strongly affect their children's development (Goodman et al., 2011). Even low-level depression interferes with mothers' supportiveness of their children's development (Conners-Burrow et al., 2014), thereby increasing children's risk of poor developmental outcomes later in life (Goodman et al., 2011). Developmental home visiting (DHV) programs could help mothers with psychological risk increase developmental support in children's home environment. We aim to examine DHV quality in relation to child development support in the home among mothers at high and low risk of depression and parenting stress. Data from 54 families in the US Early Head Start Research & Evaluation Project, includes maternal reports (infant age 14-months), of depression (Center for Epidemiologic Studies Depression Scale) and parenting stress (Parent Stress Index, Abidin, 1991), used to calculate a high/low psychological risk score. The home environment was observed at 36-months using the Home Observation for the Measurement of the Environment (HOME; Caldwell & Bradley, 1984). Trained observers rated DHV quality from 2 EHS programs using the Home Visiting Rating Scale (HOVRS A+ v2.0; Roggman, et al., 2014). Results show higher quality DHV associated with more supportive home environments at 36 months ( $r=.47^{***}$ ). This association is also significant for both mothers with low psychological risk ( $r=.54^{**}$ ) and high psychological risk ( $r=.47^*$ ), suggesting that for mothers with both high and low psychological risk, DHV quality is important for helping them provide support at home for their children's early development. Maternal psychological risk influences child development (Goodman et al., 2011). A more supportive home environment in early childhood is associated with more success later in life (Bradley, 1984). Results suggest that high quality DHV combined with other interventions could assist mothers with both high and low psychological risk in creating more supportive home environments for their children.

P01.113

#### **USEFULNESS OF DYNAMIC SYSTEMS IN THE ANALYSES OF CAREGIVER-INFANT INTERACTIONS IN THE CONTEXT OF CAREGIVER CELL PHONE DISTRACTION**

**Khourochvili M.\*, Bohr Y., Jang H.**

*York University ~ Toronto ~ Canada*

State Space Grid methodology can be used to evaluate a dyadic system's recovery from a perturbation, and how recovery relates to the dyad's typical dynamic characteristics (Srivish et al., 2013). The SSG method has enhanced the study of dyadic behaviour in diverse environments, including peer-peer interactions (Dishion et al., 2004). In this study, SSG proved useful in examining caregiver-infant interactions in the context of caregiver distraction by a mobile device (cell phone), based on an adapted Still-Face protocol (Tronick et al., 1978). Interactions of nineteen caregiver-infant dyads from Toronto, Canada, were observed during three phases of engagement while caregivers were also distracted by mobile phone activity (interaction as usual; modified still-face phase; re-engagement). Interactions were coded using a modified behaviour-state system (Mesman et al., 2009), and plotted with dynamic systems state space grids using Gridware 1.15a (Hollenstein, 2012). Technology use in caregivers was using the Media and Technology Usage and Attitudes Scale (Rosen et al., 2013). A significant relationship was identified between caregiver technology usage scores and a dyad's flexibility in moving between positive and negative engagement ( $r = .416, p = .038$ ). Specifically, the higher a caregiver's reported technology use, the more inconsistent the behavioural quality of her engagement with her infant. Dynamic system approaches may be useful for the study of the implications, for caregiver-infant interaction, of caregivers' engagement with

digital devices. The behavioural flexibility in caregiver-infant interaction may be affected by technology usage and familiarity. Implications for future research are discussed.

P01.114

**MY BABY OR MY PHONE? THE RELATIONSHIP BETWEEN INFANT CAREGIVERS' ATTENTIONAL CAPACITY AND SENSITIVITY WHILE ABSORBED WITH A MOBILE DEVICE**

**Khourochvili M.\*, Bohr Y.**

*York University ~ Toronto ~ Canada*

Caregivers' potentially excessive distraction by mobile devices warrants concern for their ability to appropriately attend and respond to their infants, a feature of parenting known as caregiver sensitivity. The level of sensitivity displayed by caregivers in such a divided attention context may be associated with their attentional profiles (Watkins & Mash, 2009). Indeed, adults with attention problems may struggle with consistent parenting and managing their child's behaviour (Murray & Johnston, 2006). We examined caregivers' sensitivity while engaged with a mobile device in the presence of their infant. We further queried the impact of caregivers' attentional profiles on sensitivity in this context. Twelve caregiver-infant dyads were recruited from Toronto, Ontario. Caregiver and infants behaviours were coded based on a modified behavioural classification system (Mesman et al., 2009). Caregiver attentional capacity was captured using a self-report measure of attention symptoms [Adult ADHD Self-Report Scale Version 1.1 (ASRS-v1.1); Kessler et al., 2005] and a task that measured divided attention capacity [Paced Auditory Serial Addition Task (PASAT); Gronwall, 1977]. The relationship between caregiver disengagement and PASAT scores was substantial and approached significance (higher scores represent better divided attention abilities),  $t(9) = 2.03$ ,  $p = .07$ ,  $r = .56$ . A high but non-significant positive correlation was found between caregiver engagement and ASRS scores (higher scores represent greater attention difficulties),  $t(10) = 1.74$ ,  $p = .11$ ,  $r = 0.48$ . The more attention difficulties caregivers reported, the more sensitive they were toward their infants. Further, the stronger caregivers' ability to divide their attention, the less sensitive caregivers were. Given extant beliefs that parenting behaviours of mothers with attention difficulties may negatively influence children's development (Watkins & Mash, 2009), the current findings are discussed in view of the complex relationship between attention challenges and parenting in specific contexts.

P01.115

**THE INFLUENCE OF DEVELOPMENTAL SUPPORT IN THE HOME ENVIRONMENT FOR FIRSTBORN AND LATER-BORN INFANTS WITH DISABILITIES**

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Some children, such as children with disabilities, may be extra sensitive to variations in the developmental supportiveness of their home environments (Belsky, 2015). A child with a disability may benefit from a mother with experience raising a first child who can more readily sustain positive developmental support for a later child whose cues are hard to read (Fleming et al., 1987). One way parents provide developmental support is by creating a responsive and stimulating home environment (Elardo, Bradley, & Caldwell, 1977). This project aims to explore the home environment across infancy in relation to age 3 development of firstborn and later-born infants with disabilities. Data from 309 infants with disabilities in the US Early Head Start Research and Evaluation Project included the Home Observation for the Measurement of the Environment (HOME; Caldwell & Bradley, 1984) at 14, 24, and 36 months. Infant cognitive development was measured at 36 months using the Bayley Scales of Infant Development (Bayley-II; Bayley, 1993)

Mental Development Index (MDI) and social development with the Emotional Regulation and Orientation/Engagement subscales of the Bayley Behavior Rating Scale (BRS). The home environment at 14, 24, and 36 months was significantly correlated with infant development at 36 months. When examined separately by birth order, firstborn infants had different outcomes than later-born infants. The 14-month home environment was associated with cognitive development for firstborn infants and social development for later-born infants. The 24-month home environment was associated with cognitive development for firstborn infants and social development for first and later-born infants. The 36-month home environment was associated with cognitive and social development for first and later-born infants. Results suggest that developmentally supportive home environments positively influence development for infants with disabilities, with more specificity earlier in infancy.

P01.116

**STABILITY AND CHANGE PATTERNS UPON THE TRANSITION TO OLDER SIBLING: THE EARLY DEVELOPMENT OF SIBLING RELATIONSHIPS AND CHILD ADJUSTMENT**

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The birth of a sibling is a normative event for most children. Upon the transition to older sibling (TOS), toddlers undergo a number of challenges including exposure to differential treatment (DT) by parents. Prior to a sibling's arrival, DT is relatively infrequent, so little is known about the links between jealousy before and after the TOS and child adjustment. A longitudinal study was conducted with 87 pregnant mothers and their toddlers ( $M = 28.85$  months,  $SD = 10.96$ ) at a laboratory during the last trimester of pregnancy (T1) and one month after childbirth (T2). Mothers reported child adjustment (CBCL); and the dyads' interactions were videotaped, including episodes of DT with a lifelike doll as if it were a newborn infant. Using a person-centered approach, Latent Class Analysis identified two distinct classes: Under-controlled (UC) marked by Pestering, and Over-controlled (OC) marked by Anxiety. 75% of the children were classified as UC, and 25% as OC at T1 with 38% as UC and 62% as OC at T2. Chi-square tests revealed that 45% of children who were classified as UC at T1 showed stability at T2; however, 81% of the children who were classified as OC at T1 were still OC at T2. Regression analyses revealed that higher Pestering at T1 predicted higher Internalizing problem at T2. Higher Pestering and lower Positive Emotionality at T1 predicted higher Externalizing at T2. Under-controlled (pestering) behaviors are less stable than over-controlled (anxious) responses, suggesting a perturbation and vulnerability upon the transition. Yet, the UC prior to the sibling's birth predicted internalizing and externalizing problems after the transition.

P01.117

**RESILIENCE OF MATERNAL SENSITIVITY TO CONTEXTUAL STRESS**

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Introduction: Maternal sensitivity is a key determinant of infant attachment security. Evidence and theory suggest that stressors in the family ecology undermine sensitivity. However, published findings remain equivocal with most work based on small samples, with limited measurement of contextual stress exposures. Aims of the Study: We examined the extent to which multiple indicators of concurrent contextual stress, including stressful life events, financial strain, family size, partner conflict and low social support, were associated with postpartum maternal sensitivity. Material and Methods: Maternal sensitivity was coded using the Maternal Behavior Q-Sort based

on dyadic interactions during extended Strange Situation Procedure observations, at infant age 12-18 months. Dyads (n=200) were participants of a nested clinical sub-sample within a 34-year longitudinal cohort study. Data on contextual stress were collected by maternal self-report prior to videotaped observations. Associations were examined using linear and multiple regression. Results: Maternal sensitivity explained 44% ( $p < .001$ ) of the variance in infant attachment security. We found no effects of stressful life events, financial strain, family size, partner conflict or social support. Maternal sensitivity was also robust to internalising symptoms in models that included contextual stressors. However, a small significant effect emerged for low maternal education ( $r = 0.196$ ,  $p < .001$ ). Conclusions: While day-to-day fluctuations in caregiving are inevitable for all parents, findings suggest overall capacity for caregiving sensitivity may be largely resilient to concurrent experiences of contextual stress. Given the current data are drawn from a general population sample, effects may emerge for those experiencing more pronounced or persistent adversity, particularly in clinical samples. Prior research has also shown effects of maternal education, supporting its utility as an indicator of risk. Current findings are nested within an intergenerational study and so represent a unique opportunity to next examine preconception predictors of sensitivity, including possible effects of persistence of stress across development.

P01.118

#### **THE PERCEPTION OF A MOTHER'S COMPETENCY PREDICTS THE QUALITY OF INTERACTIONS WITH HER INFANT**

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The quality of mother-child interaction in the year after birth affects infant development, and a mother's feelings about her abilities as a parent can determine the type of interaction that is had between the mother and child. The goal of the current study was to determine how a mother's competency predicts the quality of interactions during play. Participants included 30 parent/child dyads with infants ranging in age from 9-14 months. Participants were recruited from the Healthy Start program in Pittsburgh, PA. Healthy Start is a federally funded program aimed at supporting families with infants that are at high risk for infant mortality in the first year of life. Mothers were given a self-report questionnaire about depression and maternal competency. Mother and infant engaged in a 20 minute play session, with 10 minutes of their own toys and 10 minutes of new toys. Mothers were evaluated using the PICCOLO, which measures teaching abilities, encouragement, affection, and responsiveness to the child. Dyads were asked to provide information regarding the mother's childhood trauma exposure, any prenatal drug use and the child's health. Standard multiple regression was used to assess the degree to which mother's competency predicted the overall quality of maternal-child interactions. The total variance explained by the model was .295 (adjusted R<sup>2</sup>),  $F(3,26) = 5.044$ ,  $p = .007$ . In the final model, maternal competence significantly predicted quality of maternal-child interactions ( $\beta = .628$ ,  $p = .002$ ). With these results, further interventions could be conducted to increase maternal competency, improving the mother-child interactions.

#### **Evaluation and outcomes: scientific studies and early interventions**

P01.119

#### **COMPARISON OF METHYLPHENIDATE AND ATOMOXETINE TREATMENT IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER: A SINGLE-CENTER STUDY**

**Abe T.\*, Tsuno I.**

Methylphenidate (MPH) and atomoxetine (ATX) are the representative drugs for the treatment of attention deficit hyperactivity disorder (ADHD). We report the comparison of the effects of these two drugs for ADHD. In 2.5 years from May in 2013 to December in 2015, we added up 60 patients with ADHD (male/female=52/8, range: 5-14 year-old, median: 8 year-old). Forty patients were combined type (male/female=36/4), and 20 were inattentive type (male/female=16/4). Three to 5 months after the administration of ADHD drugs, we compared how the symptoms of children changed at both home and school before and after the administration, by using ADHD Rating Scale (RS)-IV. ADHD RS-IV before and after the single use of MPH was improved from  $30.0 \pm 11.2$  to  $11.2 \pm 8.3$  (mean $\pm$ SD, n=18, p<0.001), and that of ATX from  $23.9 \pm 10.2$  to  $13.9 \pm 6.6$  (n=16, p<0.01) at home, respectively. That of MPH was improved from  $37.5 \pm 11.1$  to  $15.3 \pm 7.9$  (p<0.001), and that of ATX from  $31.6 \pm 12.4$  to  $17.6 \pm 10.7$  (p<0.01) at school, respectively. In inattentive type, ADHD RS-IV before and after the single use of ATX was improved from  $23.7 \pm 8.1$  to  $13.3 \pm 6.0$  at home (n=9, p<0.05), from  $25.8 \pm 11.2$  to  $16.1 \pm 8.2$  at school (p<0.01), respectively, although that of MPH had no significant differences at both home and school. From the results of this study, we think that MPH was significantly more effective than ATX. However, remarkable improvement was seen in some cases that were treated with ATX. In inattentive type, there is a possibility that ATX is more effective than MPH. Therefore, we have to select the drugs for ADHD while considering the clinical courses of the patients.

P01.120

**BUILDING CONNECTIONS: SUPPORTING COMMUNITY-BASED PROJECTS ACROSS CANADA TO EMBED TRAUMA-INFORMED APPROACHES FOR FAMILIES WITH INFANTS AND YOUNG CHILDREN**

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*Mothercraft ~ Toronto ~ Canada*

Building Connections is a national initiative which was developed to support community-based projects that serve families who may be living with interpersonal violence (IPV). The primary goal of Building Connections is to raise awareness of IPV and trauma-informed approaches, using an infant mental health framework, and to increase the confidence and capacity of project staff to respond to the needs of vulnerable Canadian families. Through the Building Connections initiative, over 800 projects across Canada were provided with foundational information about trauma-informed approaches in the form of a resource manual and national webinar. Thirty sites across the country are being selected to receive additional training to deliver a six-week group intervention called Connections: A Group Intervention for Mothers and Children Experiencing Violence in Relationships. This evidenced-based, manualized intervention focuses on mothers' experiences with IPV, its impact of the development of their infants, their parenting, and their self-esteem. Selection for the intervention is based on a self-assessment tool and site visit. Following the certified training, project staff receive ongoing support from the Building Connections team through weekly community of practice webinar meetings. Every aspect of the initiative is being evaluated using qualitative and quantitative measures. Our poster will describe the various stages of the Building Connections initiative, highlighting how this unique combination of information, instruction, consultation and research, through a trauma and infant mental health lens, has helped raise awareness of and support to project staff in responding to IPV.

P01.121

**ACT ON VIRTUES: DEVELOPMENT OF CHILD CHARACTER IN KINDERGARTEN**

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Children under the age of 4 years already understand and display certain virtues, such as honesty, kindness and justice. Virtues are universal values, recognized by all faiths and cultures. Understanding and practicing with virtues in daily life can strengthen positive character traits and enhance social-emotional well-being in children. Pedagogical workers in day care centers aim to support personal and social development of children, but lack a systematic approach in teaching and practicing with virtues. A new methodology has been developed that facilitates pedagogical workers in this task. This study examines the feasibility and effectiveness of this methodology. 112 children between 2 - 4 years will be included from 7 units of day care centers. Pedagogical workers will be trained to use the methodology (select a monthly virtue, detect, teach and support the display of the virtue in the behavior of children). In a pretest (T0) and posttest (after a year T1) personal and social competence will be assessed by different questionnaires and interviews. A control group will be included. Feasibility of the method will be assessed from pedagogical workers and focus groups with children. Parents and pedagogical workers will complete the Child Behavior Questionnaire, Preschool Social Behavior Questionnaire, and subscales of the Vineland Adaptive Behavior Scale Screener. The Multidimensional Life Satisfaction Scale for Children and a group meeting will be used to assess the child's perspective on the methodology. Pedagogical workers will complete the Measurement Instrument for Determinants of Innovations to provide information about the feasibility. This study contributes to the development of a systematic approach for pedagogical workers to facilitate children in their personal and social development. Results of the study can lead to adaptations in- and possible implementation of the virtues methodology in child care centers.

P01.122

### **MELLOW BABIES: A RANDOMISED FEASIBILITY TRIAL OF AN INTERVENTION TO IMPROVE THE QUALITY OF PARENT-INFANT INTERACTIONS AND PARENTAL MENTAL WELLBEING**

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Mellow Babies aims both to improve mothers' mental wellbeing and the quality of their interactions with their baby and has previously shown promising results. There is a lack of good quality evidence for such interventions in the very early years. The feasibility of a definitive trial of Mellow Babies was assessed using a waiting list randomised pilot trial. Mothers with additional health/social care needs were randomised either to take part in a 14 week programme of Mellow Babies or to receive usual care whilst on a waiting list for the intervention. We recorded the rates of recruitment and retention as well as participants' views of their experience in the pilot trial. Outcomes of blind-rated Mellow Parenting Observation System (primary) and self-report maternal wellbeing pre- and post-intervention / waiting period were also measured. We recruited 100% (38/38) of eligible participants, 36 (95%) completed baseline measures, and 28 (74%) provided post-intervention measures. Five took part in qualitative feedback interviews. Mothers who had taken part in Mellow Babies had significantly more positive interactions with their babies after the intervention compared to those in the control group ( $p=.01$ ), whilst controlling for pre-intervention scores. There was no significant improvement in mothers' mental wellbeing, and one of the scores (outwardly directed irritability) increased for the intervention group ( $p=.03$ ). Mothers gave positive feedback in qualitative interviews, as well as outlining barriers to participation. A definitive trial of Mellow Babies is feasible. We recruited a bigger sample than previously published research on Mellow Babies and were able to demonstrate significant change in the primary outcome measure. A

definitive trial should ideally include longer follow up of mothers, and a focus on fathers. The practical difficulties in conducting this type of research are also considered.

P01.123

### **DISCUSSION ABOUT THE FACTOR TO PROMOTE SOCIAL INTERACTION OF AUTISTIC CHILD IN INTEGRATED EDUCATION IN JAPAN**

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In Japan, the autistic children often goes to the daycare institution for mentally retarded children for a certain period of time at first, and shifts to a local nursery school, and integrated education is performed. The purpose of integrated education in Japan is autistic child deepen each other's understanding through the interaction with other children and learn a social role and skill (Oyama, 2011). It is shown, however, autistic child is difficult to approach for other children with the interaction in daily life (Holwin, 1986). It is required that clarify the factor that interaction is promoted and the motive that other children concern in a scene of integrated education. In this study, we examined a factor to promote the social interaction of an autistic child and the child care person, other children in the integrated education. We observed for running from entering a kindergarten to attendance at school for three years for the autistic child who became the entering a kindergarten via daycare institution for mentally retarded children. As a result of categorizing and having examined the relation of the childcare person, for the relation of the childcare person, interaction was promoted by intervention to enter among other children and it changed three people's relations that the autistic child, the childcare person and other children from the two people that the autistic child and the childcare person. Other children based on the record of observation, it was shown that interaction was promoted by the flexible correspondence which matched with the place than a directive thing as a relation of the other children. In the integrated education scene which was not structured, it is suggested the possibility that other children learned how relation with an autistic child as a model in the relation childcare person.

P01.124

### **TALK, READ, SING CAMPAIGN: ATTITUDES AND BEHAVIOR TOWARDS TALKING, READING, AND SINGING TO BABIES**

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Talk, Read, Sing (TRS) is a nationwide public awareness campaign in the United States that seeks to increase the quantity and quality of parent-child interactions early in life. TRS distributes literacy and child development toolkits to parents of babies born in hospitals in Tulsa, Oklahoma. TRS also enrolls parents in text4baby, a free text messaging service that sends information to parents about infant and early child development. The aims of this study were to explore demographic differences in caregiver's attitudes towards talking, reading, and singing to babies, and to examine potential differences in attitudes and behaviors between toolkit recipients and non-recipients. A survey link with questions regarding attitudes and behaviors towards talking, reading, and singing to babies was texted to text4baby subscribers living in Oklahoma and surrounding states. A total of 2,138 text4baby subscribers (98% women) completed the survey. A subset of respondents were from Tulsa and included 62 participants who received the toolkit and 75 participants who did not. In the overall sample, regression analyses indicated demographic differences in attitudes toward talking, reading,

and singing to babies. Participants who spoke Spanish, were part of a minority group, and who had lower levels of education were less likely to endorse the importance of talking and reading to babies. In the subsample from Tulsa, participants who received the toolkit reported repeating their baby's sounds, talking to their baby when changing a diaper, reading to their baby, and singing to their baby more often than those who did not receive the toolkits. Results suggest that some demographic groups may particularly benefit from the TRS campaign's message because they are less aware of the importance of talking and reading to babies. Moreover, findings indicate that the toolkits distributed at hospitals promote early literacy behaviors among parents/caregivers.

P01.125

### **STRENGTHENING THE RECRUITMENT CATCHMENT AND RIGOR OF SAMPLING FAMILIES WITH INFANTS THROUGH ONLINE METHODS**

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The parenting intervention literature articulates difficulties conducting large-scale studies with families of infants, identifying struggles recruiting gender-balanced samples (particularly fathers), lower SES families, and other hard-to-engage segments of the population. Online approaches to recruitment may reach a broader recruitment catchment, but be subject to reporting bias, high rates of missing data, and often reach more highly educated or tech-savvy participants. Adequate but efficient screening practices may reduce these threats to validity and reliability. Our aim was to use online survey methods to demonstrate the potential efficiency and rigor of recruiting a large sample with more balanced characteristics. 225 respondents were screened during a 6-hour data collection window; eligible participants (n=188, 53% male) of children younger than two years old were recruited through Amazon's Mechanical Turk to complete an online survey including 8 measures on the joys and stresses of parenting infants/toddlers. The sample reported white (64%), non-Latino/Hispanic (88%) racial/ethnic characteristics and fulltime employment (63%), with an average household income of \$20,000-\$39,999. Participants completed screening questions to ensure eligibility and reduce bias, including age eligibility (criteria = >18; range 21-54 years;  $\mu_{age}$ =32.41 years); Country of citizenship (75% U.S.; 1% Canada; 22% India; 2% Other); English reading skill (97% strong; 3% moderate) and child age eligibility (criteria = <2years; range 1-24 months,  $\mu_{age}$ =14.7 months). We present a discussion of the nuances of online recruitment and participant screening to ensure maximum validity and data integrity.

P01.126

### **RECRUITMENT AND RETENTION STRATEGIES OF VULNERABLE PARTICIPANTS: A CASE STUDY OF THE BEST SERVICES TRIAL (BEST?) - EFFECTIVENESS AND COST-EFFECTIVENESS OF THE NEW ORLEANS INTERVENTION MODEL FOR INFANT MENTAL HEALTH**

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There is a need to improve recruitment and cohort retention to ensure success of longitudinal research studies involving vulnerable participants as high attrition rates are costly, threaten the validity of a study and can negatively impact its long term goals. The BeST? study, a randomised controlled trial (RCT) compares two services: New Orleans Intervention Method (NIM) and Case Management (CM) for the management of maltreated infants and young children entering care in the UK. Contacting the participating families at baseline can be challenging because birth parents often have poor engagements with professionals due to mental health problems or substance

misuse. For this reason we have engaged social work staff to make these first approaches to families. At follow-up, contacting participants and carers can be difficult as their placements can be transient and change at short notice. Locating this cohort is often time consuming and expensive requiring specific staff to access contact information. Despite these challenges, the BeST? study has achieved a high recruitment rate of 60% and a high retention rate of 84% throughout the study. We present our recruitment and retention strategies that helped us achieve and maintain this level of subject participation. These include the appointment of dedicated, highly organised and persistent research nurses from the Glasgow Clinical Research Facility (CRF) with additional support from administrative staff and recruitment coordinators with social work background, innovative management of contact and scheduling of appointments through the use of electronic databases, flexibility of research team's working times often adapting and tailoring their culturally sensitive approaches to the participants. The CRF nurses have been invaluable in building ongoing positive relationships with families and accessing health data to ensure contact attempts are efficient. Our findings add to the existing information on recruitment and retention strategies and help inform researchers designing studies and protocols.

P01.127

#### **DESIGNING TEXT MESSAGING PARENTING SUPPORT FOR MOTHERS WITH SEVERE MENTAL ILLNESS AND THEIR PARTNERS**

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In the perinatal period, a significant number of women will report mood and anxiety symptoms and a number will be diagnosed with a psychotic disorder or an escalation of emotional dysregulation with borderline personality disorder. Affected mothers will experience feelings of worthlessness, dysphoria, anxiety, inability to make decisions, and in extreme cases, incapacitating agitation or delusions. The ability of mothers with severe mental illness (SMI) to care for their infant is likely to be compromised and be reflected in their children's higher rates of cognitive, psychosocial, emotional and behavioural problems. While screening and referral procedures targeting women's mental health have been initiated in Australian public hospitals, and inpatient care for affected mothers and infants is available in some regions, many mothers do not seek help from professionals or services. For mothers with SMI the support of her partner can be crucial to her recovery and can improve infant outcomes. However, such partners are difficult to engage in face-to-face services. Given this identified need and corresponding unavailability of service, we describe the design and development of a text-based support program delivered to the mobile phones of SMI mothers and their partners in a regional area within Australia with limited access to residential care for affected mothers and babies. The program includes frequent text messaging to both mothers and fathers and a regular Mood Tracker request inviting participants to indicate their level of distress with provision for escalation to telephone contact and increased clinician involvement in cases of severe distress. Data from the feasibility study over five months of text messaging will be presented. Exploring ways to provide parenting support for mothers with SMI and their partners via mobile phones can potentially improve outcomes for the family.

P01.128

**SUPPORTING NEW FATHERS WITH MESSAGES DELIVERED TO THEIR SMARTPHONES: A FEASIBILITY STUDY OF SMS4DADS**

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The transition to parenthood can be a challenging time, in which both mothers and fathers experience increased risk of distress and depression. Mothers are more likely than fathers to engage with services and have their mental health monitored and attended to during the perinatal period. The present study aimed to explore whether smartphone technology could be used to address fathers' needs across their transition to fatherhood. A corpus of messages, including linked information and mood tracking software, was designed to support and enhance paternal relationships with their babies, their partners and themselves across the perinatal period. Messages were sent to project participants (N=520) from 12-weeks' gestation to 24-weeks after birth. Of those fathers enrolled (N=520), 21.5% scored > 13 on K6 and completion rate (85%) was similar between these and other fathers. Most fathers (63.1%) clicked at least one link and responses were received for 20.5% of mood tracker questions. The probability of reporting worse mood scores decreased over time. Fathers completing post study surveys (N= 101) reported that messages helped them in their experience of becoming a new dad (92.8%), as well as helping them develop a strong relationship with their new child (54.9%), and in their relationship with their partner (79%). The present study has demonstrated that it is both feasible and acceptable to support new fathers with SMS4dads, a relationship-focused messaging system designed to be delivered to smartphones across fathers' transition to parenthood.

P01.129

**PROSPECTIVE LONGITUDINAL EVALUATION OF CLINICAL IMPROVEMENT AND PERCEIVED QUALITY IN TWO EARLY CARE CENTERS IN BARCELONA**

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There are no data in Catalonia (Spain) about the effectiveness of interventions in the early care centers. Therefore, the objective of this study is to evaluate the interventions of two early care centers in Barcelona. Interventions in psychology, speech therapy and physiotherapy are evaluated. It is intended to evaluate the evolution of clinical outcomes and their relationships with the perceived quality of the service and with treatment, sociodemographic and clinical history variables. Non-probabilistic sampling and informed consent are carried out. The sample is composed of children 0-6 years old and their families. This is a longitudinal prospective study. Clinical improvement is measured at baseline and at six months of treatment. For this, in psychology we use: The Parenting Stress Index-Short Form (PSI-SF, Abidin, 1995, Diaz-Herrero, Brito de la Nuez, López, Pérez-López & Martínez- And the Behavior Assessment System for Children (BASC, Reynolds & Kamphaus, 1992, González, Fernández, Pérez and Santamaría, 2004). In speech therapy, the instruments are: Illinois Tests of Psycholinguistic Aptitudes (ITPA, Kirk, SA McCarthy, JJ & Kirk, WD, 1968; Ballesteros and Cordero, 2004) and The Revised Navarre Oral Language Proof –English translation- (PLON-R or Prueba de Lenguaje Oral de Navarra-Revisada, Aguinaga, Armentia, Fraile, Olangua & Uriz, 2004). And in physiotherapy we use Brunet-Lézine Revised: Psychomotor development scale of the first Childhood –English translation- (Brunet-Lézine Revisado. Escala de Desarrollo Psicomotor de la Primera Infancia, Brunet & Lezine, 1951, Josse, 1997). Finally, the quality perceived by families is evaluated through the Inventory of Quality in Early Childhood Care

Centers v. 2.0 –English translation- (ICAITT v. 2.0 or Inventario de Calidad en los centros de Atención Infantil Temprana v.2.0).

P01.130

### **BIO-PSYCHO-SOCIAL APPROACH IN CHILDREN WITH ONSET OF DIABETES TYPE ONE AND THEIR PARENTS**

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*ospedale pediatrico Bambino Gesù ~ Rome ~ Italy*

International studies show the importance of bio-psycho-social approach in management of chronic diseases like Diabetes Mellitus Type 1. Therapeutic Education is the most common instrument used in order to promote self efficacy and to prevent psychological discomforts. The aim of the study is to evaluate the effectiveness of therapeutic education (ET) on quality of life (QdV) and glycometabolic control of children with type 1 diabetes mellitus and to describe the bio-psycho-social approach to the families. 89 families of children with type 1 diabetes mellitus diagnosis were followed in the first year of illness through therapeutic education sessions (ET) with a diabetologist, psychologist and pediatric nurse. 56 families voluntarily participated in the ET with intensive group sessions, forming the experimental group, the remaining 33 families formed the control group and received an ET in individual sessions. Quality of life of children and parents was measured (PedsQL). At 12 months the quality of life assessment was repeated and the HbA1c parameter was used to evaluate glycometabolic control after ET. There are no statistically significant differences in HbA1c at 6/9/12 months between the two groups. The quality of life declared by children greatly improves in all the scales of the questionnaire, after ET sessions. In the experimental parents' group, the quality of life scores are improving statistically not significantly. In the Parent Control group, the scores worsen statistically significantly in 3 of the 5 test sub-scales. In the children's control group the quality of life scores get worse without statistical significance. The effectiveness of ET and its influence on QdV are statistically evident in children who experience it in groups, compared to those who carry out individual sessions. Children in the experimental group declare statistically significant improvement in all scales of the questionnaire administered.

P01.131

### **RECRUITING PREGNANT WOMEN WITH MENTAL OR SOCIAL VULNERABILITIES TO A RANDOMIZED CONTROLLED STUDY FOCUSING ON IMPROVING ATTACHMENT**

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The mother's psychological condition and social background is of crucial importance for her child's well-being both during pregnancy and early life. Secure attachment is significantly associated with several positive outcomes for the child, both in terms of the child's emotional, social and behavioral development and adjustment. Attachment research indicates that sensitive parenting lead to a secure attachment in the child. Social and psychological vulnerability in parents can affect the attachment formation and there is a need of effective strategies to detect and support vulnerable families already from pregnancy. The study is conducted in collaboration with Herlev Hospital, Denmark and the following Danish municipalities: Ballerup, Gentofte, Herlev and Rødovre. The target group of the intervention is pregnant women who do not have psychiatric diagnosis or problems related to drug abuse, are not treated at family outpatient clinic or other municipal interventions, but who has the need for more than the standard treatment due to psychological and/or social challenges (e.g. previous traumas, problematic family relations or acute life crisis). Pregnant women who plan to give birth at Herlev Hospital and are residents in one of the

participating municipalities and who fulfill the inclusion criteria are contacted by telephone. The aim of the telephone contact is to inform the woman about the study and ask if she is interested in a home visit. At the home visit a researcher provide further information about the study. If the woman agrees to participate, the researcher asks the woman to give informed consent and fill out a baseline questionnaire. Experiences from the recruitment process will be presented. Facilitating factors and barriers for recruiting vulnerable pregnant women will be discussed. Experiences with recruiting vulnerable pregnant women to a randomized controlled study focusing on improving parent-child attachment can be useful for other researchers and clinical practitioners working in the field of prenatal- and maternal care or with parental educational programs.

P01.132

### **MATERNAL SENSITIVITY AND EARLY DISCIPLINE: THE IMPACT OF DOULA HOME-VISITING SERVICES**

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Young, low-income mothers are often less sensitive towards their infants and more likely to use corporal punishment than older, more socially advantaged mothers. Home-visiting services that begin prenatally and focus on parenting and the mother-infant relationship may improve sensitivity and positive approaches to discipline within this population. This study examined the impact on parenting of an intervention in which doulas are part of a home-visiting team. During pregnancy, young, low-income, ethnically-diverse mothers from three US cities (n=312) were randomly assigned to receive a doula home-visiting intervention or a low-intensity case management control condition. The intervention provided weekly prenatal and postnatal home visits from both a doula and a home visitor, and hospital-based doula support during childbirth. Mothers were interviewed in their homes during pregnancy, and at 3-weeks, 3-months, and 13-months postpartum regarding their parenting attitudes, practices, and discipline strategies. At follow-up sessions, they were video-recorded interacting with their infants. Videos were rated by blind coders for sensitivity and intrusiveness. OLS and logistic regression analyses using one-tailed tests were conducted and effect sizes (Cohen's d or odds ratio) calculated. Mothers in the intervention group were observed to be less intrusive at 3-weeks (d=.23) and 3-months (d=.26), and more sensitive to infant distress at 3-months (d=.42) than control-group mothers. Intervention group mothers also held attitudes less favorable towards corporal punishment at 3-months (d=.22). At 13-months, intervention mothers were less likely to use psychological aggression toward their child (OR=0.45), more likely to use inductive approaches to handling tantrums (OR=2.26), and felt more negatively about parental restriction of children's power (d=.24). The effects at 13-months were especially favorable for mothers still receiving home visits. Doula home-visiting services may be an effective method to reduce intrusive and aggressive parenting attitudes and practices among young mothers.

P01.133

### **MICHIGAN COLLABORATIVE FOR INFANT MENTAL HEALTH RESEARCH: PROVIDERS, CONSUMERS, & EVALUATORS WORKING TOGETHER TO BUILD AN EVIDENCE BASE FOR IMH PRACTICE**

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When Selma Fraiberg developed Infant Mental Health Home-Visiting (IMH-HV) in the 1970s, little was known or measured about the importance of early childhood development and the value of intervening early to strengthen early caregiving relationships to promote better child outcomes. Since then, IMH-HV has been widely implemented across Michigan as the primary community mental health service delivery model for infants, toddlers and families. However, recent legislative standards require additional evaluation with measurement of impact on key benchmarks to sustain eligibility for state-funded reimbursement. The University of Michigan, in collaboration with the state, the international organization Alliance for the Advancement of IMH, and four other universities, is conducting two quasi-experimental studies to evaluate effectiveness of the IMH-HV model on parental and child outcomes. In Study 1, the research team is analyzing a data set of commonly collected measures on all IMH-HV clients (N=510) that are receiving services in predominantly urban counties (including Detroit and Flint, Michigan) to assess change over time. In Study 2, the research team is collaborating with community providers serving pregnant women or parents with infants/toddlers ages 0-24 months (N=91) to monitor fidelity to the model and conduct in-depth baseline, bi-weekly, and follow-up assessments across a 12-month period of treatment to assess program impacts on parenting, mental health, and other relevant indicators. Preliminary analyses suggest that IMH-HV parents are at high risk, with average Adverse Childhood Events of 4.6, 49.5% above clinical cut-off for depression (PHQ-9), 39.6% above clinical cut-off for PTSD (PCL-5), and 47.3% above clinical cut-off for stress (PSI) at baseline. Subsequent analyses will test dose-response relationships, and how delivery of specific components and fidelity to the model are related to parent and child outcomes. The powerful model of university, community, and provider collaboration and implications for real-world application of IMH-HV will be discussed.

P01.134

#### **REFLECTIVE SUPERVISION SELF-EFFICACY SCALE FOR SUPERVISEES: RESEARCH AND CLINICAL IMPLICATIONS**

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The Reflective Supervision Self-Efficacy Scale for Supervisees (RSSESS), a new 17-item self-report measure, assesses infant mental health (IMH) home visitors' confidence about their reflective practice skills. The RSSESS addresses a need for reflective practice assessment, particularly important given growing interest in reflective practice in infancy and early childhood contexts. Aims include: 1) Explore the measure's research utility to assess IMH clinicians' reflective practice skills; 2) Examine associations between perceived reflective supervision self-efficacy and IMH home visitors' job satisfaction and burnout; and, 3) Present case study material to address the RSSESS' clinical utility. Using data collected from a statewide IMH evaluation with IMH home visitors (N=56), a principal components factor analysis assessed the factor structure of the RSSESS. Correlational analyses were conducted with regard to various clinician characteristics. The RSSESS was separately administered to 7 supervisors and 11 home visitors in an Early Head Start program; thematic results were derived to inform ongoing training and reflective supervision. Factor analysis indicated the following two subscales with Cronbach's alpha noted: Use of Supervisory Relationship,  $\alpha = .894$  and

Use of Reflective Practice Skills with Families ,  $\alpha = .829$ . The Cronbach's alpha for the RSSESS as a whole was .906 (n=56), suggesting a high degree of internal reliability. Perceived reflective practice self-efficacy was positively associated with IMH visitor job satisfaction ( $r=.335$ ,  $n=56$ ,  $p=.013$ ) and negatively related to job burn out ( $r=-.375$ ,  $n=56$ ,  $p=.004$ ). Observational data highlighted 6 themes related to reflective supervision consultation (RSC) practices. Promising evidence suggests the RSSESS is a useful tool to assess the reflective practice self-efficacy of IMH clinicians. The tool's properties combined with its user-friendly design make the RSSESS well-suited for evaluations where reflective practice skills are a variable. Finally, clinical evidence suggests the measure can highlight clinicians' strengths and areas for growth in the context of RSC.

P01.135

**TBEARS- TULANE BUILDING EARLY RELATIONSHIPS SUPPORTS AND SERVICES: SUPPORTIVE HOME VISITATION FOR FAMILIES STRUGGLING WITH THEIR INFANT'S BEHAVIOR**

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Parents of challenging babies or who struggle with post-partum mood issues may struggle during the baby's first twelve months; this in turn can put babies at risk for decreased quality of life and child abuse (Barr, Trent & Cross, 2006). These parents are at an increased risk of feeling overwhelmed, not responding to their infant's needs, and neglecting their newborn. TBEARS is a short-term home visiting model that uses the Fussy Baby Network<sup>®</sup> FAN model to provide support to parents struggling with their infant with the goal of enhancing parental capacity and well-being. The study population included women >18 years of age, had a child < 24 months old, and participated in TBEARS. Data was collected before the first home visit with the clinician and again 3 months later. This design used mixed methodologies by blending pre-post test quasi-experimental design with phenomenological interviewing. A subset of mothers participated in in-depth qualitative interviews regarding mothers' experiences parenting an infant and participating in TBEARS (Brinkmann & Kvale, 2009). Mothers (N=28) received an average of 5.04 with an average visit length of 77.8 minutes. Participating mothers were White (46.4%), Black (42.9%) or Hispanic (7.1%) and majority were enrolled in WIC, a government subsidized program for women with young children (57.1%) and whereas 46.4% reported an income below \$40,000. Mothers reported an increase in self-efficacy, confidence, and post-partum bonding and a decrease in stress, worry, depression, and anxiety. Current qualitative findings validated quantitative findings with and identified potential mediating variables such as employment, self-care, affect, parent-infant relationship, and family conflict. Preliminary findings indicate that participating in TBEARS helps to improve the mental health and confidence of mothers challenged with their new infants. We continue to collect data and to code qualitative data and both will be included in this presentation.

P01.136

**A SYSTEMS-WIDE APPROACH TO ADDRESSING EARLY CHILDHOOD TRAUMA: EVALUATION RESULTS FROM THE IMPLEMENTATION OF TRAUMA SMART**

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Trauma Smart is an evidence-based systems approach to address childhood trauma at a systems level. 55% of the children screened had 1 positive indicator of trauma and 22% had 6+ indicators of trauma. Changes in skills related to trauma informed care (TIC) were measured via self-report with

Trauma Smart Feedback Form at baseline, retrospective and posttest reports. Staff initially rated themselves as having high levels of TIC skills, but after the training re-evaluated their skills as being significantly lower than they initially reported. Changes in scores from retrospective to posttest report suggest significant increases in skills related to TIC (N=62, all p's < .001). Changes in trauma informed culture of the agency was measured using the Attitudes Related to Trauma Informed Care, ARTIC – 45 (Trauma Stress Institute). Results suggest significant improvements in the trauma-informed culture (N = 111, all p's range .000-.01

P01.137

### **PATTERNS AND TRENDS OF MUSIC INTERVENTIONS FOR HOSPITALIZED NEWBORN INFANTS**

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Music interventions have been used in the NICU for more than 40 years; yet research outcomes are mixed due to heterogeneity in the populations, intervention protocols and measures, making it difficult to render useful results. In addition, transparency of theory and mechanism for change has been limited. Therefore, a deeper understanding of the existing research and how it informs the development of a stronger theoretical framework is necessary to advance the practice and science of music intervention with hospitalized infants. The purpose of this study was to identify the existing patterns and trends in current music intervention research with hospitalized infants for perspective on the relationship between infant characteristics, identified needs, specificity of the intervention content and outcomes. This study is a configurative systematic review, a method that seeks to discover new ways of understanding a phenomenon by determining, interpreting, and organizing patterns that emerge in the existing literature in order to develop new concepts. Studies were excluded if outcomes specifically targeted parents or the stimulus was non-musical (e.g. intrauterine sounds, tones). Thirty-six recorded and 22 live music studies were identified and underwent full-text review. Analysis by a team of specialist researchers in NICU music interventions is nearing completion. Descriptive statistics and graphics will illustrate the relationship of existing patterns and trends in the evidence for music interventions for hospitalized infants, including constructs necessary to build theory (i.e. covariates, mediators, and moderators). Recommendations for reliable music intervention design will be made as it relates to the developmental competence of the hospitalized infant.

P01.138

### **CREATING A RESEARCH AND DEVELOPMENT PLATFORM FOR EARLY CHILDHOOD HOME VISITING** **Korfmacher J.\***

*Erikson Institute ~ Chicago ~ United States of America*

In 2010, the US launched unprecedented investment in the scale up of evidence-based early home visiting (HV) to improve family functioning and parenting in families facing adversity. In 2012, HARC – the Home Visiting Applied Research Collaborative – was established to carry out trans-model dissemination and implementation research to strengthen the impact of HV. As part of the process of building a research network, HARC has: 1) elicited input from stakeholders nationally to create a HV research agenda; 2) invited local HV programs and HV researchers to become network members; 3) used core support to fund initial studies and convene national meetings; and 4) secured extramural funding to carry out complex, foundational research for the next phase of HV dissemination and implementation research. A diverse array of over 300 local HV programs and 150 researchers have joined HARC. Over 12 studies have been conducted. A study example will be

presented examining: i) HV model coherence, as indicated by the alignment of characteristics of targeted families (strengths and needs) with services to be provided, skills of providers, and intended outcomes; and ii) use of observational measures to examine provider skills in partnership formation and promoting family engagement in home visits over time. The study demonstrates that families in HV are heterogeneous in their strengths, risks and capacity to engage, indicating the need for precision HV that can address individualized needs and concerns. Our network activities show the feasibility of building a strong platform for innovative methods to integrate research evidence into practice to promote precision HV.

P01.139

### **THE EFFECTIVITY OF THE ESSENTIAL 5 METHOD**

**Naber F.\*<sup>[1]</sup>, Heikoop H.<sup>[2]</sup>, Op De Weegh A.<sup>[2]</sup>, Op De Weegh M.<sup>[2]</sup>, Schenk J.<sup>[3]</sup>**

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<sup>[3]</sup>Associate Professor ~ Rotterdam ~ The Netherlands

Autism is a severe disorder which influences not only the development of the child, but also the parent-child interaction and the feelings of parental efficacy. Raising a child with autism is a challenge for parents. It is of importance that effective interventions can be used to support parents. The Essential 5 is a method that teaches parents to become more sensitive for the autistic characteristics of their child and guide and support the child up to a level that the child can function individually at his own level. This method is used for 15 years in practice and is now being investigated for effectivity. The effectivity of this intervention, based on The Essential 5 method is being presented. To measure the effectivity of this method, the Child Behavior Checklist (CBCL) is being used as well as a parental burden questionnaire (PBQ). Before and after the intervention is being received, parents of 273 children diagnosed with autism in the age between 4 and 15 years, were asked to report the behavior of their child using the questionnaires. Analyses show that the problematic behavior of the children with autism who received The Essential 5 method, reduced strongly. When looking at the different subscales, it was found that for all scales the problematic behavior of children with autism reduced, for some subscales even under the clinical cut-off score. Also the reported parental burden significantly declined. These first results show effectivity of The Essential 5 method for both problematic child behavior as well as parental burden, reported by parents.

P01.140

### **GROUP SCHEMATHERAPY FOR FAMILIES WITH 0-3 YEAR OLDS**

**Van Bakel H.\*<sup>[1]</sup>, Roelofs J.<sup>[2]</sup>, Theunkens Y.<sup>[2]</sup>, Shaw I.<sup>[3]</sup>, Persoon L.<sup>[4]</sup>**

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Therapy Institute Midwest-Indianapolis ~ Indianapolis ~ United States of America, <sup>[4]</sup>Maastricht University ~ Maastricht ~ The Netherlands

Also infants may suffer from a variety of problems and disorders. Approximately one out of seven infants experiences mental health problems that are salient and not easily treated by parenting programs. We developed and examined in this first pilot study whether group schematherapy (GST) can be applied to families with infants experiencing mental health problems. The therapy consists of four phases. The first phase focusses on attachment and close relationships. During the second phase emotions and emotion regulation is the focus. In the third phase is directed at 'old' and 'new' behavior patterns and the fourth phase focusses on implementation en practising new behavior. We developed and examined in this first pilot study whether group schematherapy (GST) can be applied to families with infants experiencing mental health problems. Three referred families with an infant

aged between 1-3 were included and participated in 12 weekly GST sessions. During a pre-test and post-test parents completed questionnaires on symptoms of psychopathology, schema mode, early maladaptive schemas, and schema coping styles. Furthermore, we assessed the quality of parent-infant interactions and parents' representations (Working Model of the Child Interview). We expect changes in a number of modes and schemas in parents from pre- to post-therapy. In addition we also assess changes from pre- to post-treatment and will investigate temporal changes in modes during therapy as well. The study is ongoing and results will be presented and discussed at the conference. The present study will provide preliminary support for the applicability of GST in families with infants as well as the effectiveness of GST. It is a starting point for further research on this intervention.

P01.141

**PSYCHOSOCIAL/PSYCHOLOGICAL SUPPORT FOR MALE PARTNERS OF WOMEN ADMITTED TO MOTHER AND BABY UNITS IN THE UNITED KINGDOM**

**Wittkowski A.\*, Turner B., Garrett C.**

*The University of Manchester ~ Manchester ~ United Kingdom*

In the UK, specialist Mother and Baby Units (MBUs) currently offer dual admission for women experiencing severe mental illness and their newborn in order to minimise disruption to the maternal bond. However, admission for many women also means separation from their partners, which is likely to have a detrimental impact on the relationship between the woman and her partner, and the father-infant-bond. Current guidelines for managing perinatal mental health problems recommend addressing the needs of partners, with MBU standards outlining the need to ensure that appropriate support is offered (NICE, 2014; NHS England, 2016). The current study aimed to gain a better insight into the support offered to male partners by conducting a survey of UK MBUs. As part of this questionnaire-based survey, 17 MBUs in the UK were contacted and asked to provide information on the support being offered in their service to male partners of patients. Information on barriers and facilitators of offering support, together with aspirations for future support was also collected. Ten (58%) MBUs completed the survey and provided information. Both structured and informal support was offered, which was delivered on an individual, group or couple basis. Partner-level barriers included engagement and other commitments, and service-level barriers included resources and training. Facilitators identified included resources and service ethos. The findings suggest that emotional, practical and informational support was offered in a variety of ways, by different members of staff to partners on their own or to couples or to couples and their babies. All of the MBUs offered support to male partners. The findings indicate the varied nature of interventions on offer across MBUs in the UK, which may reflect regional variations in patient needs and staff preferences and training backgrounds.

P01.142

**MOTHERS' EXPERIENCES OF PSYCHOSOCIAL INTERVENTIONS FOR POSTPARTUM DEPRESSION: A SYSTEMATIC REVIEW AND METASYNTHESIS OF THE QUALITATIVE LITERATURE**

**Wittkowski A.\*, Hadfield H.**

*The University of Manchester ~ Manchester ~ United Kingdom*

Postpartum depression is a serious maternal and infant health concern. The importance of offering effective and acceptable treatments is well recognised, particularly given the numerous barriers mothers face in accessing interventions for postpartum depression. The aim of this systematic review was to synthesise qualitative research exploring mothers' experiences of receiving professional psychosocial support for postpartum depression. A systematic review of the literature

was conducted in July 2016 by searching five electronic databases (CINAHL, MEDLINE, PubMed, Ovid and Web of Science). Qualitative research studies published in English which explored mothers' experiences of professional psychosocial support for postpartum depression were included. Studies exploring mothers' experiences of anti-depressant medication only were excluded. Fifteen papers met inclusion criteria and were appraised for methodological quality. Data were synthesised using the interpretive thematic synthesis method. An overarching theme of 'the process of help-seeking' was identified which encompassed three superordinate themes: 'barriers to seeking and accepting support', 'valued aspects of support' and 'outcomes'. Mothers found the process of seeking help difficult, with several barriers preventing them from both seeking and accepting professional support. Despite this, mothers described the support received as beneficial and particularly valued the therapeutic relationship. Mothers reported feeling more positive and confident after receiving a psychological and/or psychosocial intervention and reported experiencing better relationships with their infant and other family members. Although seeking and accepting help for postpartum depression was a difficult process, mothers highly valued professional mental health care support and perceived it as beneficial. Discharge experiences were an important factor in maintaining the gains made within an intervention. Clinical services should aim to address the barriers mothers face in accessing mental health care and empower mothers to feel in control throughout the process, offering interventions appropriate to each woman's personal circumstance.

P01.143

**SUPER PARENTS: THE EVALUATION OF A GROUP-BASED PARENTING PROGRAM FOCUSED ON MINDFULNESS, POSITIVE PARENTING, AND BUILDING EXECUTIVE FUNCTION**

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*Oklahoma State University ~ Stillwater, OK ~ United States of America*

Poverty and trauma during early childhood may have devastating and long-lasting impacts which can be mitigated by sensitive, responsive parenting and parental warmth. Trauma-informed research suggests that programs targeting parents who are dealing with the stresses of poverty and adversity may be more effective if they include activities that build the capacity for self-regulation and other executive function skills as well age-appropriate parenting practices. Super Parents is a group-based program to increase responsive parenting by teaching positive parenting behaviors (using a standardized curriculum), executive function skills, and mindfulness activities to parents of very young children. The aim of the present study was to evaluate the effectiveness of the Super Parents program by examining improvements in parenting attitudes, mindfulness, executive function, parenting efficacy, stress, and child behavior. Parents (n = 54; M age = 30.24; 89% Female, 70% minorities, M annual income = \$23,136) with children (M age = 2.57 mos.) enrolled in three high quality early care centers serving low-income families were asked to participate in Super Parents and the evaluation. Parents completed surveys at the first (T1) and last sessions (T2), and approximately three months after the last session (T3). Survey measures included positive parenting attitudes, parenting efficacy, executive functioning, mindfulness, perceived stress, and child behaviors. T-tests were computed to assess differences between parent-reported attitudes and behaviors at T1 and later time points. Significant increases were found for positive parenting attitudes, parenting efficacy, and child prosocial behavior, with significant decreases in parent-reported child hyperactivity between T1 and T2. At T3, significant increases in parenting self-efficacy and executive function, and reductions in perceived stress and child hyperactivity were observed. Evaluation results indicate that providing parents with opportunities to develop and practice executive function, mindfulness, and self-regulation skills is a useful addition to traditional parenting programs.

P01.144

**GROUP ATTACHMENT BASED INTERVENTION (GABI) FOR AT-RISK FAMILIES: PARENT-CHILD INTERACTIONS AND FACTORS ASSOCIATED WITH ATTENDANCE**

**Demairo J., Nikitiades A.\***

*New School ~ New York ~ United States of America*

Dropout rates in the area of parent-child and family psychotherapies are of particular concern. This study assesses factors that identify families more and less likely to engage in treatment. The current report analyzed attendance rates for 78 families referred to a Group Attachment-Based Intervention program (GABI), to identify factors that may contribute to treatment retention. GABI is offered three times each week over the course of a 6-month treatment period. Overall, sessions attended ranged from 0-74% (mean=14%), with families attending 8 sessions on average. Reasons for dropout included unresponsive/lack of interest in treatment, relocation, or parental work/school conflict. At baseline and end of treatment, families completed the Adverse Child Experiences Questionnaire (ACEs), a measure evaluating childhood trauma (Felitti et. al., 1998) and partook in a 10-minute free play session, which was assessed using the Coding Interactive Behavior (CIB) paradigm, a scheme rating interactions between adults and children (Feldman, 1998). Families who attend GABI more often were characterized at baseline by lower CIB scores in parental consistency of style, and child competent use of the environment. Additionally, higher scores in parental ignoring were associated with greater attendance, suggesting that problematic aspects within the parent-child relationship may motivate parents to attend GABI. Higher attendance also positively and significantly correlated with mothers' experience of emotional abuse (ACEs) in childhood. Rates of attendance in terms of outcome: Those who successfully completed GABI exhibited more positive interactive behaviors compared to parents who participated in the control group, a parent education program. For example, families that completed GABI exhibited higher rates of dyadic reciprocity, than families in the control group, suggesting that dosage may be particularly important in interventions aimed at treating the parent-child relationship. Gaining a better understanding of retention in parent-child psychotherapy is essential in improving treatment outcomes. Identifying potential risk factors at intake may allow clinicians to identify patients at greater risk for dropout. This study aims to identify families more and less likely to engage in treatment and to identify factors that may contribute to treatment retention.

P01.145

**PLAY INTERACTION IN FAMILIES AT RISK: THE RELATIONSHIP BETWEEN MOTHER'S BEHAVIOR AND CHILD'S PLAYFULNESS**

**Pinchover S., Nikitiades A.\***

*New School ~ New York ~ United States of America*

Play is a primary occupation of children, which is integral to their development. In their early years, play typically occurs in interaction with primary caregivers. These interactions are usually enjoyable for both play partners, and have been found to contribute to the child's development, play abilities and child-caregiver relationship. However, in high risk families, including mothers with a history of multiple adverse childhood experiences and ongoing experiences of poverty, and children in risk of neglect and maltreatment, child-caregiver play interactions may not necessarily be beneficial for the child. The proposed presentation examines the relationship between the quality of mother behavior and the child's playfulness during a dyadic play interaction, in 71 high risk families. Ten minutes' video-taped dyadic play interactions were analyzed using the Test of Playfulness (Bundy, 1997) and the Coding of Interactive Behavior CIB, Ruth Feldman, 1998). A positive correlation was found between maternal sensitivity and child's playfulness, showing that when the mother was

more sensitive to the child's signals, the child was more playful. In addition, a positive correlation was found between dyadic security and child's playfulness, showing that when the mother's behavior made the child feel secure in the interaction, she was more free to play and express playful behaviors. Promoting play in children at risk of neglect and maltreatment is highly important in light of the known role of play in children's development. The current study sheds light on the relationship between maternal behavior and child's playfulness in families at risk, and contribute to the theoretical knowledge on the relationship between children's play and their environment. The study aims to examine the relationship between the quality of mother behavior and the child's playfulness during a dyadic play interaction.

P01.146

### **RANDOMIZED TRIAL OF A PREVENTIVE ONLINE PARENTING PROGRAM FOR YOUNG CHILDREN WITH BEHAVIORAL PROBLEMS**

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During the first years of life children gradually learn to regulate their emotions and behavior. Still it is common for them to lose control of their emotions. Temper tantrums is among the most frequent reasons for referral to pediatrician or psychological services. Problems in regulating negative emotions in early childhood have been found to be associated with both internalizing and externalizing problems at school age and beyond. There are several effective preventive programs for behavioral problems, but few are online available and are easily accessible for parents. Most of the interventions are based on behavioral principles and don't focus specific on enhancing emotion regulation skills of the child. *Url&Todd* is a short online preventive intervention for parents of children aged 2 till 6. The intervention consists of five cartoon animations (ten minute long). Parents are given insight in how the brain of a young child develops. They learn how to cope with the emotional outburst of their child in a way that promotes regulation skills and strengthens the bond between parent and child. The aim of this research was to study the effect of *Url&Todd*, a short online preventive intervention for parents of children from 2 till 6 years. A randomized controlled trial is conducted. Parents (N=186) are included and followed during a four to six week period. The respondents are randomly divided among three conditions; access to *Url&Todd*, or access to a control condition consisting of written information (positive parenting), or a wait list control group. Main outcome measures are parental self-efficacy and behavioral problems of the child. Secondary outcome measures are emotion regulation of the parent and the child and parenting style. At this moment the 120 participants are included. Preliminary results are promising, especially for the group scoring clinical on behavioral problems. Detailed results are expected in april 2018.

P01.147

### **POST PARTUM DEPRESSION AND CHILD IN THE CONTEXT OF "HUMAN BIRTH THEORY"**

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Peri-partum represents a period of vulnerability for women, encouraging the development of psychiatric illnesses. Post Partum Depression (PPD) is a non-psychotic depressive episode of mild to

moderate severity, extending into the first postnatal year, occurring with a prevalence of 6.5-12.9%. It may have severe consequences for both mother and infant's health, and on cognitive and emotional development occurring in childhood. Little has been investigated about the "non-conscious" dynamics related to birth, whether there is a continuation of the pre-natal condition, or birth represents a breaking point. It is also largely unknown how the cultural ideas about birth may influence the caretaker's way of relating to the infant. Cognitive and Interpersonal therapy are effective in treating PPD. However, we have seen encouraging results in a psychotherapy widespread in Italy, based on the «Human Birth Theory» formulated by the psychiatrist M. Fagioli (1971). We studied literature using Pubmed, Psychinfo, Psylink, and texts discussing the «Human Birth Theory». We also refer to case studies. According to the Human Birth Theory, a primary self is established already at birth. It is characterized by the newborn's capability of relating to the caretakers in a complex way. His "certainty" that other human beings exist and are capable of relating adequately to him, should be confirmed during the first year of life, but it can also be destroyed or impaired. We assume that a mother, who has lost her original capability of sensitivity, might be unable to adequately relate to the infant's self. She might enact what Fagioli (1971) calls the "annulment pulsion", making the infant's self disappear in her mind. The paper discusses the implications on PPD of this invisible dynamic, which can be traced and recovered through dreams interpretation.

P01.148

**"VID-KIDS" VIDEO-FEEDBACK INTERACTION GUIDANCE FOR IMPROVING INTERACTIONS BETWEEN DEPRESSED MOTHERS AND THEIR INFANTS: A RANDOMIZED CONTROL TRIAL (RCT)**

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Postpartum depression (PPD) is 'toxic' to infant development because depression diminishes maternal sensitivity/responsiveness to infant cues. Infants perceive these behaviours as stressful, triggering cortisol release, constraining a critical period of brain development. Treating PPD has not consistently improved interaction quality or children's developmental outcomes. Parenting training, such as VID-KIDS, promotes sensitive interactions that may help infants develop optimally. VID-KIDS is a brief (3-session), nurse-guided intervention designed to improve maternal-infant relationships, reduce depressive symptoms, and optimize infant cortisol. A feasibility pilot (n = 12), showed positive, large effects on maternal-infant interaction quality (d =1.43) and infant cortisol patterns (d=.5). VID-KIDS offers mothers a strengths-based approach for improving sensitivity and responsiveness toward their infants by promoting "serve and return" interactions. We are presently conducting an RCT evaluating VID-KIDS on: 1) maternal-infant interaction quality, and 2) infant cortisol patterns, infant development, maternal PPD and parenting stress. After baseline, over the following 9 weeks, mothers randomized to the intervention receive 3 video-feedback sessions during home visits conducted at 3-week intervals, followed by post-test and delayed post-test (2-month) assessments. Recruitment of depressed mothers with infants aged 2 – 6 months is underway via partnership with Calgary Public Health. To date, 23 dyads have enrolled. If successful, future aims are to conduct economic evaluation, commercialize VID-KIDS for dissemination by NCAST Programs, and examine potential integration of VID-KIDS into existing public health services. This poster will describe the video-feedback intervention protocol and progress to date for a parallel group RCT.

P01.149

**PARENTAL MENTAL HEALTH IN THE FIRST MONTHS AFTER DISCHARGE FROM THE NEONATAL INTENSIVE CARE UNIT: A PILOT STUDY**

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For most parents, giving birth to a (very)preterm infant as well as the consequential hospitalization of their infant at the Neonatal Intensive Care Unit (NICU), are events of profound upheaval. Parent psychosocial support is usually available during NICU-stay but often stops promptly when the infant is discharged from the hospital. Recent studies, as well as experience of neonatologists at their outpatient follow-up clinics, suggest that parents are at risk to develop symptoms of depression, anxiety or post-traumatic stress in the first months after discharge. The aim of this study is to gain more insight in parental mental health problems and their need for psychosocial support in the first months after discharge. Parents were included at their outpatient visit to the neonatology clinic at the VU University Medical Center at the infant's adjusted age of 3 or 6 months. Parents were asked to fill out the Distress Thermometer for Parents and Hospital Anxiety and Depression Scale and a semi-structured interview on parental experiences was conducted. Norm-referenced data were used to evaluate scores on both questionnaires. The interview was quantified. Paternal and maternal problems were compared, as well as whether problems differed with time since discharge. 108 parents (57 mothers, 51 fathers) participated. Compared to Dutch population norms, both parents reported more general distress related to practical, emotional and cognitive problems at 3 months ( $p < .05$ ) and emotional problems at 6 months ( $p < .05$ ). Mothers, but not fathers, report anxiety and depression symptoms at 3 months ( $p < .01$ ) and depression at 6 months ( $p < .05$ ). Interview data show that 57% of the parents have missed psychosocial support after discharge, of which 50% organized without hospital interference. Parents, especially mothers, are in need of psychosocial support in the first months after their infant discharge of the NICU. Screening for parental mental health problems shortly after discharge and referral to psychosocial care needs to be added to standard follow-up care after discharge.

P01.150

**PSYCHOMETRIC ANALYSIS OF THE ALARM DISTRESS BABY SCALE IN A PEDIATRIC MEXICAN SAMPLE**

**Esparza Moreno A.Y.\*, Barrios M., Puigdemívol I., Miralbell J.**

*Dept Psicología Clínica i Psicobiología ~ ~ Mexico*

The Alarm Distress Baby scale (ADBB) was designed to assess sustained withdrawal reactions in infants aged between 2-24 months, and it is currently widely used in clinical practice. However, some studies described different factorial structures. This study aims to compare different factorial structure models and internal consistency of the ADBB in a pediatric Mexican sample. A total of 499 Mexican infants participated (mean age (months): 20.36, SD: 6.53). The internal consistency was assessed by using Cronbach's  $\alpha$ . In order to study factorial structure of the scale and for cross-validation purposes, the sample was randomly divided into two subsamples. Principal Component Analysis (PCA) was performed on the first subsample ( $n = 160$ ), whereas the second sample ( $n = 339$ ) was used to perform Confirmatory Factor Analysis (CFA). Two alternative models were specified for the CFA (one-factor model and two-factor correlated model). Several fit indices were used to evaluate goodness-of-fit: Chi-square significance, Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) with a cut-off criteria of 0.90 or higher, and Root-Mean-Square Error of Approximation

(RMSEA) with values of 0.08 or less indicating good fit. Cronbach's coefficient ranged from .825 to .866. PCA revealed one component which accounted for 48.46% of the variance. Results from the CFA showed that the two models presented good overall fit (One-factor model:  $\chi^2 = 23.061$ ,  $df = 20$ ,  $p = .286$ ; CFI = .997; TLI = .996; RMSEA = 0.021; Two-factor model:  $\chi^2 = 22.224$ ,  $df = 19$ ,  $p = .273$ ; CFI = .997; TLI = .996; RMSEA = 0.022). These results indicated that the scale was a reliable and valid instrument for being used as a screening tool for the evaluation of withdrawn behavior in infants.

### **Infant mental health services, training, teaching, supervision and consultation**

P01.151

#### **INFANT MENTAL HEALTH IN AN ACUTE PAEDIATRIC SETTING: THE TRAINEE EXPERIENCE**

**Holst J., Goldwasser T., Paul C.\***

*Royal Children's Hospital ~ Melbourne ~ Australia*

The unique clinical training experience of a psychiatric and a paediatric trainee in an infant mental health team in a tertiary paediatric consultation-liaison (CL) setting is presented in this poster. An audit is presented of the cases seen; the referral pathways and referrer expectations, medical comorbidities and the treatment provided including the use of the Newborn Behavioural Observation (NBO) where applicable. The team is involved with a range of clinical problems from feeding difficulties in a general medical setting, medical trauma in neonatal ICU, support for infants awaiting transplant, and more. Secondary consultation and liaison is provided in addition to direct clinical work with the infant and family. The CL setting tends to lend itself to high intensity work that can range from brief encounters to longer pieces of work, often without clear indication of how long the engagement will last from the outset. Cases referred were reviewed with regards to diagnosis under the DC:0-5 diagnostic system and the clinical utility of this system in a busy clinical setting, including around the limitations of such a system where the problem may sit with the child, parents, relationship, medical system or some combination of all of these. The trainees carry out the majority of the clinical work, gaining a range of different skills during the placement. A reflection of the experience of training in this setting is outlined with respect to both the learning opportunities as well as challenges.

P01.153

#### **PROMOTING RURAL PARTICIPATION IN THE PROFESSIONAL DEVELOPMENT OF IMH WORKERS**

**Redmond R.\***

*Oregon Infant Mental Health Association ~ Portland, OR ~ United States of America*

Rural infant mental health (IMH) professionals struggle with professional development compared to urban counterparts because of geographic isolation, reduced internet access, distance to in-person trainings, difficulty finding local mentors, etc. Infant Mental Health Endorsement® was rolled out in Oregon starting July 1, 2016. Endorsement® recognizes IMH professionals who have acquired specified IMH competencies through education, work, in-service training, and reflective supervision/consultation. Rural was defined as a community with less than 30,000 residents and not a contiguous with an urban community. Oregon's rural rate of Endorsement®-seeking is 52% (75 out of 143) which is significantly higher than its statewide rural population percentage of 19% ( $\chi^2 = 103.01$ ,  $df = 1$ ,  $p < .0001$ ). The rates for the other three states for which data were available were much lower (Arizona – 11% [10%], Wisconsin – 35% [30%], Kansas – 40% [26%]) and were more in line with their rural population rates [in square brackets].

Rural participation was vastly increased over what would be expected from population estimates. Strategies included:

1. Contracting with local indigenous IMH professionals to provide rural IMH training, network with both rural decision-makers and field staff in a variety of rural venues, and provide in-person and distance-based advising,
2. Offering scholarships for Endorsement® fees and distance-based video Reflective Supervision groups,
3. Creating Endorsement® materials in Spanish and contracting with Spanish-language staff,
4. Negotiating Memorandums of Understanding with rural IMH organizations that they will support Endorsement®,
5. Identifying local Endorsement®-related resources that are missing and providing them; trainings in competency areas, providers of reflective supervision/consultation,
6. Creating rural promoters who will advocate for Endorsement® (e.g., Early Childhood College Faculty to their students, Mental Health Consultants to their consultees).

P01.154

**BABIES' MENTAL HEALTH IN FOCUS MULTIPROFESSIONAL STUDIES FOR SOCIAL CARE AND HEALTH CARE STUDENTS. LECTURER ANNE HILLER-IKONEN, LECTURER ANNE PIRINEN - LAUREA UNIVERSITY OF APPLIED SCIENCES, VANTAA, FINLAND**

**Pirinen A.\***

*Laurea University of Applied Sciences ~ Vantaa ~ Finland*

We describe the interventions that social- and health-care students learn to support early parent-child interaction and parental mentalization. Laurea University of Applied Sciences in Vantaa offers a 5-credit study unit in Supporting Interaction and Mentalization. In order to adapt to reflective family-oriented work and holistic cooperation with families, students need learning assignments that encourage them to apply their knowledge in authentic family situations. Through authentic family cases and simulation-based training, the students can learn different ways to support the capabilities of parents for mentalization. The cases are planned with public health nurses and family workers, and they model the everyday life of the families. Empathizing with the family cases and training by simulation, the students can take possession of an intervention using open, reflexive questions. They learn methods for questioning the parents' thoughts or their non-functional images and beliefs about themselves and their babies and children. By viewing authentic mother-baby videos, the students can be trained to observe and support the early interaction between parents and babies. They become familiar with EPDS (Edinburgh Postnatal Depression Scale) and Diary for expecting families (Folkhälsan, Finland). Authentic Interviews for supporting parent-child interaction with the expectant family or the family after childbirth are also included in the course. Learning models (such as experiential, dialogical, cooperative and flipped learning) applied to lessons and workshops will model a multiprofessional, holistic client-centred approach to working with families in maternity or child health clinics, in family work or in specialized health care for families.

P01.155

**KNOWLEDGE GAINS, TRAINING NEEDS, AND FUTURE DIRECTIONS FOR THE IMH WORKFORCE: INSIGHT FROM A HEAD START AND CHILD WELFARE COLLABORATIVE TRAINING SERIES**

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Following several years of planning and conversation, in 2011 Head Start and Child Welfare leaders in Connecticut launched the first Infant Mental Health joint training of this combined workforce. A

needs assessment revealed staff needed to know how to observe and understand babies as human beings with inner experiences and how to support and preserve critical attachment relationships. CT Association for Infant Mental Health was invited by leadership to contract with local and national experts to provide training. The effort's overall theme was "Working in collaboration to support families with challenges." Training content was related to the Competencies for Culturally Sensitive, Relationship-Focused Practice Promoting Infant Mental Health:® attachment, unresolved loss and trauma, visitation, reflective practice, infant/toddler development, screening and assessment, and cultural responsiveness. This poster documents goals, evaluation design and outcomes, and perspectives of the trainers following six cohorts of training over four years. 189 staff from Head Start, Child Welfare, and Birth-to-Three agencies completed pre- and post-tests geared to content of each training, assessing participants' levels of knowledge on the day of training. Six expert trainers were interviewed by co-authors about their experiences with the training. Prior to training, participants had moderate knowledge in the areas of attachment, unresolved loss and trauma, cultural responsiveness, and reflective practice. Low knowledge was observed prior to infant and toddler development, screening and assessment training and the importance of visitation trainings. Averaged across six waves, participant knowledge levels improved significantly, with moderate to large effects ( $d = .43$  to  $1.15$ ). Three themes emerged from trainers, reflecting core benefits of this approach: 1) The value of training across systems, agencies, and disciplines, 2) the importance of addressing the particular knowledge base and the support needs of the child welfare workforce, 3) participant gains in hearing the voice of the infant/young child and the impact that had on their practice.

P01.156

**POSSIBILITIES FOR PSYCHOLOGY WORK IN MATERNAL AND CHILD CARE AND OBSTETRICS: REPORT OF EXPERIENCE ON A MULTIPROFESSIONAL RESIDENCY IN HEALTH**

**Caetano Da Silva Leão L.\*, Milman Cervo G., Nunes Mousquer P.**

*Grupo Hospitalar Conceição ~ Porto Alegre ~ Brazil*

Maternal and child health care in Brazil has undergone important changes based on experiences in obstetric care. With the implementation of the strategy Rede Cegonha by the Brazilian Ministry of Health in 2011, actions have been carried out, aiming the training of professionals to act in accordance with the humanization of care for mothers and infants, such as residency programmes. The work of Psychology is understood as a fundamental part of these actions, in order to qualify assistance to the dyads. This work is based on the authors' experience in a residency program in Porto Alegre, which exists since 2013 and has residents from several areas. In two years of training, these professionals experience the reality of working with mothers and babies from pregnancy to two years of the baby, in primary care and hospital context. Two case reports will exemplify the work of psychologists in each area, using theories that support the parent-infant psychotherapy. Resident psychologists are supported by weekly supervision and theoretical training spaces, and are also encouraged to have autonomy in multi-professional work. It is considered that the training of psychologists in service with all the apparatus in working with parents and infants is of fundamental importance for the construction of new models of work with quality.

P01.157

**BREAKING DOWN SILOS FOR BABIES: LESSONS LEARNED FROM A UNIVERSITY, STATE, AND COMMUNITY PARTNERSHIP FOR INFANT MENTAL HEALTH WORKFORCE DEVELOPMENT**

**Williamson A.\*, Huffer A., Chesher T.**

*Oklahoma State University ~ Stillwater, OK ~ United States of America*

As the evidence base for the importance of early attachment relationships for healthy development grows, so does the evidence of poor social-emotional outcomes for young children when early experiences involve chronic stress, abuse, neglect, and relationship disruption. Oklahoma currently lacks adequate numbers of mental health clinicians with specialized training in infant mental health (IMH) to meet the needs of young children and families facing these issues. Additionally, the limited financial and human resources for training IMH professionals are often fragmented across multiple systems making it challenging to accomplish large workforce goals within any one silo. To effectively address these issues, there is a critical need for innovative collaborations towards effective infant mental health workforce development. This poster will present a university, state, and community partnership for IMH workforce development and discuss solutions, challenges, and future directions for these types of collaborative endeavors.

P01.158

**CITY OF HELSINKI: THERAPEUTIC WORK FOR FAMILIES WITH INFANTS**

**Hästbacka A.K.\*, Suominen U.**

*City of Helsinki ~ Helsinki ~ Finland*

The aim of this poster is to explore what kind of public psychotherapy for families with infant there is offered and has been in City of Helsinki for over 20 years and how has it changed or not changed. Through the years we have been trying to answer the questions like when, why, how, what, who, relating with working therapeutically with babies and parents. On this poster we would like to introduce some possible answers to these questions now and before. The answers are searched with therapists and clients. The world around us has changed a lot in 20 years, how does that appear in our co-operation with families?

P01.159

**EMBRACING BASIC TRUST: DEVELOPMENT OF AN ATTACHMENT AND MENTALIZATION-BASED COPARENTING INTERVENTION**

**Kranner T.<sup>[1]</sup>, Trost K.\*<sup>[1]</sup>, Brisch K.H.<sup>[2]</sup>**

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A newly-developed short-term intervention for young parent-child triads, its concept and structure, shall be presented. "Embracing Basic Trust (EBT)" is a short-term home-based intervention for young parent-child triads. It aims to foster the development of a secure attachment between the infant and both parents by focusing on the reflective function (Fonagy, Steele, Steele, Moran, & Higgitt, 1991) of the parents. The concept takes into account the importance of the parent's ability to successfully cope with their shared transition to parenthood - the coparenting quality (Feinberg, 2002). The intervention starts when the child is four months old and stretches over a period of three months, consisting of six home visits. Parents are invited to address their own as well as their partner's attachment experiences. Thereby, they get to know their own and their partner's "trigger points" in the interaction with the child. Aim of this task is to enhance the understanding and support for the partner's individual strengths and difficulties, enabling the parents to support each other in challenging situations with the child. Interaction sequences of one parent with the child are observed and commented in a mentalizing way by the mentor. Gradually, with the mentor acting as a role-model, the other parent will then be instructed to use this mentalizing view when watching their partner and child.

Short videotaped sequences will be used to empower and reinforce the parents at the end of the intervention.

The intervention will be evaluated in a longitudinal RCT.

P01.160

### **MOTHER AND INFANT MENTAL HEALTH: IMPLEMENTATION OF A UNIVERSITY GRADUATE DEGREE PROGRAM IN TUNISIA**

**Hamza M.\*, Halayem S., Charfi F., Rim R., Ons A., Samia K., Ahlem B.**

*Faculty of Medicine of Tunis ~ Tunis ~ Tunisia*

Even if the field of perinatal psychiatry remains insufficiently developed in Tunisia, mother and child mental health has been gaining recently a particular interest. In this field, several healthcare professionals have an important role to play in prevention by screening at-risk situations and early identification of peri and postpartum troubles affecting the mother, the child or the dyad. It's in the perspective of raising awareness and collaboration between the different specialists that the university degree "Perinatality and Development" was implemented since 2010 at the Faculty of Medicine of Tunis. This teaching indented to any professional working in the field of perinatology (obstetricians, midwives, neonatologists, pediatricians, geneticists, psychologists, psychiatrists, child psychiatrists, general practitioners...), is held each year at the rate of a 4 hours session per week. The teaching, which is essentially theoretical, is divided into 8 modules: from pregnancy to birth, child development, mother infant early interactions, newborn pathology, maternal mental health and perinatality, filiation and attachment, child psychopathology and early interventions and prevention. Evaluation was initially only ensured by a written test assessing knowledge via clinical cases and essay questions. Later, a clinical presentation was included in the assessment in which the candidate illustrates a mother infant problematic situation and it's evolution through the therapeutic process. Two consecutive satisfaction surveys were conducted leading to integrate tutorials based on videotaped clinical assessments and interventions.

P01.161

### **REFLECTIVE PRACTICE: A TRAINING MODULE AND OUTCOMES FOR 3RD MELLINIUM PROFESSIONALS**

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This presentation is designed to introduce a module on reflective practice that addresses: being reflective, facilitating reflection in others (supervisees, peers, parents, children), understanding reflective supervision and creating reflective organizations. The presentation contains information about the skills and practices necessary for a workforce that is facing increasing challenges as they provide care and treatment for very young children and their families in a world of unrest.

Presentation will include brief discussions of:

- module content;
- underlying theoretical model;
- reflective workplace practice and reflective supervision; and
- Description of training activities included in the module that enhance reflective skills.

Presenters will share outcomes gathered after using the module for over five years with multiple audiences from multiple disciplines (e.g., child welfare, early care and education, early intervention, home visitors, recovery clinicians, etc.), including pretest-posttest data, engagement of participants in reflective supervision groups and attainment of Endorsement in Culturally Sensitive, Relationship

Focused Practice Promoting Infant Mental Health®.

P01.162

### **WATCH ME GROW! AN EXPLORATION OF REFLECTIVE CLINICAL PRACTICE IN A HOME BASED SETTING**

**Lesniak H.\*, Hathaway S.**

*Starfish Family Services ~ Livonia ~ United States of America*

Many parents of young children served by community agencies have experienced multiple negative childhood experiences that affect their ability to reflect on their children's behaviors and experiences. Clinicians are vicariously impacted as they are exposed to the stresses in the lives of the multiple families they work with. Negative impact on the quality of clinical work and burn out is common. What the clinician brings to the supervisor during reflective supervision can influence the quality of the supervisory experience as well as their relationship with their families they are working with. Through clinical case presentation, we will explore reflective practice strategies that promote both a deeper understanding of the family as well as a deeper understanding of the clinician's own experiences. Our parent/infant dyad lives in an urban area in a home with multiple children, and is impacted by many stressors including poverty, limited access to transportation, and intergenerational trauma. Participants will sit with the layers of relational and environmental factors that impact this child, parent, and family. We will look at a specific clinical tool in the form of a hand out that will prompt professionals to reflect upon the parent/infant dyad, the family context, and the therapist's own feelings and experiences. This process will prepare the clinician for reflective supervision, with the aim of deepening the supervisory experience. Interactive discussions and videos will help participants think about what implementation looks like and how they may use some of the strategies in their own work environment.

P01.163

### **NBO ONLINE COURSE - AN RESOURCE IN TRAINING**

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The aim is to present an online course of a brief intervention, the Newborn Behavioral Observations (NBO) system. The course is developed as an additional resource in the Norwegian NBO-training. We will share our experience of the digital learning platform and show the outline and features. The NBO is a relationship-based and individualized intervention designed to support a positive parent-infant interaction. A recent study found that the NBO was associated with reduced odds for depressive symptomatology in mothers during the first month after birth, and increased maternal sensitivity and reduced intrusive and hostile behaviour. The NBO-training originated in USA, by professor Nugent. In Norway this training is refined and extended in terms of length and instructional feedback. So far, 650 infant mental health practitioners has completed the nine months training in Norway. However, altering practice is demanding, thus implementation research suggest varied training methods. The NBO E-course provides the students with the opportunity to continue learning self-paced online in between training days. It comprises seven modules with text and videos, aiming to teach the students to administer the tool, gaining knowledge of the theoretical

base of the tool, enhance their observation skills and how to talk with the parents about their infant's signals.

P01.164

**COLLABORATIVE INTERFACE BETWEEN AN ESTABLISHED CHILD AND ADOLESCENT MENTAL HEALTH SERVICE (CAMHS) AND A NEW PARENT INFANT INPATIENT UNIT (PIU) IN A REGIONAL CONTEXT**

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*Bendigo Health Child and Adolescent Mental Health Service ~ Bendigo ~ Australia*

Evidence how an existing Child and Adolescent Mental Health Service (CAMHS) can support the establishment of a new Parent Infant Inpatient Unit (PIU) to develop an effective ongoing collaborative service interface. Bendigo Health established a new Parent Infant Inpatient Unit (PIU) in 2017. CAMHS participated in the PIU reference group with particular consideration of the needs of the infant and promotion of parent-infant relationship within the PIU to be located within the Adult Mental Health Service Inpatient Precinct. CAMHS assisted coordinate a comprehensive training program for PIU staff prior to the unit opening. This drew on the support of services from the Bendigo Parent Infant Mental Health Network recognising many incoming PIU staff clinical background was from the adult psychiatry domain. CAMHS and PIU have continued to develop an ongoing service interface. This includes CAMHS representation at PIU Clinical Team Meetings, reflective practice sessions and supervision as well as the opportunity for CAMHS manager to backfill PIU Nurse Unit Manager as required. CAMHS provide a staff member to facilitate a mindfulness group on the PIU; and where indicated has facilitated family session on the unit and community follow-up of Parent Infant work. In a reciprocal relationship, the effective collaborative interface with the PIU provides CAMHS an opportunity to support the development of their staff's clinical experience in the Infant domain, as well as an opportunity for early intervention where parent-infant dyads can be identified for follow-up by the CAMHS community team where clinically indicated by the PIU.

P01.165

**INFANT AND EARLY CHILDHOOD MENTAL HEALTH IN GENERAL PSYCHIATRY AND CHILD AND ADOLESCENT PSYCHIATRY TRAINING PROGRAMS IN CANADA**

**Matheson K.\*, Lelli M.**

*University of Ottawa ~ Ottawa ~ Canada*

A child's first 6 years of life are crucial in setting the stage for lifelong mental health. Serious mental health problems can occur in the very young, manifesting as social, emotional or behavioural problems. Reported prevalence rates are estimated to be between 12-18%, and children do not generally out-grow these problems. The Ontario Centre of Excellence for Child and Youth Mental Health's published report highlighted the need to invest in training the Infant and Early Childhood Mental Health (IECMH) workforce.

1. To highlight the importance of IECMH education for General Psychiatry and C&A Psychiatry residents
2. To describe the current landscape of IECMH education in Psychiatry training programs in Canada
3. To discuss the need for improvement in IECMH education in Psychiatry training programs

Introduction

The proposed study is a survey of IECMH training opportunities for residents in General Psychiatry and Child & Adolescent Psychiatry (CAP) training programs in Canada. Questionnaires were created for Program Directors of General and CAP programs and all Program Directors were invited to

participate in the electronic survey. Questions address different modalities of instruction and exposure to IECMH. Qualitative data was aggregated in themes. The response rate was 50%. Didactic teaching in IECMH was provided in 7/7 programs. Half the programs mandated clinical rotations with this age group and 5/8 programs offered research opportunities. Most Program Directors (5/7) reported that they felt that training in IECMH should be a mandatory part of CAP subspecialty residency training. Program Directors identified the following as barriers to change:<sup>[1]</sup> (1) A high demand for other child and adolescent services; and<sup>[2]</sup> (2) A large number of Royal College requirements already in place, making the addition of more a challenge to accommodate. There is significant disparity in residents' current exposure and education in IECMH across the country. Numerous Program Directors reported IECMH to be an important area of curriculum development for residents. The lack of Royal College defined training objectives for IECMH, as well as the need to satisfy many other training objectives, make implementation difficult.

P01.166

**THE CROWELL-PROCEDURE AND WORKING MODEL OF THE CHILD INTERVIEW AS ASSESSMENT METHODS FOR THE CHILD PROTECTION SERVICES: TRAINING AND SUPERVISION IN A RURAL AREA**

**Goksøy A.\*<sup>[2]</sup>, Langlo B.O.<sup>[1]</sup>**

*<sup>[1]</sup>Førde and Gaular child protection services ~ Førde ~ Norway, <sup>[2]</sup>Regional Centre for Child and Youth Mental Health and Child Welfare, Uni Research Health ~ Bergen ~ Norway*

There has been a substantial increase of preschool children referred to the child protection services (CPS) in Norway and a demand for valid methods for assessment. The Crowell-procedure and the Working Model of the Child Interview is known, but little used. The CPS need regular training and supervision because of a high turnover. Our project takes place in a very rural part of Western Norway with 110.000 inhabitants and no town of more than 10.000 inhabitants. The CPS is organized in 15 offices in several small villages, and some with a staff of only 4–5 professionals. Travelling around is difficult especially in the winter because of poor roads with many ferries, bad weather and possible rock- or snowslide. The project started in 2014 and is ongoing. The participants are professionals from the CPS (N=79). They have received training with subsequent supervision in clinical use of the Crowell procedure, and some (N=35) have also had training in the WMCI. Half of the participants are using the Crowell-procedure; it is helpful and easy to use. Few utilize WMCI because it is difficult to interpret. The trainings have been time consuming. The participants need effective supervision to be able to combine the Crowell observations with WMCI, and they must use less time spent to travel to the training and supervision. Our experiences with learning management systems will be discussed.

P01.167

**EVALUATION OF THE OKLAHOMA INFANT MENTAL HEALTH WORKFORCE DEVELOPMENT INITIATIVE**

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Oklahoma currently lacks adequate numbers of mental health clinicians with specialized training in infant mental health (IMH) to effectively handle the large number of families in need of IMH services. By blending funding from federal and state sources and coordination from multiple state agencies and institutes of higher education, Oklahoma developed the Infant Mental Health Workforce Development Initiative to address this issue. This initiative is ongoing with new cohorts beginning twice per year. It offers workforce development to currently practicing clinicians and includes a three-tiered approach: 1) reflective consultation with a seasoned IMH professional; 2) a

graduate level course on IMH assessment and development with a child psychiatrist specializing in IMH; and 3) preparation for participation in a Child Parent Psychotherapy Learning Collaborative. The evaluation of the initiative includes pre- and post-test surveys measuring participants' self-efficacy in reflective consultation and their knowledge of eight core competencies in the field of IMH. Significantly higher means between pre- and post-test measures were found in all eight competencies and in self-efficacy for reflective consultation indicating that participants' who completed the initiative also successfully improved their knowledge and self-efficacy. Participants also engaged in structured interviews about their experience in the workforce development initiative after its completion. Qualitative results indicate that clinicians felt more prepared to expand their practice to include infants and their families after taking the course and that having outside support in the form of reflective consultation was significant. However, many indicated that they felt they needed additional training in interventions for this population. Barriers to serving infants and their families in Oklahoma were also illuminated, such as not having adequate physical space, materials for assessments, and the limitations of billing codes to effectively meet the high therapeutic needs of infants and families.

P01.168

**HOLDING IN MIND THE SUPERVISOR, TRAINEE AND FAMILIES SERVED AT THE PREGNANCY TO PARENTHOOD CLINIC**

**Matacz R.\*, Priddis L., Thornton J.**

*Edith Cowan University ~ Perth, Western Australia ~ Australia*

The ECU P2P Clinic provides an early identification and early intervention perinatal and infant mental health (PIMH) service to infants, young children and families from pregnancy through to 3 years. It is the only specialized no cost PIMH service in the Wanneroo/Joondalup catchment area of Western Australia (comprising of 30 suburbs with a population size of 189,000). Interns provide this service under the direct supervision of an experienced clinical psychologist specialising in PIMH. Referrals are received by a range of agencies including hospitals, community and mental health services. Aims of the presentation are to demonstrate how principles of IMH are translated into practice and to offer the perspective of the families we serve. A mother and her young child were referred to P2P with PIMH concerns. This workshop will offer three different perspectives of this clinical case: the IMH reflective supervisor, IMH trainee and the family served. Central components of the assessment and intervention model will be shared through exploring different perspectives of the family's journey with the P2P service which will include (1) development of a mentalizing formulation with the family (2) interpersonal processes of containment and holding (3) parallel processes (4) therapeutic process and outcomes and (5) use of video clips and still pictures of the dyad. Video material will be presented and there will be opportunity for discussion and reflection of the material throughout the workshop.

P01.169

**PRACTICE OF REFLECTIVE GROUP SUPERVISION IN NURSERY SCHOOLS IN JAPAN**

**Dalrymple N.\***

*Chubu Gakuin Junior College ~ Gifu ~ Japan*

In Japan, there are many nursery schools which have their own case-study meetings for their cases. Although a lot of nursery school teachers recognise the importance of understanding the relation between mothers and small children, there are few nursery schools where teachers organise reflective group supervision based on infant mental health theory. I explored reflective group supervisions by a NPO group where the board members had studied IMH for a long time.

In this study, I examined how teachers understood infant mental health theory, and how reflective group supervision worked for teachers. And I also examined how these aspects affected their work with children. I investigated the NPO group's training programme for nursery schools. I examined their system for training. Some teachers who attended the training wrote an essay in which they reflected upon themselves about their work and children. I examined their essays and also the NPO's report to find out how teachers change, from the first to the last session, over three years. I also interviewed a supervisor and some teachers. Teachers changed a lot in the way they thought of children and themselves. It took time for them to understand theory. It also took time to observe children and families from the IMH point of view. However, when teachers understood the theoretical viewpoint, they were able to observe and understand children deeper. They could accept their own feelings which they had previously desired to avoid. They could empathize not only with children but also mothers and families. I will show the results in more detail. I found that the NPO group effectively organizes reflective group supervision. Teachers understand that it is important to work with children from a relation-based point of view and to understand that all children's behaviour has meaning.

P01.170

#### **EFFICACY AND OBSTACLES TO UTILIZATION OF THE NEWBORN BEHAVIORAL OBSERVATIONS (NBO) SYSTEM BY HEALTHCARE PROVIDERS IN JAPAN**

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The Newborn Behavioral Observations (NBO) system is a useful intervention tool for development of the relationship between baby and family until 3 months after birth. It has already been used in many countries. In 2016, we held the first NBO training for healthcare providers in Japan.

The aim of this study was to analyze the efficacy and obstacles related to utilization of the NBO system by Japanese healthcare providers in a practical setting. The participants answered pre- and post-training questionnaires. After 1 year, we sent them another web-based questionnaire. The questionnaire addressed their practical experience with newborns and their parents, their confidence level as an expert, any specific challenge with the NBO system, and backgrounds; the resultant dataset was analyzed. Associations between demographic data and variables were analyzed using descriptive statistics and paired t tests. Their descriptions were coded and categorized. Fifty participants returned both pre- and post-training questionnaires. Most of them were experienced professionals in the perinatal field (Average 144.61 months). Before the training, the pediatricians, NICU nurses and physical therapists were always made a notice of newborn behaviors, but some psychologists and midwives answered occasionally. All participants tended to have less confidence in their own abilities, particularly regarding observing newborn behavior, helping parents learn what their infant's behavior means, and responding to their infant's cues. After the training, their confidence increased significantly (pre-training average 72.82±3.58, post-training average 92.18±2.97,  $p<.003$ ). They anticipated ethical barriers and lack of understanding regarding the use of NBO. The experience of NBO training was a good chance for the participants to reflect on their practice and boost their confidence regarding caring for newborns and their parents. We need to confirm the evidence regarding use of the NBO system in a practical setting in Japan and to popularize its use. This study was supported by a JSPS Grant-in-Aid for Scientific Research (C)16K12115.

P01.171

**A QUALITATIVE ANALYSIS OF STRESS AND COPING AMONG EARLY CHILDHOOD INTERVENTIONISTS: EXPLORING THE ROLE OF REFLECTIVE SUPERVISION**

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Reflective supervision is recognized as an important component of infant mental health training and practice (e.g., Tomlin, Weatherston, & Pavkov, 2014). Given the high levels of job stress reported by a variety of early childhood professionals, the present study offers a qualitative examination of early childhood interventionists' perceptions of stress and coping before and after receiving regular reflective supervision. Aims of the study were to examine continuity and change in the quality and quantity of participants' responses to questions about their job-related experiences and to identify key themes that could inform future efforts to incorporate reflective practice into early childhood settings. Thirty-three early childhood interventionists received nine months of reflective supervision and completed semi-structured interview questionnaires at the pre- and post-assessments. Questionnaires focused on job-related experiences, including what participants found enjoyable and stressful and how they coped with job-related stress. Inductive analysis techniques were used to identify themes that arose from the data. Responses were open coded by sentence, coded across question, and coded across pre- and post-assessments by three coders. Relationships between themes were discovered through axial coding. Three key themes of individual, relational, and organizational stress were identified across the pre- and post-assessments. These same themes were evident in participants' reports of coping. In addition, participants described their professional identities in terms of both efficacy/agency and personal fulfillment. Following 9 months of reflective supervision, analysis of post-assessments revealed greater detail and reflection among the majority of participants. These results contribute to the literature through identification of multiple levels of work-related stress and coping. In addition, areas of continuity and change among participants following 9 months of reflective supervision were identified. Future research should consider how early childhood interventionists' reports of stress, coping, and professional identity relate to their reported self-efficacy and observed competence with young children and families.

P01.172

**PROMOTING A NURSE LED SERVICE FOR INFANTS SLEEP PROBLEMS AT HEALTH CARE CENTRES'**  
**Skuladottir A.\*, Sigurðardottir A.O.**

*Landspítali University Hospital, Childrens unit ~ Reykjavik ~ Iceland*

A service for sleep-disturbed infants has been offered in the Landspítala University Hospital in Iceland for decades. In the process of promoting a better service for infants sleep problem at the health centers. A training course was set up by the service for health care nurses and a pilot study to test the affect of that course on children'ss sleep and well being of their parents. Participants were 6 experienced nurses from 6 primary health care centers and their clients (40-50 families). The training course "Improved sleep – Better live" include 4 whole days of teaching (one each week). After that it develops in to a weekly guidance where the health care nurses starts to bring their own cases/stories to reflect on and receive guidance. The theoretical framework in the course is based on the knowledge of the individuality of the child, empowerment of parents, and the important of individualized care within a family context. The relationship of the nurse with individual members of the family is viewed as partnership in which each person contributes to the treatment protocol. The services /(intervention) are taught as multifaceted. The nurse should listens actively and empathetically to the parents. Their concerns and problems should be recognized as real. The

parents need to learn about individuality of their child and developmental needs. They should be informed how to support it's self-soothing capacity; and to regulate rhythmic daily activities such as feeding and sleeping. Treatment can be different for individual child/family. The intervention includes 2 interviews (one hour each) with the nurse and one phone call, with 3-4 weeks spectrum. The data is collected both before and 7-10 days after the nurse intervention. Currently the authors are working on the projected and results will be ready for presentation at WAIMH 2018. It is expected that the study will lead to a better understanding what education and guidance is needed to strengthen the health care nurses to work with families with sleep disturbed infants.

P01.173

**FATHERS AND THE FAN MODEL: (AT)TUNING IN TO FATHERS OF INFANTS AND YOUNG CHILDREN**

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This presentation utilizing the FAN model's five core processes shares our approach, highlights lessons learned, and demonstrates elements from the professional development workshop implemented for professionals to engage with fathers. Important elements include aligning professionals' focus on common purpose; engaging self-exploration and awareness of professionals' beliefs, values, and attitudes about fathers, fathering, fatherhood, and men; highlighting research on the unique contributions of fathers; and presentation/reflection about utilizing the versatility and flexibility of the FAN core processes when engaging with fathers during home visits. As a national model in the U.S., the FAN (Facilitating Attuned Interactions) model was developed by Linda Gilkerson, PhD, executive director of Fussy Baby Network and professor at Erikson Institute in Chicago, Illinois, as a process-oriented communication and engagement tool for home visiting professionals to support parents around their infants' and young children's development and challenging behaviors. The model identifies five core processes that are designed to guide professionals to be attuned with parents and to address parents' immediate concerns while attending to the professionals' own activated emotions. The utility of the FAN model for home visitors with varying skills and experience has not translated to increased engagement with fathers and infants in home visiting services. How can we assist professionals to utilize the FAN model with fathers more readily, more meaningfully and in deeper ways? To address this question we conducted focus groups with fathers and mothers, explored the literature, and consulted with professionals who specialize in engaging with fathers and infants.

P01.174

**INITIAL COMPLAINTS IN THE PARENT-INFANT PSYCHOTHERAPY IN THE SOUTH OF BRAZIL**

**Frizzo G.B.\* , Schowchow M.S., Mallmann M.Y., Pedrotti B.G., Silva M.D.R.**

*Universidade Federal do Rio Grande do Sul ~ Porto Alegre ~ Brazil*

The initial complaints in parent-infant psychotherapy can sometimes denounce the main signs of psychic suffering of infants, mothers and fathers. Given the importance of these issues raised by families with infants, the present study aimed to understand the complaints presented in the initial period of treatment in a parent-infant intervention center in a public university in the south of Brazil. Through a descriptive design, the initial complaints presented in the reports of 23 families that had been assisted in this service between the years of 2013 and 2017 were analyzed. The results found in this investigation pointed to the existence of three central axes related to the complaints: infant's psychofunctional symptoms, difficulties related to motherhood and concerns regarding infant development. The initial complaints of infant's aggressiveness were the most frequent in this study,

followed by difficulties in interaction and in the bond between mother and infant. With these findings, it is expected to improve the understanding of development of families with infants and also to encourage health promotion in families with infants.

P01.175

#### **HOME-VISITING AS A RESOURCE FOR THE PSYCHOLOGICAL INTERVENTION IN EARLY INFANCY**

**Modesti C.\*, Mandressi S., Carnesale S.**

*Apriti Sesamo Co-op ~ Rome ~ Italy*

Matteo is a three years old child with a diagnosis “Multisystem Developmental Disorder” made after the launch of a cognitive behavioural therapy started due to a behavioural regression observed by his parents. The centre where Matteo carries out his CBT therapy requested to a linked Co-op to start a home-visiting psycho-educational intervention aimed at generalizing and sustaining the abilities acquired in therapy. The home-visiting intervention, currently underway, is carried out by a psychologist and supervised by the psychologist and psychotherapist in charge of the aforementioned Co-op service; the home-visiting are weekly and lasts three hours each. Networking meetings with Matteo’s CBT therapist and school are provided. The home-visiting service allowed to observe how the difficulties spotted by the diagnosis are integrated in Matteo’s daily life. Above all the aforementioned service revealed also the link between these difficulties and the relational dynamics between the child and his parents, facilitating in a such way a direct intervention on them. The home-visiting with Matteo and his parents appeared to enhance a process of promotion and sustainment of a positive development both for the child and his family due to the chance, typical of a such setting, to allow an access and intervention on the strong and weak points of their daily life context.

P01.176

#### **CHALLENGES FACED BY FAMILIES OF CHILDREN WITH AUTISM SPECTRUM DISORDER IN BRAZIL**

**Sulzbach S., Sulzbach Frischenbruder S.\***

*UFRGS ~ Porto Alegre ~ Brazil*

There is greater identification of children with autism spectrum disorders (ASD) and, as a result, more attention to specialty services to address the challenges children with ASD face. In Brasil, even with the recent Guidelines for the Care and Rehabilitation of Individuals with ASD published by the Brazilian Ministry of Health, families with children with autism spectrum disorders still face many health-care related access issues, including lack of autism specialists, long waiting lists, language and cultural barriers, transportation issues, and other financial barriers. This study aimed to understand the information quality offered to the families of children with ASD about their rights in health and identify how has been occurred the process of guidance on public health policies. This is a qualitative research with 25 families of children diagnosed with ASD from outpatient clinic of the Institute of Psychology of the Federal University of Rio Grande do Sul, South of Brazil. Psychological information was collected through semi-structured interviews that were interpreted through content analysis. The sociodemographic questionnaire covered questions such as the child’s age, sex, birth order and level of education. Details on the mother and father’s age, marital status, level of education, employment status and the type of occupation were also required. In addition to interviews, undergraduate students of Law provided educational workshops and direct advocacy services to families who need more direct support. Families received insufficient information about the rights of their children, regarding both access to health and access to education. The Brazilian Unified Health System needs to improve the care of children with ASD through educational actions to families, guaranteeing access to their rights as a citizen.

**Monday 28 May 2018**

**Poster Sessions**

**POSTER PRESENTATIONS P02**

**Cross cultural studies - Global strategies for infants, families and communities**

P02.1

**PRELIMINARY EVALUATIONS: NARRATIVE-LED WORKFORCE DEVELOPMENT**

**Crouch K.\***

*Mallee District Aboriginal Services ~ Mildura ~ Australia*

For Aboriginal Australians who have experience of intergenerational trauma, contemporary provisions of professional development regarding infant mental health can be overwhelming. Integrating sound clinical theories with culturally safe, trauma-informed wisdom is required to develop the frontline indigenous workforce around infants and vulnerable families. The aim of this study was to investigate whether culturally-informed mechanisms in training could enhance an improved awareness of best practice theory and intervention regarding infant development and trauma-informed care for Aboriginal and non Aboriginal frontline workers. Materials included the antenatal yarning resource 'Wondering From The Womb', symbol-cards, stickers, handouts, you-tube videos, textas, pencils, glitter glues and pre-post test evaluation forms. Session content included the 9 antenatal narratives from 'Wondering From The Womb', each paired with current best practice theories and perspectives of healthy infant development and family support. Following each narrative being read aloud, the yarning circle discussed paired theory and participants were encouraged to reflect on their experiences and draw key learnings on a mandala template. On completion of the session, personalized mandalas were created by each participant. Pre and post session data was collected. Two 6-hour sessions, both with 7 participants from Aboriginal and non Aboriginal backgrounds, have been completed (N= 14). For the poster presentation in 2018, there will be no fewer than 50 participants contributing to the evaluation of this study. Qualitative data from the first 2 sessions indicate strongly favourable responses from all 14 participants. Powerful endorsement of antenatal reflections, yarning and art making is evident. Pre and post test data indicates increased participant awareness and confidence with theories and frameworks. Greater data sources over the next few rounds of training will be analyzed and tested for statistical significance. Preliminary feedback identifies great need for this culturally-indicated, integrative approach to sharing wisdom. More training sessions are to be completed.

P02.2

**INFLUENCE OF FAMILY ENVIRONMENT IN THE GENERATION OF CO-MORBID DISORDERS IN CHILDREN WITH DHD**

**Moneta M.E.\***

*Maria Eugenia Moneta ~ Santiago de Chile ~ Chile*

The present paper points towards the influence of attachment and environment in particular family environment in the course of mental illnesses as in the case of conduct disorders in infancy. Thus, the interaction that occurs within the dyad Mother-child helps infants to regulate affect. These experiences may provide infants with effective regulatory strategies creating long lasting effects at the behavioral and physiological level as well as the level of gene expression. Mother sensitivity and mothers' attitude towards the child and in conjunction to attachment in early infancy may have a role to play in the generation of conduct disorders. The sample of 47 children underwent a battery

of neurological examinations to determine possible psychiatric co-morbidity described somewhere else. 30 controls children were selected from a public school. Attachment security (security / insecurity) was assessed by studying the child's perception of security with the main care person (usually the mother). For measuring child's perception of security and quality of parental style we have used the Security Scale (SS) Kerns, Keplan and Cole.) We found higher number of insecure children according to the SS in the group presenting more co morbidity. We determined that insecure children, those presenting lower scores in SS, presented much more co morbid behaviors such as ODD, than children presenting one co- morbid behavior and showing higher security scores (secure attachment) COM (-). The present paper demonstrates that the presence of co- morbid behavior inversely correlates to attachment perception of security in children. Although genetic contribution has an important role in the manifestation of ADHD, parents and rearing environment may still play a role in the development of illness, comorbidity [17, 34] and treatment success.

P02.3

### **ENHANCING INFANT MENTAL HEALTH OUTCOMES FOR INFANTS AT RISK OR IN OUT-OF-HOME CARE ENTERING THE EARLY LEARNING SECTOR**

**O'Donnell A.\***

*Australia ~ Australia ~ Australia*

Goodstart Early Learning is a not-for-profit social enterprise and Australia's largest early learning provider (0-5years). Our vision is for Australia's children to have the best possible start in life. Every day, more than 13,500 Goodstart staff support over 60,000 families and 71,500 children that attend our 650 centers nation-wide. Research supports the vital role early childhood education environments play in providing secure and nurturing environments for infants exposed to traumatic events or traumatised. To provide an optimum transition into early learning services for infants who are experiencing or have experienced trauma, especially those referred from child protection services, it is important that the trauma needs of each individual infant are considered and that there is a clear process for communication between the child protection service and early learning service. In the past, there has been limited communication between child protection services and the early learning sector. This was even more probable if infants were enrolled in centres over the phone by child protection agencies with a request of immediate placement due to the high risk child protection concerns. Educators would have no knowledge of who was dropping off and picking up the infants, details of access visits, or other important information such as the infants' sleep, settling and feeding routines. To meet the needs of their most vulnerable infants and improve infant mental health outcomes, Goodstart Early Learning developed trauma informed policies, procedures and practices to be implemented nationally. A presentation of one infants Emotional care plan.

P02.4

### **CHILDREN WITH AN IMMIGRATION BACKGROUND: CHALLENGES AND THE NEED FOR SUPPORT WITH SOCIAL INTEGRATION AND EDUCATIONAL DEVELOPMENT. INSIDE VIEW OF FAMILIES WITH AN IMMIGRANT BACKGROUND IN SWITZERLAND**

**Schöllhorn A.\*, Kosorok C., Luginbühl D.**

*Pädagogische Hochschule Thurgau ~ Kreuzlingen ~ Switzerland*

With regard to their social integration and educational development, children from families with an immigrant background are still disadvantaged in Switzerland. There is much controversy in the discussion about possible reasons and the measures necessary to ensure equality of opportunity. It is clear that the challenges experienced by the parents and their need for support have little empirical documentation. Furthermore, research and practice have paid little attention to the

heterogeneity of parenthood.

These gaps will be closed by our research questions:

- What perspectives do parents with an immigrant background have regarding the social integration and educational development of their children?
- What are the resulting challenges and needs for support?

The sample was put together via selective sampling. The criteria were educational and socio-economic status, length of stay and residence permit status of the parents. The children were aged from infancy until adolescence. Data were collected via qualitative, semi-structured interviews. They were transliterated and evaluated using evaluation methods of grounded theory and qualitative content analysis. Overall, twelve topics were identified which were relevant for the parents. In addition to challenges and needs for support with respect to immigration, the interviewees also mentioned challenges for parents in general. Subjects related to immigration were, for example, language (encouragement of first language and second language), affiliation (to feel affiliated and to be considered as affiliated), discrimination (attitudes and preconceptions, expectations) and information (about legal formality, educational system, living together in organisations). The results show differentiated challenges and the need for support regarding social integration and educational development of the children. The main findings point out the lesser role of the variety of origins when referring to the need for support. The educational and socio-economic status, length of stay and residence permit status of the parents are the crucial aspects which should be taken into consideration. There is a need to adjust the support for children base on these aspects.

P02.5

### **CONFIDENCE BUILDING IN INFANCY: AN ANALYTICAL STUDY OF INFANT EMOTIONAL BEHAVIOR PATTERNS**

**Fisher A.\*<sup>[1]</sup>, Carter P.J.<sup>[2]</sup>**

*<sup>[1]</sup>ZEROTOTHREE ~ New Jersey ~ United States of America, <sup>[2]</sup>Department of the US Navy ~ Virginia Beach ~ United States of America*

One aspect of social-emotional behavior is the level of confidence demonstrated by the infant. This study examined whether ethnicity, gender, temperament, and parental nurturing skills are related to infant confident behavior during situations of play and attachment/separation transitions. The study served as the beginning test phases of reliability and validity for the 10-item FIOT™ (Fisher Infant Observational Tool), an observational assessment instrument created for use by parents and practitioners working with infants between the ages of 6–12 months. The FIOT is intended to measure confident behavior and is designed to be sensitive to infants and parents from bicultural contexts as well as from the dominant culture. The sample included 77 infants and 77 parents from three cultural groups: African American, Caucasian American, and Latino/Hispanic American. Infants between 6–7 months and 11–12 months were observed within 3 different temperament groups. The FIOT demonstrated internal consistency reliability of .79 using Cronbach's alpha. Interrater reliability of the FIOT was measured by percent agreement (items ranged from 87.5% to 100%) and Cohen's Kappa (items ranged from .63 to 1.0). The utility and content validity of the FIOT was examined through conducting a focus group with parents. The analyses showed a relationship between the infant's FIOT score and two variables, ethnicity and temperament. Infants from the dominant culture and those with easy temperaments showed higher levels of confident behavior. No significant relationship emerged between the FIOT and gender or parental nurturing skills. The objective of the current investigation was to identify infant emotional behavior patterns and provide adults with a unique tool that would help assess early behavior and perhaps redirect the onset of negative patterns during infancy. Continued research on the FIOT is recommended.

P02.6

### **DECOMPOSE AND NARRATE: THE DEVELOPMENTAL CHALLENGES OF THE DIVORCED MOTHER IN ISRAEL**

**Rottenberg B.\*<sup>[1]</sup>, Krapf C.<sup>[2]</sup>**

*<sup>[1]</sup>University of Haifa ~ Haifa ~ Israel, <sup>[2]</sup>Haifa ~ Haifa ~ Israel*

The poster will conceptualize motherhood as a self-state which is based on the capacity to narrate in the spaces between maternal self-narratives and maternal child focused narratives. Bibliotherapy will be presented as a psychological channel that focuses on the development of the capacity to narrate by facilitating a maternal subjective playground. The ideas will be illustrated by in depth interviews with Israeli Jewish divorced mothers and Elena Ferrante's Book The days of Abandonment

P02.7

### **CROSS-CULTURAL DIFFERENCE IN EARLY SOCIO-EMOTIONAL EXPRESSION, AND LATER EMOTION REGULATION AND PROSOCIAL BEHAVIOUR**

**Bozicevic L.\*<sup>[1]</sup>, De Pascalis L.<sup>[1]</sup>, Montiroso R.<sup>[3]</sup>, Murray L.<sup>[2]</sup>**

*<sup>[1]</sup>University of Liverpool ~ Liverpool ~ United Kingdom, <sup>[2]</sup>University of Reading ~ Reading ~ United Kingdom, <sup>[3]</sup>IRCCS Eugenio Medea ~ Monza ~ Italy*

Emotion regulation is essential for healthy socio-emotional and psychological development, and it has been especially associated with prosocial behaviour. Parental practices, fundamental for promoting ER since the first months of life, are influenced by caregivers' cultural values and beliefs about what is socially acceptable and desirable for their children. The present study aims to contribute to the sparse literature available on the effect of culture on infant socio-emotional expressions, on maternal responses to them and on later child socio-emotional abilities. Using a longitudinal, cross-cultural design, infant socio-emotional expressions and maternal responses to infants' social and emotional cues during face-to-face mother-infant interactions were assessed in 55 mother-infant dyads from UK (N=21) and Italy (N=34) at 2 months of infant age. The children were assessed again at two years for emotion regulation (ER) in the face of frustration, using the barrier task paradigm, and for prosocial behaviour, during a 'help task'. Results showed differences between cultures in some ER strategies ( $p < 0.001$ ), but not in child prosocial behaviour, which was, in turn, found to be positively associated with active and constructive strategies, and negatively associated with less directed and developmentally advanced strategies, regardless of group ( $p < 0.001$ ). In early interactions, the groups showed no difference in the overall rate of infant socio-emotional expressions, but differed in their sub-types (i.e. more pre-speech in UK and more smiles in Italians -  $p < .001$ ). Maternal responsiveness to different infant socio-emotional cues also differed by culture ( $p < .01$ ). In conclusion, cultural differences found in early infant communication and emotional expressions, and maternal responses to them, as well as differences in ER help explain the transmission of cultural values. Further research should explore the association between early behaviour dimensions and later child outcomes.

P02.8

### **WORKING WITH REFUGEE PRESCHOOLS IN TEL AVIV-YAFFO: A DEVELOPMENTAL-EDUCATIONAL INTERVENTION MODEL**

**Bindel Jelinek D.\*, Tadmor M.**

*EPS Tel Aviv municipality ~ tel aviv ~ Israel*

In the metropolitan area of Tel Aviv-Yaffo, 15% of the child population in preschool age group are refugees from conflict zones. The Tel Aviv-Yaffo municipality's Educational-Psychological Services

(EPS) initiated a pilot intervention program as part of the efforts to provide refugee children with well-being and educational setting from the age of three years. Our intervention model was based upon Bronfenbrenner's Ecological Model (1979), and had to take into account both the difficult conditions of the children growing up as refugees in Israel, inadequate daycare arrangements from very early age, and cross-cultural encounters with preschool teachers. During the past two years, this ongoing intervention model was implemented in eight preschools attended by refugee children. The intervention, designed and carried out by a multilevel collaboration between developmental/educational psychologists, social workers and educators, included examination of the refugee community in terms of cultural, educational, and emotional needs. In addition, workshops have been carried out for the educational staff, designed to expand knowledge, discuss mutual expectations, and highlight issues of diversity and cultural sensitivities. The intervention involved developmental psychology work, assessment of children's needs and treatment plans, taking into account cross cultural issues. Moreover, the model called for working with parents at an early stage, which enabled an ongoing effort to adjust the intervention to many cultural aspects, living conditions of the families, and individual characteristics of child and parents. This intervention model provided a unique opportunity for working with refugee children and families, enriching cross-cultural encounters, attending to special educational and developmental needs.

P02.9

#### **CULTURAL ASPECTS OF CHOICE OF LATERALITY FOR TUNISIANS CHILDREN**

**Khadija B., Hamza M., Halayem S.\*, Khemiri I., Asma B.**

*Faculty of Medicine of Tunis ~ Tunis ~ Tunisia*

Laterality was always associated with cultural context. Despite the changes in Tunisian culture and the evolution of the society, the tendency to influence laterality of children is still relevant nowadays. The purpose of this study was to assess the opinion of adults about stereotypes in choice of laterality as well as their experience in childhood. We performed a cross-sectional study using a questionnaire in Google forms that was published in social media. 612 persons participated to the study. The average age was 31 years old. The sex ratio was 0.27. In our sample, there was 73.3% of right-handed people, 19.5% of left-handed people and 7.2% of ambidextrous people. From all the participants, 9.2% were forced to change their laterality in their childhood and 52% of them lived this forcing as a negative experience. We found that 14% of adults think that it's better to teach left-handed children to use only their right hand, due to concerns about child's well-being and beliefs that a left-handed child could be more troubled. It appears that there is a negative perception about left-handed people, and this affects many aspects of child's education. We will discuss the possible implication of cultural and religious background.

P02.10

#### **STUDY OF THE ASSOCIATION BETWEEN THWARTED LATERALITY AND STUTTERING**

**Khadija B., Halayem S.\*, Mohamed M., Ines A., Melek H., Zeineb A., Asma B.**

*Faculty of Medicine of Tunis ~ Tunis ~ Tunisia*

Changing laterality of the left-handed children in early childhood is still relatively frequent in many traditions and cultures. This behavior could have long term effects. We investigated a possible association between this behavior and the occurrence of stuttering. The purpose of the study was to determinate the prevalence of left-handed children forced to change their laterality in patients presenting stutter. We conducted a cross-sectional study that concerned 45 patients who consulted for stuttering in child and adolescent psychiatry department of Manouba-Tunisia. We looked for their family history of stuttering, possible retarded speech, associated disorders and their laterality.

The average age of the sample was eight years old. The sex ratio was 3.5. From all children, 37.2% had a family history of stuttering, five children had a retarded speech and 82.2% had an associated disorder such as aggressiveness (45.5%) and sphincter disorder (24.4%). Right-handed children accounted for 55.3% and 44.7% for left-handed ones. From the left-handed children 94% were forced to change their laterality. We will discuss this cultural behavior and its involvement in the development of stuttering in children.

P02.11

### **EARLY CARE EXPERIENCES AND ADULT PSYCHOPATHOLOGY ACROSS CULTURES: COMPARISONS BETWEEN THE UNITED STATES AND THE NETHERLANDS REGARDING INFANT CARE**

**Tarsha M.\*<sup>[1]</sup>, Sterkenburg P.<sup>[2]</sup>, Park S.<sup>[3]</sup>**

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Emerging research in neuroscience and developmental psychology demonstrates that early care experiences influence neuronal development and subsequently, shape both psychological and physical outcomes. Within this framework, there exists a heterogeneous approach of best practice for caring for children and infants in the early years of life. In order to address the question of best early care practices for children, we created an online survey utilizing Research Electronic Data Capture (REDCap), and translated the English USA survey into Dutch. The survey was disseminated in the United States and the Netherlands and included the following measures: Experiences in Close Relationship Scale-Short Form (ECR-S), Trauma Symptom Checklist (TSC-40), Three-Item Loneliness Scale, Social Phobia Inventory (SPIN-17), six questions about the respondent's early care experiences and two physical health questions. Total complete surveys were N= 139 with English USA Survey respondents n=73. Regarding early care experiences, 34.24% of English speaking respondents and 30.13% of Dutch speaking respondents report a previous cosleeping history. MANOVA analyses demonstrate significant main effects for both country and previous history of cosleeping/solitary sleep upon trauma symptoms, experiences in adult relationships, loneliness and social phobia. Across all dependent measures except social phobia, both countries were significantly different from each other with Dutch speakers reporting lower scores of Experiences in Close Relationships, Loneliness and higher scores of Trauma Symptomology. In addition, individuals with a cosleeping history report significantly lower SPIN scores compared to solitary sleepers,  $F(1, 135) = 6.154, p = .014$ . There is evidence to suggest that adults with a previous history of sleeping close to caretakers demonstrate lower social phobia compared to adults that did not cosleep as an infant. The interaction between country and sleeping history was not significant, suggesting previous history of sleeping condition influences social phobia regardless of country. Clinical application of best practices of early care experiences is discussed in terms of sensitivity to diverse populations and different cultures.

P02.12

### **EARLY CHILDHOOD GENDER DIFFERENCES IN EMOTIONAL EXPRESSION ACROSS CULTURES**

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We explore gender differences in emotion socialization across cultures in children's nonverbal expressions. There is evidence of gender differences in emotion socialization; mothers in the U.S. use causal talk more frequently with girls than boys (Chang et al., 2017) and are more responsive to

their sons' emotional expressions than their daughters' (Malatesta, 1982). Further, cultural differences exist in the intensity of emotional expressions, with Americans expressing emotions more intensely than those in China (Davis, 2012) and Chile (Farkas & Vallotton, 2017). Thus, both gender and culture differences in emotion socialization have been established, however no studies have examined whether gender differences in emotional expression are consistent across cultures, and when these differences develop. Thus, we ask, are there gender differences in nonverbal expression of emotion during early childhood, and if so, are these differences consistent between the U.S. and Chile? A series of tasks designed to elicit expressions of pleasure or frustration (such as stacking blocks into a tower vs completing an impossible puzzle) were administered to 173 subjects (US=70, Chile=103) at 12,18, 24, and 30 months. Video data were coded to find the subject's most intense positive and negative expressions, based on facial and corporal position and movement. Preliminary results indicate that at 12m, Chilean children express pleasure and frustration with lower intensity than Americans, with no gender differences in either culture. At 24m, boys and girls in both countries express frustration and pleasure with lower intensity than at 12m, implying some degree of socialization for enhanced regulation. Culture-moderated gender differences emerge around 24m with regards to frustration expression in boys. At this age, American boys express more intense frustration than girls, while Chilean boys and girls express the same intensity level of frustration. Thus, we show that gender differences in emotion socialization may vary across culture.

P02.13

**EFFECT OF LANGUAGE STATUS ON 2-TO-5-MONTH-OLD INFANTS' SOCIAL ENGAGEMENT IN AN INFANT-DIRECTED SINGING CONTEXT: A NATURALISTIC STUDY FROM MARTINIQUE (FRENCH WEST INDIES)**

**Augier M.\*, Gratier M.**

*Université PARIS Nanterre ~ Nanterre ~ France*

When communicating with young infants, mothers use both infant-direct speech and singing (IDS). Even newborns are more attentive when their mother speaks to them with IDS, they orient their gaze toward her and they vocalize more frequently and in a timely manner (Gratier, Devouche, Guellai, Infanti, Yilmaz, & Parlato-Oliveira, 2015; Dominguez, Devouche, Apter, & Gratier, 2016; Trevarthen, 1979). In Martinique, adults speak French and Creole but the context of their use is marked by social representations of French as a Higher-level language and Creole as a Lower-level language (March, 1996). Sociolinguistic studies called this particular form of bilingualism diglossia (Ferguson, 1959; Fishman, 1967; March, 1996). We examine the effect of language status on 2-to-5-month-old infants' social engagement in an infant-directed singing context in French and in Creole. Forty-three videotaped sequences of mothers singing to their infants were analyzed (15 in Creole and 28 in French). 14 infants (mean age in month = 3,  $4 \pm 0, 94$ ; 6 girls and 8 boys) and their mothers were recording at home in Martinique. Infants' level of social engagement was measured by using two methods. In study 1, microanalysis of infant behavior was performed. In study 2, 55 naïve observers viewed soundless videotapes of 7 babies listening to their mother alternating between French and Creole singing. Infants alternated their gaze more often between their mother and elsewhere in the Creole singing context. They were more frequently moved by their mother to the rhythm of Creole song. Naïve observers perceived babies to be more engaged in an infant-directed singing in French than infant-directed singing in Creole. These findings suggest that babies are engaged with their mother in an infant-directed singing context independently of the status of languages and that mothers' use of tactile stimulation differs when singing in one language or another.

P02.14

**SEXUAL ABUSE, POST-TRAUMATIC AND BEHAVIORAL CONSEQUENCES IN 3 DIFFERENT RESEARCH GROUPS OF GIRLS: ITALIAN, ITALIAN-ADOPTED AND ETHIOPIAN**

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Sexual abuse is a traumatic experience with a negative impact on the mental functioning and psychological adaptation (Di Blasio, 2001). The negative consequences, caused by early experiences of sexual abuse can be both short term, such as the deficit in the emotional regulation, depression, ADHD, dissociative symptoms, and long term, such as anxiety, PTSD and depression (Putnam, 2003; Swenson, et al, 2012). The aim of this study is to observe the post-traumatic and behavioural differences that distinguish three groups of young girls of similar age sexually abused during childhood: Ethiopian girls, Italian girls, and Italian-adopted girls. The sample is made by 41 girls victims of sexual abuse, divided into 19 ethiopians, 15 italians and 7 italian-adopted (mean age 6.9 years old), who have been assessed on the following areas: post-traumatic stress disorder, with TSCYC test (Briere, 2005), behavioural and emotional disorder with CBCL test (Achenbach & Rescorla, 2001) and sexual behaviours with CSBI (Friedrich, et al., 1992). Moreover, the impact of the age has been analyzed overall post-traumatic symptomatology of the sample. Significant differences emerged between the groups from data analysis at the CBCL test (Attention, Transgression of the Rules, Other Problems and Externalizing Behavioral) and at the TSCYC test (Avoidance Symptoms, Arousal and Total Post-Traumatic Symptomatology). Moreover, we found a relationship between the age at which the girls have been abused and the post-traumatic symptomatology. Being abused is a traumatic experience and it causes a post-traumatic symptomatology that includes internalizing and externalizing behaviours, intrusive and avoidance symptoms and increased arousal. Depending on the group the girls belong to, the post-traumatic symptomatology changes. Indeed, results highlights how adopted girls show a more serious post-traumatic symptomatology and deeper behavioural disorders than the Ethiopians and the Italians, in areas of attention, trasgression of the rules, extrenalizing behaviors, and arusal increase.

P02.15

**PERINATAL BEREAVEMENT IN A MIGRANT MOTHER FROM WEST AFRICA: EXPRESSIONS OF MOURNING AND COMPREHENSIVE THERAPEUTIC SUPPORT**

**Mc Mahon A., Radjack R.\*, Ledref M., Moro M.R.**

*Maison de Solenn, Cochin Hospital ~ Paris ~ France*

Infant loss is shattering and devastating to mothers and families and the grief that follows is often unbearable. Perinatal bereavement is a delicate period where the vulnerability and the suffering of mothers can be expressed in a variety of ways and where support is crucial. Such events seem to disrupt the natural cycle of life and can hardly be prepared for. In order to endure the overwhelming feeling of emptiness, mothers may stay hopeful until the very end, as well as go into denial. So what are the different ways by which perinatal bereavement may be expressed? When does grief and mourning become pathological? What are the cultural norms for the expression of distress in the context of loss and how do doctors work with them when supporting mothers? Through a singular clinical case of a migrant mother originally from the Ivory Coast, we would like to address these complex and important clinical issues as a consultation-liaison team of transcultural child psychiatrists in a Parisian maternity hospital. We will also discuss the particularities of motherhood in a migration context, as it is in itself a period of greater vulnerability, far from the "cultural cradle" and often marked by isolation. Moreover, we will argue the importance of a liaison intervention

based on relationship building before and during the mourning period, as well as the value of having a larger team of therapists in order to share the emotional burden of transference and countertransference.

P02.16

### **DIFFERENCES IN PARENTING AND CHILD DEVELOPMENT IN TWO REGIONS OF ECUADOR**

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*Utah State University ~ Logan ~ United States of America*

Young children in Ecuador suffer from high rates of stunting and underweight due to malnutrition (World Bank, 2011). Infants who experience malnutrition are at a higher risk for developmental delays (Miller, Murray, Thomson, & Arbour, 2016; Yousafzai, Rasheed, & Buttha, 2013). Parenting practices have received less attention in the literature on developing countries. Mother-child dyads (n = 120) from the coast and the highlands of Ecuador were assessed in their homes. Child food consumption and parenting practices were measured using the Multiple Indicator Cluster Surveys (MICS) Questionnaires (unicef). Child development was measured using the Bayley Scales of Infant and Toddler Development-III (Bayley-III; Bayley, 2006). Parenting stress was measured using the Parenting Stress Index Short Form (PSI/SF; Abidin, 1990). Independent samples t-tests indicated that coastal mothers fed their children significantly more grains (M = .97, SD = .18) and less meat (M = .63, SD = .49) than highlands mothers (M = .72, SD = .45; M = .82, SD = .39),  $t(111) = 3.66, p < .01$ ;  $t(113) = -2.32, p < .05$ , respectively. Coastal mothers reported significantly more stress due to their perception of their child being difficult (M = 49.25, SD = 6.35) than highlands mothers (M = 44.33, SD = 5.95),  $t(114) = 4.24, p < .001$ . Children from the coast had significantly lower language skills (M = 90.99, SD = 13.14) than highlands children (M = 98.34, SD = 13.57),  $t(118) = -2.98, p < .01$ . These findings suggest that there are parenting and developmental differences between the coastal and highlands regions in Ecuador. Implications for research and practice will be presented with a focus on cultural beliefs that influence parenting practices and child development in these differing regions of Ecuador.

P02.17

### **REFLECTIONS OF SOUTH AFRICAN LAY INFANT MENTAL HEALTH PRACTITIONERS**

**Khumalo T., Mokolutlo Z.\***

*Ububele Educational and Psychotherapy Trust ~ Johannesburg ~ South Africa*

Preventative IMH interventions are becoming more commonplace in high-risk South African communities such as Alexandra, Johannesburg, South Africa (a densely populated impoverished urban community), in order to meet the mental health needs of such communities. At Ububele, a community based NPO focusing on intervention for infants, children and their families, meeting the local community's needs has resulted in the training and employment of lay infant mental health workers, now called Early Childhood Community Practitioners (ECCPs). This poster offers the reflections of 2 frontline community workers (ECCPs) who both began as Ububele Home Visitors on the Ububele Home-Visiting project. It will include reflections on professional development, mapping the trajectory and accumulation of skills within the organization from Home Visitor, to Baby Mat practitioner, CoS-P (Circle of Security Parenting) facilitator and into a role described as ECCP. As an ECCP, the benefits and challenges of working within one's own community, with mothers and their infants, as a mother oneself, will be described.

P02.18

**WORKING WITH PARENTS WHO HAVE HAD ONE OR MORE CHILDREN REMOVED FROM THEIR CARE LONG TERM**

**Doherty L.\*, Spark E., Kapeli A.**

*Ohomairangi Trust Early Intervention service - NGO ~ ~ New Zealand*

Research indicates that women who have had children removed from their care experience a 'reduction in functioning' (Logan 1996, After Adoption 2007, Neil et al. 2010), which may lead to them having a 'replacement baby', only to then have that infant subsequently removed (Broadhurst & Mason 2013). Many reappear before the courts because their problems of serious drug, alcohol and mental health issues persist with the placement of their infants into permanent care. (Broadhurst, 2015). In 2010 in New Zealand, of 4238 children in out-of-home care 45% had siblings removed from the care of their parents, and 65% of parents with previous children in permanent care have their subsequent babies removed within the first 30 days of birth (Hendricks & Stevens, 2012). This presentation reports the trial of intensive supports to a group of mothers and fathers with children in permanent placement with others. They were keen to develop competencies and address their own past trauma in order to be considered able to parent their subsequent children.

P02.19

**USE OF NBO WITH TEENAGER MOTHER'S IN GROUP HOMES IN TURKEY**

**Bayrak B.\***

*Umass Boston IPMH fellow ~ Boston ~ United States of America*

A study designed to identify the experience of teenager mom's, caregivers and group home staff with NBO. In Turkish group homes teenager mothers are kept separated from their babies and united only for breastfeeding. We propose the use of NBO as an attachment tool between mother's and infants as well as the caregivers and as a training tool for group home staff to describe the importance of parent infant bonding. This is a phenomenological qualitative study sampling the experience of two teenage mothers, their caregivers and the group home staff. NBO will be applied on the mom baby pairs by an infant mental health strained pediatrician. Interviews will be conducted before and after with a semi-structured interview guide.

**Early development, child health and mental health**

P02.20

**INTEGRATING COMMUNITY PEDIATRICS AND EARLY INTERVENTION SYSTEMS OF CARE; PROMOTING AND FACILITATING PARENT ENGAGEMENT IN THEIR CHILD'S SOCIAL EMOTIONAL DEVELOPMENT THROUGH THE USE OF AN INTEGRATED IPMH CARE MAP: A CONCEPTUAL FRAMEWORK**

**Ciccarello C.\*, Bayrak B.**

*UMAss parent Infant Mental Health Program, Fellow ~ Boston, MA ~ United States of America*

We aim to bring systems of care by using ipmh principles. The most important parts of the framework are the care map and integrated care approach. The Massachusetts Maternal Child Health Transformation Coalition has proposed a tiered model of care to integrate social emotional wellness into primary care for children birth to five. In an effort to further support children ages 0-3 with social-emotional vulnerabilities, we propose linking and coordinating pediatric care and early intervention services using an Infant Parent Mental Health patient care map. Our goal is to develop a conceptual framework for an integrated system of care focusing on the social emotional wellness of children ages 0-3. Two components of the framework are the integrated care team approach and the integrated care map. Team members will be trained in IPMH core concepts and provided with

ongoing reflective supervision and continuous care consultations. The care map will be a visual aide used to describe the family's energy enhancing and depleting factors along with the child's neurodevelopmental status. By using IPMH concepts in a care map, we integrate the two primary systems of care and increase the effectiveness of both systems.

P02.21

**COLLABORATIVE INTERVENTIONS: SUPPORTING DEVELOPMENTAL OUTCOMES AND PARENT-CHILD RELATIONSHIPS THROUGH INFANT MENTAL HEALTH AND APPLIED BEHAVIOR ANALYSIS**

**Biggs L.\*, Oudekerk--Hanss A., Bennetts K.**

*Starfish Family Services ~ Detroit, MI ~ United States of America*

Presenters share their journey regarding integration of Infant Mental Health (IMH) and Applied Behavior Analysis (ABA) treatment for young children diagnosed with Autism and their families. Systemically, mental health and developmental disability providers have been operating separately, leading to families only participating in one service model and prioritizing one need over another. Presenters show how to bridge both services to provide a holistic treatment approach. More often than not, families who have children with disabilities still come with mental health struggles, trauma histories, and a wide array of environmental stressors, all coupled with the additional strain of parenting a child with Autism. Perhaps IMH work is even more important due to the fragility of the child and extra dependence on the parent. In the midst of the urgency and need for early service implementation, the attachment relationship and parental needs cannot be forgotten. Parents participating in IMH, while their child receives ABA, report lower stress levels and greater confidence in their parenting skills. Parental competence leads to higher rates of direct participation in a child's ABA treatment, resulting in increased language and attention skills and decreased challenging behaviors. Presenters developed a collaboration which combines relationship-based and insight-oriented therapeutic practices with the behavioral treatment of children with disabilities.

P02.22

**THE DEVELOPMENT AND DISRUPTION OF SUBJECTIVE AWARENESS IN INFANCY & EARLY CHILDHOOD**

**Sieg K.\*<sup>[1]</sup>, Jennings A.L.<sup>[1]</sup>, Jennings S.P.<sup>[2]</sup>**

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Aim: The purpose of this presentation is to demonstrate the evolution of mental processes in infancy and early childhood. A further demonstration of how mental trauma disrupts the development of early subjective human awareness is also included. Content: This presentation will include an overview of how subjective awareness develops in infancy and early childhood. Examples of the early sense of self and non-self will be demonstrated via videos from the presenter's own case studies. Concepts including vitality affects, amodal perception and attunement will be reviewed. Correlations between findings from bio-developmental research and psychoanalytic as well as object relations theory will be highlighted. An analysis of those factors which are key for resiliency will be discussed. The presentation will then explore the psychopathology of traumatic disruptions which occur in infancy and early childhood. Mechanisms of complex trauma and associated sequelae will be demonstrated via additional case studies including examples utilizing brain imaging and sand tray therapy exhibiting corresponding epigenetic and family intergenerational influences. The presentation will conclude with meaningful engagement and collaboration on therapeutic implications for not only clinical intervention but for primary prevention as well.

P02.23

**NEURAL EVIDENCE FOR A DEFICIT IN NUMEROSITY PROCESSING IN INFANTS PRENATALLY EXPOSED TO ALCOHOL**

**Ben--Shachar M.S.\*<sup>[1]</sup>, Jacobson J.L.<sup>[2]</sup>, Jacobson S.W.<sup>[2]</sup>, Berger A.<sup>[1]</sup>**

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Arithmetic has been identified as a particularly sensitive developmental endpoint in fetal alcohol spectrum disorders (FASD). Behavioral and neuroimaging studies suggest that this impairment is mediated by a specific deficit in the core quantity system involving the ability to mentally represent and manipulate numbers. Using an event-related potentials (ERP) task, we provide the first evidence of a fetal alcohol exposure-related deficit in quantity processing – at the level of brain function – which can be detected as early as infancy. Six- to nine-month-old prenatally alcohol-exposed (N=19) and nonexposed (N=19) infants were tested using a habituation-dishabituation task. Infants were habituated to a specific quantity of stimuli, which varied in terms of location, total surface area, and color. ERPs were locked to the presentation of a novel quantity during the dishabituation trial. Prenatal alcohol exposure was related to longer latencies and larger amplitudes of the P300 component in response to the dishabituation trials. Alcohol exposure was also related to a weaker posterior parietal response to quantity changes. Results could not be attributed to demographic variables, such as infant age, sex, or mothers' socioeconomic status, or to other exposure variables, such as maternal smoking or drug use during pregnancy. Our results suggest that infants who had been prenatally exposed to alcohol are slower in the processing of quantity and show a diminished ability to discriminate novel quantities. Our findings further indicate that fetal alcohol-related impairments in basic numerosity processing (which can be detected as early as infancy) provide the basis for later difficulties in arithmetic. These findings advance an understanding of the pathophysiology of FASD and can contribute to the development of better, targeted interventions for the specific number-processing deficits that characterize these disorders.

P02.24

**EARLY DETECTION OF WITHDRAWAL IN THE FIRST LEVEL HEALTH AND INTERVENTION FOR REDUCING RISKS IN THE EARLY DEVELOPMENT**

**Bonifacino N.\*<sup>[1]</sup>, Nauar M.<sup>[2]</sup>**

<sup>[1]</sup>*Psychoanalytic Association of Uruguay ~ Montevideo ~ Uruguay*, <sup>[2]</sup>*First Level Care. Public Health Minister. ~ Montevideo ~ Uruguay*

Sustained withdrawal is an important risk sign in the early development. The purpose of this research is to evaluate the benefits of the incorporation of a screening tool in the First Level Health for early detection of withdrawal and for the promotion of synchrony in parents–infant interactions from the well-baby visit of the first months of life. Evaluate the effectiveness of First Level Team trained in ADBB scale (Guedeney 2001) and in interventions aimed to promote synchrony in parent–infant interactions, for reducing infant withdrawal during the first year of life. First Level Health professionals were trained in ADBB for early detection of withdrawal and in interventions to be done from the monthly well-baby visit to promote new resources in parent – infant interactions. The impact of this training in the infant health is assessed through a comparative analysis of withdrawal between a follow up group of 100 infants assisted by the trained professionals and assessed with ADBB in two times during the first year of life, and a same age control group assisted by not-trained professionals. Independent judges will score the video-material in double blind system. Final results will be available in March 2018, at the end of the study. Preliminary results of follow-up group: 1st

ADBB assessment (infants from 2 to 5 months) 23.1% withdrawal (ADBB >4); 2nd ADBB six months later: 9.6% withdrawal.

P02.25

### **AN AUTISTIC CHILD EXPRESSING SELF EXPERIENCE NARRATIVE: ENACTMENT OF THE “LOSS AND REUNION”**

**Mori S.\*<sup>[1]</sup>, Akita Y.<sup>[2]</sup>, Yokoyama C.<sup>[3]</sup>**

*<sup>[1]</sup>Keio University ~ Fujisawa ~ Japan, <sup>[2]</sup>Tohoku Fukushi University ~ Sendai ~ Japan, <sup>[3]</sup>Keio University ~ Yokohama ~ Japan*

The study will discuss an autistic child's resonance experience inspired by an animation cartoon. The discussion will show that understanding of such a phenomenon will offer an access to the unique experience of an autistic child. Introduction: It is always difficult to understand the internal world of an autistic child. One of those children, Ko, started to express a distinct psychological phenomenon in the therapeutic space. The therapist's understanding the meaning of the expression offered a direct access to Ko's traumatic loss experience. Description of the work: Ko was aged 2 when his parents got divorced. His mother had to work, leaving Ko in an institution. This traumatic experience was further compounded by her sudden death. When the therapist met Ko, aged 7 and still institutionalized, he had not been told of his mother's death. As the therapeutic relationship unfolded, he started to draw pictures while repeating fragmentary words. The therapist, at first, could not grasp what he tried to convey, but eventually recognized that his pictures and words were the reproduction of an animation cartoon: Ko, resonating with the protagonist of the cartoon, was yearning for a warm family which once he had had. This understanding hugely contributed to the procedure of the therapy. Conclusions: Emotional scars experienced during infancy impede a child's healthy mental growth. The understanding and acceptance of the experience of an autistic child expressed through non-verbal channels will offer the possibility to expand the experiential world of the child.

P02.26

### **PROLACTIN, A POTENTIAL MEDIATOR IN NEWBORN INFANT IRRITABILITY FOLLOWING MATERNAL PERINATAL ANXIETY SYMPTOMS**

**Zhang H.<sup>[1]</sup>, Su Q.<sup>[1]</sup>, Shao S.<sup>[1]</sup>, Yao D.<sup>[1]</sup>, Ding D.<sup>[3]</sup>, Dang S.<sup>[1]</sup>, Zhu Z.<sup>[2]</sup>, Li H.\*<sup>[1]</sup>**

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Newborn infant irritability affects roughly 15-30% of all newborns of physical health. However, little is known about the physiopathological mechanism underlying newborn irritability. The present study aimed to determine whether newborn irritability resulted from maternal perinatal anxiety symptoms, and whether the alteration of PRL associated with cortisol and 5-HT in newborn infants were associated with newborn irritability. 205 pregnant women were recruited: normal group (n = 100), and 105 were diagnosed with anxiety (n = 105), which randomly divided to control group (n=40) and Newborn Behavioral Observations (NBO) intervention group (n=65). Newborn Irritability was assessed by Neonatal Behavioral Assessment Scale (NBAS). Prolactin, cortisol and 5-HT in maternal and neonatal serum were determined using Chemiluminescence analysis and radioimmunoassay method. 1. The scores of irritability items in the newborn infants of anxiety group were higher than that of the normal group (p<0.05). 2. Lower serum PRL, 5-HT and higher serum cortisol were found in the newborn infants of anxiety group compared with that of the control group

both postpartum 2d and 15 ( $p < 0.05$ ). 3. The level of serum PRL in newborn infants were significantly and negatively correlated to the scores of irritability items ( $p < 0.05$ ). 4. After 7 rounds of NBO interventions, the HAMA and PSS scores of mothers and the scores of irritability items of newborns in the NBO intervention group were all lower than those of the control group ( $p < 0.05$ ). Neonatal peripheral prolactin could be a mediator in newborn irritability following maternal perinatal anxiety symptoms.

P02.27

### **DEVELOPMENTAL INFLUENCES ON CHILDREN'S NARRATIVES**

**Dealy J.\*<sup>[1]</sup>, Mudrick H.<sup>[2]</sup>, Robinson J.<sup>[1]</sup>**

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Story stem narrative tasks are often used to provide insight into young children's experiences of family relationships and are an important clinical assessment tool that can inform therapy goals. However, is story stem tasks' utility limited to glimpsing the child's representations of family relationships? This study examined the influence of executive functioning (EF) and language proficiency on children's narrative themes and coherence. Participants included a diverse low-income sample of 225 children. EF tasks and language proficiency were assessed at age 4 and EF tasks and story stem narratives were assessed at age 6. Children responded to eight story stems and narrative themes and coherence were coded by independent observers. Three latent narrative variables were constructed (Prosocial, Aggressive/Conflict, and Avoidance/Danger) and Narrative Coherence was rated. Results of longitudinal path analyses in structural equation modeling demonstrated age 4 EF significantly predicted narrative outcomes. Age 4 language proficiency independently predicted Aggression/Conflict and Avoidance/Danger. Age 6 EF mediated the relationship between age 4 EF and narrative outcomes. These results indicate that cognitive and language abilities significantly contribute to story stem content and performance. Efforts to translate the story stem method to clinical settings have emphasized the benefit of incorporating the child's perspective through story stems into family-oriented treatment (Robinson, 2007). Story stem narratives enable the clinical team to assess the child's management of emotional arousal generated by the content of the story beginning and the child's ability to construct a narrative. This study enriches interpretations of the child's narrative by demonstrating that the child's executive skills and verbal fluency influence his/her story telling. These findings suggest that the child's narrative provides a holistic picture of the child's strengths and developmental needs expanding its potential utility in treatment planning.

P02.28

### **ENRICHING THE SOIL, PLANTING THE SEEDS: USE OF INFANT PARENT PSYCHOTHERAPY IN THE INFANT MENTAL HEALTH HOME VISITING MODEL**

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An overview of IMHHV, currently being evaluated in an RCT, using metaphor and case presentation to illustrate the relationship-based model and the resulting dramatic improvements in a toddler's physical health and family's relational health. Adapted from Selma Fraiberg's approach and implemented for high-risk infants and families in behavioral health, IMHHV utilizes components that include infant-parent psychotherapy (IPP). Other components, e.g., therapeutic alliance and developmental guidance, are "nutrients" enriching the family's often-deprived environment and

troubled relationships. Over time, the "seeds" of IPP are planted aiding parents in understanding how past affects present. Sometimes seeds sprout and growth is easily observed. Sometimes, a seed lies dormant indicating that the "soil" is not yet ready, and the therapist returns to enrichment. The reflective supervisor serves as "master gardener" supporting the therapist in understanding his/her role as a source of light encouraging growth. The clinical presentation will highlight an IMH specialist's work with a dyad. The eighteen-month-old girl was diagnosed with failure to thrive and a chronic kidney condition and was at risk for removal. The soil of her relationship was dry and malnourished at the start. Making use of the therapeutic alliance and emotional support, the dyad's soil became rich and better prepared for planting seeds via IPP. The presentation will describe the strong and healthy toddler, her flourishing relationship with her mother that resulted, and an illustration of post termination growth that can occur when soil is nourished and seeds have been properly planted.

P02.29

### **INFANT GESTATIONAL AGE AND SERVICES TO SUPPORT PARENTS PREDICT INFANT DEVELOPMENT IN A PORTUGUESE SAMPLE**

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Life experiences and parenting play an important role in infant development. To prevent developmental risks and to support parents in their educational role, it is important to learn about the determinants of infant development. Therefore, we investigate the association between child, maternal, family and social variables, and infant development. Moreover, we aim identify the determinants of infant development in the Portuguese sample from Azores. At 11-months, infant development was assessed with Schedule of Growing Skills II (SGS II). To assess mother-infant quality of interaction, the dyads were observed in free play at 12-months using the Crittenden CARE-Index. Maternal sensitivity and infant cooperative behavior were correlated with SGS II global scores and sub-scales (except for Locomotor and Self-care Social). Infant development was associated with several factors like maternal years of education, number of siblings, birth weight and risks in pregnancy but only the number of nurse visits attended by parents during the infant first year and gestational age were determinants of infant development. The findings of this study adds to a large body of research that indicates that infant health, infant development and parenting are strongly and complexly associated. Therefore, services to support infant development, social responses to families, parenting advice and infant health care should work together to offer integrated and transdisciplinary services centered in the child and their family needs.

P02.30

### **PROMOTING FAMILY SERVICES THROUGH A REGIONAL KNOWLEDGE-SHARING NETWORK**

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*UIT The Arctic University of Norway ~ Tromsø ~ Norway*

To spread knowledge, about the importance of early sensitive parenting and support of parents to different professionals who are working with new families in the northern area of Norway. We questioned how our knowledge based on interventions originated from the Brazelton-Institute, could be made available for healthcare providers anywhere in our region. A main goal was to improve multi-professional cooperation around new families, across organizational borders and between different professions. A website with structured knowledge, organized by five main chapters (Pregnancy, Childbirth, Challenging beginnings, Infancy and Toddlerhood) opened

November 2016. The focus is how health-care providers can support sensitive parenting and successful child development in the early stages of children's life and offers information about existing regional, national and international resources created by others. Through many links to other websites, we try to gather knowledge! The Health Authority informed all health-care institutions and primary health-care providers meeting new families in the communities about the website by e-mail. About 120 professionals have already signed up for regular newsletters from the drafting group. This group takes the responsibility to make updates with new information or knowledge-based resources created by others. A monthly electronic monitoring of website-visitors indicate that many are using the website.

P02.31

### **PREDICTORS OF SOCIAL-EMOTIONAL AND BEHAVIORAL PROBLEMS AND COMPETENCIES IN EARLY CHILDHOOD IN JAPAN**

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Multiple factors might influence the emergence of the social-emotional and behavioral problems in early childhood. However, predictors related to these problems have not been sufficiently clarified in Japan. This study aimed to explore the predictors of the social-emotional and behavioral problems and delays/deficits in acquiring competence in early childhood. Fifteen hundred children aged 1–3 years and their parents in Saitama prefecture, Japan, were randomly recruited from the Basic Resident Register System. The Japanese version of the Infant-Toddler Social and Emotional Assessment was used to measure children's behavioral problems and competencies. As explanatory variables, sex, age, premature birth, low birth weight, and regular non-maternal care; parental age, education, and marital status; and household income were used. A stepwise linear regression analysis was performed. Data from 581 respondents were analyzed. Externalizing problem was predicted using children's sex, age, and parental age and education ( $R^2 = .06$ ,  $F(4, 576) = 9.61$ ,  $p < .01$ ). Higher parental age was associated with fewer externalizing problems ( $\beta = -0.13$ ,  $p < .01$ ). Additionally, sex and parental age was a significant factor predicting internalizing problems ( $R^2 = .04$ ,  $F(2, 578) = 10.57$ ,  $p < .01$ ). In case of competence, sex, age, regular non-maternal care, and parental age accounted for 38% of the variance ( $R^2 = .38$ ,  $F(4, 576) = 89.21$ ,  $p < .01$ ), and age was the most influential factor among the variables ( $\beta = 0.57$ ,  $p < .01$ ). No variable significantly predicted dysregulation problems. The current study revealed small but significant contribution of sex, age, regular non-maternal care, and parental age and education to the social-emotional and behavioral problems and competencies in children aged 1–3 years old.

P02.32

### **POVERTY AND A BALANCED DIET AS FACTORS IN THE DEVELOPMENT OF CHILDREN IN THE NETHERLANDS**

**Van Andel H.\***

*Jeugdggz Dimence Groep ~ Deventer ~ The Netherlands*

It is important to provide a balanced diet especially for young children. Poverty is a growing problem in the Netherlands and other western countries as well. Poverty may lead to a "scarcity mentality" in the parents, which reflects also on the child. Clinicians have to learn to recognize this type of thinking and its influence on daily living, and also learn to deal with it even when it is not the speciality of the clinician. In the Netherlands, (hidden) poverty is a growing problem, which is often missed by the clinician. The influence is big and when nothing is done to help, the problem tends to grow. To cope, the parent often start to think along the lines of a " Scarcity Mentality": trying to

solve short term problems like how to get enough food on the table. The parent does not think of a balanced diet or how to save money to buy new shoes. Thus a multi problem situation may develop which will have influence on the child. When the child encounters food deficiencies for longer periods of time, this may lead to developmental, physical and mental problems. It is important that clinicians not only have to diagnose the problems of the child itself, they have to be attuned to this underlying problem and learn to act to help solve it.

P02.33

### **THE TRAJECTORY OF MATERNAL PARENTING STRESS AND INFANT TEMPERAMENT ACROSS THE FIRST YEAR OF LIFE**

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The early mother-infant relationship is salient to the well-being and development of the infant. The constructs of parenting stress and infant temperament are key in determining quality of interactions within the mother-infant dyad. However, it is not yet clear how these constructs relate and develop in the first year of life. Cross-sectional mother-infant dyads were tested at 6 weeks (n = 93), 6 months (n = 56) and 12 months (n = 43) of infant age. At each time point, mothers completed the Parenting Stress Index – Short Form and the Carey Temperament Scales. Preliminary analyses revealed significant positive correlations between parenting stress scores and a number of temperament domain scores, across the three time points. However, only Mood scores consistently correlated with parenting stress scores at all three ages. Looking longitudinally, preliminary analyses revealed that parenting stress scores (n = 17) did not differ across time. However, differences in temperament domains (n = 20) were found across time. Infants were reportedly more adaptable at 6 weeks of age, more intense at 6 months of age and more negative in mood at 12 months of age, compared to the other time points. The results suggest that maternal parenting stress and infant temperament are associated, and appear to have continuity across the first year of life, with the exception of adaptability, intensity and mood domains. This suggests that parenting stress is a relatively stable construct, while aspects of infant temperament change across time. These results have implications for increasing mothers' awareness and support of their well-being and infant's behavioural style, thus improving mother-infant interactions.

P02.34

### **WHAT ABOUT FATHERS?**

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Maternal mental health problems influence child development. However, less is known about how father's mental health and wellbeing influence child's psychosocial development. Current study investigates whether paternal wellbeing, reported by the mother at the prenatal period, is associated with 1) mother's wellbeing at the prenatal period and, 2) child's internalizing and externalizing problems later. The longitudinal data originally consisted of 349 normal population Finnish primiparous mothers. The internalizing and externalizing problems of the children were evaluated at the age of 5 by the mothers (n = 154), at 9 by the mothers (n = 184) and fathers (n = 120) and at 17 by the mothers (n = 188), fathers (n = 126) and adolescent themselves (n = 190). Sixteen fathers (5%) had mental health problems (concurrently or earlier) at the prenatal period according to the mother. Another 9% of the fathers had other type of problems. Father's mental

health problems and problems in other areas of life were associated with many aspects of mother's wellbeing, including poorer relationship with the husband, poorer satisfaction in life, feelings of loneliness, and higher prevalence of mental health problems and depressive symptoms. More children exceeded the upper cut-point of internalizing problems at all follow-up ages in mothers' reports and at adolescence in fathers' and adolescents' reports if the father had mental health problems prenatally. No associations were found between father's mental health or other problems and child's externalizing problems. This study indicates that father's problems at the prenatal period may influence mother's wellbeing and increase child's risk for emotional problems. Simple questions addressed to expecting mothers may be sufficient to identify expecting families at risk. More attention should be paid on fathers' wellbeing from prenatal period onwards.

P02.35

### **MATERNAL DEPRESSION AND CHILDREN'S CONDUCT PROBLEMS: FATHER POSITIVITY AS A PROTECTIVE FACTOR**

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Maternal depression is a risk factor for child socioemotional and behavioural difficulties. There is some evidence that fathers may protect against some of this risk through positive and supportive behaviours. The majority of studies looking at maternal depression and children's outcomes have focused on single-child designs, which is problematic given that child-specific factors are conflated with other family-wide processes. The current study addressed this by including multiple children per family (Lahey & D'Onofrio, 2010). The current longitudinal study examined associations between maternal depression and child conduct problems, with father-child positivity explored as a potential protective factor. We expected children with depressed mothers to be at risk for more conduct problems, but less so when there were higher levels of father-child positivity (controlling for mother-child positivity). There were 501 Canadian families participating in the study (2 - 4 children / family). Measures of child conduct problems (a composite of mother- and father-ratings) were collected at three time points across childhood (M age = 3.46, 5.00, and 6.64 years at Time 1, 2, and 3, respectively). Maternal depression (mother-reported) and parental interaction quality (parent-reported) were also measured at each time point. A three-level multilevel analysis (repeated measures clustered within children clustered within families) was used. There was a significant 3-way interaction between maternal depression, father positivity and children's age. The plotted interaction (not shown) indicated that higher maternal depression significantly predicted more conduct problems. This effect was slightly buffered by positive father-child interactions. Father-child positivity was negatively related to conduct problems at low levels of maternal depression, too, particularly for older children. Analyses controlled for mother-child positivity. These findings indicate that positive father-child interactions may buffer against some of the risk of having a mother with elevated depression. This is in line with previous single child designs that have demonstrated a protective role for fathers in homes with elevated maternal depression. Findings are discussed within a risk and resilience framework. Benefits of within-family designs are also discussed.

P02.36

### **TEMPERAMENT AND SLEEP QUALITY IN TWINS: PARENTAL AGREEMENT VERSUS DISAGREEMENT** **Euser S.\*, Bosdriesz J., Van Den Bulk B., Koliijn L., Van Ijzendoorn M., Bakermans--Kranenburg M.**

*University of Leiden ~ Leiden ~ The Netherlands*

Although sleep is fundamental for optimal child development, sleep problems are common and are associated with negative outcomes on multiple domains. Sleep problems may be more prevalent among children with a difficult temperament. In most studies, child temperament is measured using parent-report questionnaires, generally completed by the mother. If both mother and father reports are used, convergence between informants can be limited. However, disagreements between informants do not necessarily merely reflect rater bias, they can also indicate valid rater specific views and thus be informative (Bartels et al., 2003). Using a behavioral genetics model we will first examine the sources of agreements and disagreements between mother and father reported temperament. Secondly, we will examine the predictive value of both parental agreement and parental disagreement of child temperament on child sleep quality. In total, data of 244 children from 122 families (52% boys; Mage = 3.61 years; SD = 0.61; 50% MZ twins) were included in the current study. Sleep quality was measured using MicroMini-Motionlogger actigraphs during four consecutive nights. In addition, mothers and fathers independently completed four subscales from the Children's Behavior Questionnaire for both children. Preliminary behavioral genetic analyses showed that models including genetic and unique environmental factors (AE) fitted the data best, with 26% and 68% of the variance of temperament and sleep respectively being explained by genetic factors. Further analyses are currently ongoing. Results on the sources of disagreement and the predictive value of the specific father and mother perspectives highlight the importance of including both mothers and fathers reports in studies on parenting and child development. Examining their agreements and disagreements promises to be a fruitful approach in predicting child developmental outcomes.

P02.37

#### **PARENT-CHILD CARE (PC-CARE): A BRIEF INTERVENTION FOR CHILDREN AND CAREGIVERS**

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In the United States, approximately 14.8 of every 1000 children aged 0-3 are victims of maltreatment, more than any other age group (US DHHS, 2014). A common precursor to maltreatment is child defiance and disruptive behaviors; parents become frustrated but do not know effective discipline strategies (Urquiza & McNeil, 1996). Thus, it is essential to teach parents of young children effective parenting skills. Unfortunately, most interventions take months to complete, leading to high attrition rates (Kazdin, 2008), or are implemented as group psychoeducation with no assessment of whether parents use the skills effectively with their children. To address these concerns, we developed Parent-Child Care (PC-CARE), a trauma-informed 7-week dyadic intervention for children aged 1-10 with externalizing behaviors. PC-CARE teaches and coaches parenting skills to improve relationships and reduce externalizing behaviors. Its brevity reduces attrition and increases accessibility; its emphasis on coaching ensures parents can use the skills effectively with their children. PC-CARE has been used for children with disruptive behaviors, trauma histories, sexual behavior problems, and autism spectrum disorders, and with biological, foster, and adoptive caregivers. Thus far, psychologists, marriage and family therapists, clinical social workers, Master's level developmental psychologists, and Bachelor's level behavioral support clinicians have been trained. In this workshop, we describe the PC-CARE model, review protocols for 1-2 and 3-10-year-olds, and present results of analyses of treatment effectiveness.

P02.38

#### **PSYCHOLOGICAL SURVEY OF INFANTS AND FAMILY-BASED TRAINING PACKAGE IN ORDER TO INCREASE MENTAL HEALTH OF THE INFANT AND THE FAMILY**

**Khodayari Fard M., Alavinezhad S.S.\*, Sajjadianari S.**

A wide range of evidence shows that increasing awareness and correct information in parents about the process of physical and psychological development in infants and teaching how to deal correctly with the behavioral encounters with them lead to improving the quality of parenting and mental health of child and parents. The fundamental basis needed for training:

1. The correct developmental process from birth to age 5.
2. Attachment and creating a sense of safety and trust.
3. Mutual and positive interactions of parent-infant, strengthen the senses and teaching appropriate games.

Providing parents training package in order to expand mental health of families and children, increase parents self-efficiency, reinforcing parents' positive interactions and raising the quality of life in family. The current research is mixed method; both quantitative and qualitative methods have been used. Parents training package, is prepared based on developmental theories, child clinical psychology, educational psychology and family counseling and contains personal and group training. The trainings start from birth and continue until the age of 5 and make the developmental quality and parent-child interaction better. The results show that parents who received and used this training package well, not only are satisfied and have good interactions with their children but also the level of mental health has increased. Results and family reviews show a considerable improvement in stress, anxiety, mental health of parents and improvement in quality of parent-child interaction. Totally effective interventions based on training parents according to psychological basis and principals, can have a positive impact on the process of advancing self-efficiency and family and children's mental health.

P02.39

#### **IMPROVING MOTHERS' SENSITIVITY IN CO-RESIDING PRISON-UNIT**

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Most children of incarcerated mothers later develop behavioral and emotional problems (Hoffmann, Byrd & Kightlinger, 2010) and insecure attachment relationships with mothers (Poehlmann, 2005). A sensitivity-training for mothers with children in a co-residing setting in prison might enhance their quality of interaction (Byrne, Goshin & Joestl, 2010). We therefore implemented an intensified version of the attachment-based prevention program SAFE® (Safe Attachment Formation for Educators) in prison in order to enhance mothers' sensitivity via group sessions and individual video-feedback every 4 weeks on sensitivity in mother-child-interactions. We want to evaluate the emotional availability (Emotional Availability Scale, Biringen, 2008) of mothers in a German prison during and after participation in the adjusted intensified version of the SAFE®-program. We hypothesize an increase in maternal sensitivity to the child's needs and consequently an improvement in their behavior. A sample of N=12 mothers and their infants was videotaped for 20 minutes during a diaper and play situation every 4 weeks for the length of intervention. Videos were coded by a reliable coder using the Emotional Availability Scales (Biringen, 2008). During the intervention with incarcerated mothers we observed that the mothers slowly built up trust and started sharing their attachment experience in the weekly group sessions. We saw that mothers started to reflect on their interaction styles with their children and became more emotionally available to them during the length of incarceration. We expect to see shifts in the higher end of emotional availability in our data from the beginning to the end of our intervention. Preliminary results will be presented. An intensive attachment-oriented training seems to increase the emotional availability of incarcerated mothers to their children. A nationwide

program would prevent children of incarcerated mothers from developing behavioral and emotional problems.

P02.40

### **INFANT BRAIN RESPONSES TO SAD SPEECH CORRELATE NEGATIVELY WITH MATERNAL PRENATAL PREGNANCY-ANXIETY LEVELS**

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Prenatal stress is one of the putative factors affecting brain development and, components of the emotional brain may be especially vulnerable. However, there are limited studies on how maternal pregnancy-anxiety affects emotional speech processing in infants. The participants were 20 infants (9 females and 11 males) age 6 to 10 weeks (mean age:  $55 \pm 9$  days) from FinnBrain Birth Cohort Study ([www.finnbrain.fi](http://www.finnbrain.fi)). Their mothers had completed Pregnancy-Related Anxiety Questionnaire Revised-2 (PRAQ-R2) at gestational week 24 which was used as proxy for maternal prenatal anxiety. The stimuli were 11 s trains of four short phrases spoken in happy, angry, sad and neutral voice. We used Near-infrared spectroscopy (NIRS) to measure changes in brain activations (total hemoglobin concentration, HbT). The probe was located over the skull at left temporal region as our region of interest was Left Superior Temporal Sulcus. We found strong negative association between total hemoglobin (HbT) responses to sad speech and PRAQ scores (Spearman's correlation coefficient ( $r$ ) = -0.62,  $p$  = 0.005). Additionally, brain responses to happy speech were negatively associated with PRAQ scores ( $r$  = -0.39,  $p$  = 0.10). Age and gender of the participants did not correlate with HbT. Left superior temporal sulcus is activated in infants in response to sad speech and therefore, involved in processing emotional stimuli. Maternal prenatal psychological state predicts infant response profiles, as elevated maternal pregnancy-anxiety was followed by blunted infant response to sad speech. The significance and potential implications of the findings will be discussed.

P02.41

### **PERFORMANCE OF SCREENING TOOLS FOR LANGUAGE AND BEHAVIOUR DIFFICULTIES IN PRESCHOOL AGED CHILDREN**

**Sim F.\*, Thompson L., Wilson P.**

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Preschool language and behavioural problems can impede multiple areas of a child's development and often persist into adulthood predicting poor educational, social and health outcomes. Early identification may significantly reduce this burden both on individuals and society but relevant tools largely lack validation. The objective of this systematic review is to identify screening tools used to ascertain language and behavioural difficulties within a preschool population of children and evaluate their psychometric properties in relation to a validated diagnostic assessment. Searches were conducted in the following electronic bibliographic databases: MEDLINE, EMBASE, PsycINFO, CINAHL and ERIC. The authors focussed on universal screening tools (i.e. tools for whole population use) and studies using clinic or high-risk samples were excluded. Children were aged between 2-6 years at the time of the initial screen and any age at follow-up assessment. In order to establish screening performance, only studies employing a validated diagnostic follow-up assessment measure were included. Both the concurrent and predictive validity of a screening tool have been taken into account. Studies screening for specific disorders (e.g. ASD, ADHD) were included provided

they were whole-population based. Aggregate data of the findings from the included studies will be presented, structured around the screening properties (target population, respondent characteristics, administration time) and screening performance (sensitivity, specificity, positive predictive value, negative predictive value) calculated in reference to 'gold standard' follow-up assessment. Aggregate data of the findings from the included studies will be presented, structured around the screening properties (target population, respondent characteristics, administration time) and screening performance (sensitivity, specificity, positive predictive value, negative predictive value) calculated in reference to 'gold standard' follow-up assessment.

P02.42

### **QUALITY OF LIFE AMONG PRESCHOOLERS: A STUDY IN A SAMPLE OF SPANISH CHILDREN BETWEEN 3 AND 5 YEARS OLD**

**Orgilés M.\*, Morales A., Fernández--Martínez I., Penosa P., Espada Sanchez J.P.**

*Miguel Hernández University ~ Alicante ~ Spain*

Quality of life in children and adolescents has been widely investigated. However, there is a lack of studies focused on quality of life in preschool children. Specifically, we could not find any study carried out with the aim of examining the quality of life among Spanish preschool-age children. The aim of this study was to analyze the Spanish preschoolers' quality of life perceived by their mothers, and to examine differences by gender. The sample of this cross-sectional study consisted of 191 children between 3 and 5 years old ( $M = 3.71$ ;  $SD = 0.80$ , 55.5% males), recruited from five schools located in the southeast of Spain. Mothers completed a parent-report measure of health-related quality of life (Kiddy-KINDL) and provided sociodemographic data about themselves and their children. The Spanish preschoolers' quality of life was good, finding a total score of 80.49 ( $SD = 9.86$ ) (rating ranging from 25 to 100). The results showed the following scores in the subscales of the Kiddy-KINDL: physical well-being ( $M = 81.38$ ;  $SD = 13.09$ ), emotional well-being ( $M = 80.49$ ;  $SD = 13.81$ ); self-esteem ( $M = 75.91$ ;  $SD = 17.08$ ), family ( $M = 79.71$ ;  $SD = 14.39$ ), friends ( $M = 82.65$ ;  $SD = 14.47$ ), and daily functioning ( $M = 82.82$ ;  $SD = 12.74$ ). No significant differences were found by gender. The results of the study extend the literature related to the quality of life at pre-school age, finding a good quality of life among Spanish preschoolers, but no differences in function of gender. Implications of the study are discussed.

P02.43

### **INFLUENCE OF MATERNAL ANXIETY ON THE QUALITY OF LIFE OF THEIR PRESCHOOL CHILDREN**

**Espada Sanchez J.P.\*, Morales A., González M.T., Penosa P., Orgilés M.**

*Miguel Hernández University ~ Alicante ~ Spain*

Maternal anxiety has a negative impact on their children, indicating some studies a relationship between anxiety in mothers and behavioral and emotional problems in children. Despite the importance of family variables on the development of children, few studies have analyzed the influence of maternal anxiety on the perceived quality of life in preschoolers, being this study the first conducted in a Spanish sample. The aim of this study was to analyze the relationship between maternal anxiety and the quality of life among a sample of Spanish pre-school children. A total of 119 mothers ( $M = 36.31$  years old;  $SD = 5.18$ ) of children aged between 3 and 5 years old were recruited through the schools of their children (55.5% were boys), located in the southeast of Spain. The mothers completed the State-Trait Anxiety Inventory (STAI); the quality of life in children was assessed with the Kiddy-KINDL (parent version). Mothers with higher anxiety trait scores perceived that the quality of life of their children was lower ( $r = -.25$ ;  $p = .01$ ) than the less anxious mothers. The more affected areas of quality of life perceived by the more anxious mothers were: friends ( $r =$

-.25;  $p = .01$ ), family ( $r = -.23$ ;  $p = .01$ ), daily functioning ( $r = -.22$ ;  $p = .01$ ), and emotional well-being ( $r = -.15$ ;  $p = .01$ ). The results suggest that maternal anxiety could influence on the perception of the quality of life of their children. Moreover, it is possible that children with poorer quality of life have more anxious mothers than those with higher scores. Interventions that address maternal anxiety may be the most efficient manner to prevent the negative effects on children's quality of life.

P02.44

### **EXPLORING LONGITUDINAL IMPACTS OF ADVERSE CHILDHOOD EXPERIENCES ON HEALTH IN MIDDLE CHILDHOOD**

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Findings from the Adverse Early Childhood Experiences (ACE) study articulated the negative effects of childhood trauma on long-term health. Increasingly, physicians and other practitioners are being encouraged to engage in screening and prevention efforts related to ACEs. Our objective is to examine the associations between ACEs and health and development in a sample of low-income families. Descriptive, cross-sectional study of a sample of families enrolled in Early Head Start. Participants: Data come from 1099 socio-demographically diverse mothers and children collected at or near ages 1, 2, 3, 5, and 11. Parents were 23 years ( $SD=6$ ) old, representative on race/ethnicity (White=41%, Black=32%, Hispanic=23%), with limited education (43% less than high school, 29% with diploma/GED). Children were equally divided on gender. An ACEs index was created from interview and observation items at each age, which were averaged across all ages. At age 11, parents reported on child health. Logistic regression analyses controlled for program status and location, family demographics (child gender, maternal education, race, and age at enrollment and family income). Children were exposed to none (15%), one (35%), two (29%), or three or more ACEs (21%). Children with 3 or more ACEs have odds 2.8 ( $p<.001$ ;  $CI=1.7, 4.6$ ) times higher than children with no ACEs of having been diagnosed with asthma, allergies or chronic sinusitis. ACEs were also associated with greater diagnosis of emotional problems and/or ADHD (Wald = 43.11,  $p<.001$ ). ACEs were associated with risk for overweight/obesity (Wald=15.49,  $p<.001$ ) where the odds for children with 2 (OR= 2.28,  $p=.05$ ;  $CI=1.0, 5.19$ ) or 3 or more (OR= 4.35,  $p=.001$ ;  $CI=1.9, 10.24$ ) ACEs across development were higher than those with none. Findings suggest that ACEs influence the health outcomes of children early in development. We will discuss implications for screening and intervention.

P02.45

### **OVERPROTECTIVE OR PUNITIVE MOTHERS? EFFECT OF THE EDUCATIONAL STYLE ON CHILD ANXIETY**

**Orgilés M.\*, Espada Sanchez J.P., Morales A., Melero S., Penosa P.**

*Miguel Hernández University ~ Alicante ~ Spain*

In the first years of life, the style of parenting is determinant for the child development. The aim of the study was to analyse the relationship between the parental educational style (overprotective, punitive, assertive and inhibited) and the presence of anxious symptomatology (separation anxiety, social anxiety, OCD, generalized anxiety and physical fears) in a sample of Spanish preschoolers. The sample consisted of 119 preschool children between 3 and 5 years old ( $M = 3.71$ ,  $SD = .80$ , 45.5% girls), whose parents completed a questionnaire reporting their educational style and the Preschool Anxiety Scale of Spence. Girls showed more separation anxiety ( $d = .28$ ,  $p = .04$ ) and physical fears ( $d = .30$ ;  $p = .03$ ) than boys. Correlations analyses indicated that the overprotective educational style

was significantly associated with separation anxiety ( $r = .33$ ,  $p = .01$ ), OCD ( $r = .30$ ;  $p = .01$ ) and generalized anxiety symptoms ( $r = .17$ ;  $p = .05$ ) in children. The assertive style was associated with less symptoms of generalized anxiety ( $r = -.15$ ;  $p = .05$ ), while the inhibited style was associated with more symptomatology related to social anxiety ( $r = .18$ ;  $p = .05$ ) and OCD ( $r = .19$ ;  $p = .01$ ). The punitive style was associated with social anxiety ( $r = .25$ ;  $p = .01$ ), separation anxiety ( $r = .24$ ;  $p = .01$ ), OCD ( $r = .20$ ;  $p = .01$ ), and generalized anxiety symptoms ( $r = .20$ ;  $p = .01$ ) in pre-schoolers. In conclusion, the educational style seems to be related to the presence of anxious symptomatology in the preschool age; therefore, parents are a key player in the prevention and treatment of emotional problems during childhood.

P02.46

### **SOCIAL-EMOTIONAL DEVELOPMENT OF INSTITUTIONALIZED CHILDREN LIVING IN FAMILY-LIKE ENVIRONMENT**

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Children placed in institutions are at risk of having social-emotional problems due to their prior experience of being left without parental care and placed in an institutional environment. Although family care for orphan children is the most ideal and acceptable alternative, usually it takes time to find a family for each child, and BHs are still the alternatives as a temporary place for children. Based on a special resolution of the Russian government ('issued 24/05/2014), all institutions for children left without parental care have to create a family-like environment, including the establishment of primary caregivers, and the elimination of periodic transitions of children to new wards (Russian Federation Government Resolution No481, 2014). This study examined social-emotional development of children living in Russian Baby Homes with family-like environment ( $N = 30$ ) in comparison with children from biological families ( $N = 30$ ). Children were assessed with "Ages and Stages Questionnaires: Social-Emotional" (ASQ:SE; Squires J., Bricker D., Twombly E. et al., 2015) in the age range 8 - 42 months. The results showed that institutionalized children from family-like Baby Homes demonstrate a higher prevalence of social-emotional problems in comparison with children from biological families without institutional experience. Unfortunately, the creation of the family-like environment in institutions for children left without parental care including only structural changes in accordance with the Resolution of the Russian government is not enough for normal child development. Training encouraging warm, sensitive and responsive interactions with children during routine caregiving activities and supervision system for caregivers are also important and should be included in the intervention.

P02.47

### **NATURE AND NURTURE IN PRESCHOOL ADHD**

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Attention-Deficit/Hyperactivity Disorder (ADHD), a well-defined common neuro-developmental disorder. However, its presentation in the preschool years can be variable and mistaken for other common behavioral and developmental problems. We have been developing protocols for diagnosis and treatment of preschool ADHD, based on clinical studies and a body of research accumulated over the past 20 years. Our "clinical algorithm" includes a proper neurodevelopmental evaluation, including full history, developmental and psychosocial status, and physical/neurological exam. Validated teacher and parent questionnaires also contribute to a complete evaluation. Findings

from this evaluation form branches on a "decision tree", which then lead to further steps. The mainstays of treatment include parental training, as well as various protocols mainly based on Occupational Therapists and other disciplines developments. These treatments have been proven effective in the preschool population. In the absence of improvement following these treatments, and the presence of significant impairment in at least two areas of functioning, medical treatment should be considered. We have also present the "Triangular Model for Diagnosis and Management of Preschool ADHD", based on the temperamental-genetic, emotional-behavioral and developmental-genetic pathways explaining the genesis of a clinical picture of ADHD, as well as the basis for choosing the appropriate clinical tools in its treatment throughout different stages of childhood. This model can further be used to explain the child's behaviors and clinical outcome to the parents. We believe adherence to these guidelines can improve outcome in these children, and prevent worsening comorbidity and impairments as they proceed to school age and beyond.

P02.48

**PREVENTING, DETECTING AND MANAGING EARLY SIGNS OF DEVELOPMENTAL DISORDERS – INSTITUTIONAL CHANGE AND EDUCATION OF CARETAKERS IN LIFEWORLDS AT RISK IN BY USING A MODERN RECORDING- AND FEEDBACK SYSTEM FOR INTERSUBJECTIVE AND INTERCULTURAL IN-VIVO-RESEARCH**

**Frank B. <sup>\*[1]</sup>, Polzin C.<sup>[2]</sup>, Vuliva A.<sup>[3]</sup>, Bruno A.<sup>[3]</sup>, Müller O.<sup>[4]</sup>, Rosenhahn B.<sup>[4]</sup>, Lüdtke U.<sup>[2]</sup>**

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The relationship between social structures in communities and lifeworlds of socioeconomically deprived families must be examined in cross-disciplinary perspectives. Research can elucidate the effect of at risk-lifeworld-conditions on the quality of single mother (or caretaker) -infant interactions, conditions that influence the temporal structure of single vocal, gestural and "mimetic" interactions. Newborns communicate from the moment of birth and develop under given social and institutional conditions. According to their psychological development they are depending on a contingent and responsive partner (see Trevarthen & Aitken 2001; Gratier 2003). From the first day of life their psychological expressions are intentional (see Frank & Trevarthen, 2012). Basic dialogue, multimodal communication and emotional regulation are intrinsically connected and are relational and intersubjective at their core (Frank & Lüdtke 2011). Institutional conditions can easily lead to neglect within timed childcare, encapsulated within certain institutional requirements ("looping"; see e.g. Goffman 1961) and can lead to a more or less severe type of hospitalism (Spitz 1945) and other severe developmental problems. Inquiring type and reasons of child neglect in vulnerable institutions; inducing institutional change; inquiring new methods of education of (analphabetic) caretakers in rural areas in developmental countries. In this research-project we investigated the protoconversation in 0 – 3 months old children, the relation between temporal structure (voice, facial expression and body movements) and the precursors of speech related to cultural specifics of these interactions. These protoconversations are captured by an autonomous multi-camera-system for in-vivo research (III-R system: Intersubjective and Intercultural in-vivo research), avoiding the presence of a third person (researcher) in field research. This presentation will show the analysis of III-R - recordings of caretaker-infant interactions, gained in a remote orphanage in Lushoto, Tansania (case study, microanalysis of C-I-interactions based on in-vivo-recordings), the use of these kind of recordings and of camcorder recordings for intervention in disturbances in early development and

education of caretakers according Video Interactive Guidance (Kennedy 2011). Effective work on different levels of social exclusion needs interdisciplinary research- and intervention strategies

P02.49

### **GENDER DYSPHORIA IN EARLY CHILDHOOD**

**Peskin M.\***

*Geha Mental Health Center ~ Petah Tikwa - Israel ~ Israel*

The aim of the presentation is to outline the history, assessment and treatment of a 5 year-old boy who declared at the age of 3 that he/she is a girl. From the focus on a particular child with specific personal and family problems, the presentation provides a more general perspective regarding the complexity of developing identity. The biological, psychological and social factors which are involved in the process are presented, as well as their interactions. Finally, the presentation discusses several ways of treating clinical cases of very young children with GD, and crucial and urgent questions related to whether, when and how mental health professionals should intervene. Gender identity develops between the second and the fourth years of life, consolidating during the preschool years. In a yet unknown, but clinically very significant percentage of young children, there is no concordance between the gender assignment (sex) and the gender identity. This condition was diagnosed in the past as Gender Identity Disorder. New research findings and concepts lead to major changes in psychiatric, psychological and social understanding and definition of the non-concordance between gender assignment and gender identity. Gender is now understood as a continuum, rather than a dichotomy, between the male and female poles. Non-concordance may be associated with gender dissatisfaction, and even distress or impairment. Currently, this condition is defined as Gender Dysphoria (GD).

P02.50

### **EXECUTIVE FUNCTIONS OF SOCIOECONOMICALLY DISADVANTAGED CHILDREN (3-5 YEARS): THE IMPORTANCE OF FATHER-CHILD RELATIONS**

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Although, father's influence on the child's development has not been studied extensively, it is even more limited when it comes to investigate fathers' influence on child executive functions (EF). Two studies using community samples have shown that quality of father-child interactions is related to EF at 3 years (Bernier et al., 2012; Meuwissen & Carlson, 2015). Only one study has investigated this association using a low-income sample (Towe-Goodman et al., 2014), showing that this association needs further investigation. Moreover, these studies have not reported EF over the preschool period. Thus, the aim of this research is to better understand the association between the father-child relationship and the development of EF in preschool children with a socio-economically disadvantaged background. Participants included 67 children (51% boys), ages 3–5 years, and their father. Fathers were aged between 24 and 51 years ( $M = 37.1$  and  $SD = 7.1$ ). Of these, 45.6% had an annual gross family income between \$ 8,000 and \$ 14,999. More than half of the fathers (69%) had an high school diploma. Quality of father-child interactions was assessed from direct observation of a free-play situation (Moss et al., 1998) while executive function (cognitive flexibility) was tested using the Minnesota Executive Function Scale (MEFS; Carlson & Zelazo, 2014). Preliminary analysis revealed that child age was the only sociodemographic variable associated with EF,  $r = .69$ ,  $p < .01$ . Partial correlations controlling for child age showed that preschoolers' EF were associated with Father-Child Communication ( $r = .28$ ,  $p < .05$ ), sensibility ( $r = .26$ ,  $p < .05$ ) and tension ( $r = .29$ ,  $p < .05$ ) but

not related to Father-Child emotional expression, coordination and pleasure. Findings underscore important dimensions of the father-child relationship on preschoolers' executive function in low-income families.

P02.51

### **TEDDY BEARS AND TRICHOTILLOMANIA: A CASE REPORT**

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Many psychopathological theories have suggested different understandings of trichotillomania in children quiet distinct from that of adults. It has been correlated with the quality of early interactions and with the concept of the transitional object. This case-report attempts to highlight the psychopathology of trichotillomania. The patient was 2 years and 4 months old when she was first brought in by her parents for hair pulling resulting in balding of extensive parts of the scalp. The child had no previous medical history. Maternal depression and separation from the father colored the early months of life. In late pregnancy, the mother was recruited as teacher in a city in southern Tunisia. She had left her marital home with her daughter, then 10 days old, to start working and kept his child's existence secret from her employers. This period was marked by physical and moral exhaustion of the mother, which led her to seek the help of the grandfather who became the child principal caregiver. Trichotillomania started at the age of 9 months. The behavior occurred at times of idleness or stress especially around bedtime concomitant with oral stimulation. The mother reported that every time the child has adopted a transitional object she have prevented it because of cultural misconceptions. The child showed signs of insecure attachment. Guidance has been provided encouraging parents to institute bedtime rituals fulfilling the transition wake sleep and remove oral stimulations. All hair pulling behavior stopped by the time of the second consultation after two weeks time.

P02.52

### **INTERVENING EARLY IS ALREADY LATE: INTERGENERATIONAL CYCLES OF CHILDHOOD MALTREATMENT BEGIN BEFORE CHILD'S BIRTH**

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Child abuse and neglect (CAN) has long-term consequences on physical and mental health and is a risk factor for intimate partner violence (IPV) in adulthood. However, little is known about the association between CAN, IPV and mental health during pregnancy. This appears important as both IPV and CAN may affect pregnant women's mental health during this critical period and affect the developing foetus. The current study first aims to evaluate whether pregnant women exposed to CAN are at increased risk of IPV. A second objective is to assess how CAN and IPV influence mental health during pregnancy. Future mothers (n= 103) were recruited in general community services and services designed for adults presenting vulnerabilities. They were invited to complete self-report instruments, including the Childhood Trauma Questionnaire, the Conflict Tactics Scale-2 and others measures on their current psychological distress (Edinburgh Postnatal Depression Scale, Personality Diagnostic Questionnaire, PTSD Checklist for DSM-5). Severity of CAN correlated with IPV ( $r = .22, p < .05$ ). Both CAN and IPV significantly correlated with psychological symptoms. Mediation analyses showed that IPV partially mediates the association between CAN and depression ( $\beta = .14, SE = .04, p < .01$ ), personality traits ( $\beta = .44, SE = .13, p < .01$ ), and post-traumatic stress symptoms ( $\beta = .41, SE = .11, p < .01$ ). Results show that the risk of IPV increases with the degree of exposition to CAN. As this may expose the foetus directly (through physical damage) and

indirectly (through mother's stress), we advocate that intergenerational cycles of violence begin before child's birth. Both types of violence, past and current, independently increase the risk of mental health symptoms during pregnancy, which represents an additional risk for the developing foetus.

P02.53

### **IDENTIFYING VARIABLES ASSOCIATED WITH THE PRODROME OF AUTISM DURING THE FIRST YEAR OF AN INFANT'S LIFE**

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While there are as yet no clear biological markers for ASD, evidence exists for the presence of behavioural markers for autism already within the first year of life. However, there is still a great deal that is unknown regarding the prodromal development of autism, early behavioural variables, and the effects of early intervention. This study conducted at the Mifne Center examined 110 infants between the ages of 3-15 months who were eventually diagnosed with autism at the age of 2-3 years. Retrospective analysis was conducted of video-recordings of the first months of their lives made by their parents before any suspicion concerning defective development arose. Clips of parental home videos of infants during their first year of life will be included in this workshop presentation. Eight variables associated with the prodrome of autism during the first 15 months of life were identified. These include: excessive passivity, excessive activity, lack of eye contact, lack of reaction, refusal to eat, aversion to touch, motor development delay and head circumference. The results from this study form the basis of the "Early Signs of Pre-Autism Screening in Infants" (ESPASI) screening instrument suitable for infants between 5-15 months. Symptoms associated with the prodrome of autism may be identified in the first year of life. A therapeutic imperative exists for early assessment and intervention for infants with the prodrome of autism from around the age of twelve months. The ESPASI presents an early screening tool to detect autism in infants between 5-15 months, though its widespread clinical application still requires further validation.

P02.54

### **THE EVOLVED NEST: RELATION TO CHILD AND ADULT WELLBEING AND SOCIOMORALITY**

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Every animal has a developmental niche or system for its young, part of an extra-genetic inheritance, that corresponds to the needs and maturational pace of offspring (Gottlieb, 1991). Intensive caregiving emerged for social mammals over 30 million years ago and small-band hunter-gatherers (SBHG), representative of 99% of human genus social history, demonstrate a "hunter-gatherer childhood model" of childrearing (Konner, 2005, aka the "evolved developmental niche;" EDN; Narvaez, Gleason et al., 2013; Narvaez, Wang et al., 2013). For young children, the EDN includes soothing perinatal experiences, extensive breastfeeding, lots of positive touch, free play, multiple adult caregivers and positive social support for the mother-child dyad. All components are related to child biological development. We report on several studies examining whether the EDN matters for wellbeing, sociality and type of morality in young children and adults. We created measures of the EDN that mothers complete about their children's experience and tested them in three countries (China, Switzerland, USA). We also created a retrospective measure of adults' childhood experiences and tested it among adults in the three countries. We also used standardized measures

of wellbeing, social and moral development. Mental health, sociality and morality were predicted by models using the EDN as a predictor, even after controlling for caregiver responsiveness. Children with a more intact EDN showed greater social pleasure, empathy, self-regulation and conscience. Adults who reported a more intact EDN had more secure attachment, less anxiety and depression, greater perspective taking and open hearted morality. SBHG show a much more cooperative morality than typical humans from civilized societies, demonstrating Darwin's "moral sense," which seems to be diminishing in countries like the USA where the EDN is particularly degraded. Darwin's "moral sense" may require EDN-consistent support in early life when brain and body system functions and trajectories are established.

P02.55

**IMPACT OF BREASTFEEDING ON EMOTIONAL AND BEHAVIORAL PROBLEMS AT AGE 2½ YEARS**

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Breastfeeding is an important factor for neuropsychological development, with the majority of studies reporting a beneficial effect on child cognitive development. But only few studies have focused on the association between breastfeeding and child psychopathology, with some inconsistency in findings. The association between duration of breastfeeding and later emotional and behavioral problems was studied in a population based birth cohort of 1,796 mother-child pairs. Outcome focus was ADHD-symptomatology and dysregulation problems at age 2½ years, rated by parents and caretakers using the Child Behavior Checklist for ages 1½-5 years (CBCL/1½-5). The association with maternal education was analyzed using Structural Equation Modelling (SEM). Our study indicated that longer breastfeeding might have a protective effect on development of ADHD symptoms at age 2½ years. Results will be shown at the conference. Our study indicated that breastfeeding might reduce the risk of ADHD and the broader range of dysregulation symptoms at the age of 2½ years. The results support the recommendation of breastfeeding, not only to promote physical health and neuro psychological development, but also as a possible protective factor on the development of ADHD in children in a low risk population.

P02.56

**INTEGRATION OF THE NMT WITHIN A MILIEU APPROACH TO EARLY CHILDHOOD MENTAL HEALTH**

**Gwynne K.\***

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The Dalwood Spilstead Service provides a model of care which integrates evidence-based interventions, within a comprehensive trauma-informed approach with services for both parents and children provided from the one team. The Spilstead Therapeutic Preschool supports 55 children between 1-6 years who present with complex emotional and developmental needs. Implementation of the Neurosequential Model over the past 6 years has been transformative and now informs all aspects of service delivery. The NMT Metrics are incorporated into assessment protocols for all children attending the Therapeutic Preschool and completed by the family's inter-disciplinary team. Regulation is prioritized and targeted for both children and parents via a combination of somato-sensory, environmental and relational strategies while the NMT Therapeutic Web is enhanced in the presence of multiple, predictable co-regulating relationships with staff from 11 disciplines, trained volunteers and community mentors, forming a Co-Regulating Care approach to relational health. Individual NMT programs are developed for both parents and children. The therapeutic preschool day commences with "Sensory Settling Time" in one of the Sensory Rooms (including an

“Engine Room” and “Snoezelen”) for approximately 40 minutes of child-led sensory experience in a calm, contained environment prior to classroom participation. Evaluation of a co-hort of 20 children utilizing the NMT Functional MAP, The Brigance Developmental Screen plus norm-referenced parent rated measures has indicated statistically significant gains in all developmental domains since implementation. The presentation will include case study examples.

P02.57

#### **YOUNG CHILDREN’S FEELINGS ABOUT THEIR INCARCERATED PARENTS**

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Five million US children have experienced a co-resident parent leaving for jail or prison. Children with incarcerated parents are more likely to exhibit behavior problems, health concerns, and cognitive difficulties than their peers, controlling for other risks. Although visits to corrections facilities are a key opportunity to maintain parent-child relationships, several studies have linked children’s visits to jails with elevated behavior problems and anxiety. However, studies have not asked young children directly about their feelings regarding visits or their incarcerated parents. This study describes how young children feel about their incarcerated parents using a new assessment method, as well reporting results of direct observations of children’s visits to jail. 62 children, age 3-8 years, who visited in one of four jails were given an iPad and earbuds when they arrived. Through recorded questions on the iPad, children were asked 5 questions about their feelings, including their current feeling state and about their family, the person they were visiting, the actual visit, and the person who brought them. Children responded by touching a picture of a face icon, ranging from smiling to neutral to crying (Figure 1), similar to pain scales used in pediatrics. Their visits were also observed using the Jail-Prison Observation Checklist. 22% of children indicated negative feelings while waiting, whereas 39% indicated positive feelings. Slightly more than half of children indicated positive feelings about their families and incarcerated parents. We will explore variations in children’s feelings based on age, what they were told about the parent’s incarceration, and their relationships with caregivers. More needs to be done to help children who struggle to cope with their emotions when visiting a jailed parent, as visits to corrections facilities are a unique opportunity to enhance parent-child relationships.

P02.58

#### **SLEEP BEHAVIOR OF ONE-YEAR OLD CHILDREN AND SOOTHING METHODS USED BY PARENTS: KUOPIO BIRTH COHORT STUDY**

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Sleep behaviour including the duration and the quality of sleep is essential for infant’s development. Helping the infant regulate his or her sleep-wake –state is one important task of early parenting, and parental soothing is significant for the development of infant’s self-soothing skills. Whether infant’s sleep is considered problematic or not, depends on cultural context and parent’s attitudes and beliefs concerning how infants sleep in general. In this study, we sought to investigate sleeping behaviour of 1-year old infants, as well as the soothing methods used by parents when their children wake up at night. This data was collected as part of the Kuopio Birth Cohort (KuBiCo) Study, that seeks to determine the effects of prenatal exposures and genetic factors on both the infant’s and mother’s health. The final database will include 10,000 mother-child pairs. All pregnant women who

will give birth at Kuopio University Hospital are invited to participate. The results are based on the answers of 1,213 mothers on Infant Sleep Behaviour Questionnaire. For the poster presentation we are aiming to continue analysis by studying the differences of male and female infants concerning their sleep behaviour. 88% of 1 year old infants slept 12 hours/day or more. Altogether 66% of them needed parental help in settling to sleep, and 92% fell asleep within 30 minutes. Those soothed by giving milk woke up more often and required more parental assistance than those soothed by other methods. Approximately one tenth of 1-year old infants sleep less than recommended. Furthermore, circa one in ten infants falling asleep takes longer than what is considered average. Soothing a 1-year old infant with milk at night time is associated with more night awakenings and greater need of parental assistance.

P02.59

### **PERCEIVED SOCIAL SUPPORT IN MOTHERS OF INFANTS HOSPITALIZED IN NEONATAL INTENSIVE CARE UNIT**

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The separation of mother -infant dyad at birth, because of the newborn baby's need for intensive medical attention, is an unexpected and traumatic event for the mother. It may affect not only the process whereby the mother forms a bond of attachment to her child, but also maternal mental health and postpartum psychological distress. Social support is thought to have an important influence on women's mental health in this specific period. The present study aimed to investigate levels of social support among mothers whose babies were hospitalized at birth in the neonatal intensive care unit (NICU) of the Mongi Slim hospital in Tunisia. It also aimed to examine the relationship between perceived social support and postpartum depression. This study were conducted by the Child psychiatry department of Mongi Slim hospital (Tunisia). Socio-biographical and gynaecological characteristics were collected from Medical Files. Mothers completed the Multidimensional Scale of Perceived Social Support (MSPSS) translated into Tunisian dialect, the validated Arabic version Edinburgh Post-Natal Depression Scale (EPDS) and the Postpartum Bonding Questionnaire (PBQ). Time spent in the NICU exposes both infant and mother to stressors. The family's understanding of the mother's difficulties and his ability to provide support for her may be crucial factors in helping her to establish a healthy relationship with her baby.

P02.60

### **EMOTIONAL EXPRESSIONS IN YOUNG CHILDREN FROM SUBSTITUTE FAMILIES**

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The number of substitute families (SF) in the Russian Federation (RF) has been currently rising. Very few research, dedicated to children with early deprivation experience transferred to SF, has been conducted in RF. World-known studies prove that children's capacity to express the emotions associates with the quality of relationships with the primary caregiver and influences child's development and mental health. Besides, social-emotional environment in social-risk families and institutions doesn't allow a child to create emotional relationships with the primary caregiver. Thus, this research was initiated to find out what effects of early deprivation experience on children's emotions we can watch after 6+ months staying in the SF environment. We examined the differences of emotional expressions in young children from SF and biological families during 5-minutes free-play interaction with the mothers. We used "Dyadic Affect Manual" to code and measure the emotional expressions.

The research data is under analyses now. It is supposed that children from SF use less negative affect, and more motor activity and disruptive behavior in interaction with their mothers than children from biological families. We also expect less emotional synchrony between mothers and children in SF in comparison with biological families. Children in SF are prone to exhibiting signs of intellectual inefficiency, behavioral and emotional deviations, and psychic disorders. Substitute parents might not be ready to face such problems, and this is a major reason of secondary returns of children from SF back to institutions. This research data could help understanding the processes of emotional regulation through emotional expressions in children with early deprivation experience. It could contribute to introduce intervention programs aimed at supporting emotional synchrony as basis for emotional relationships between children and mothers in SF.

P02.61

### **EMOTIONAL REGULATION OF YOUNG CHILDREN WITH SPECIAL NEEDS IN INSTITUTIONS WITH DIFFERENT SOCIAL-EMOTIONAL ENVIRONMENT**

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*Saint-Petersburg State Universit ~ Saint-Petersburg ~ Russian Federation*

In the Russian Federation the early intervention programs for children with special needs (SN) are mainly focused on medical issues, while the psychological component is often placed second. Many researches show that interacting with a primary caregiver, a child develops emotions as the basis of emotional regulation. The primary caregiver focus on recognition and adequate response to the child's signals play a particularly important role for a child with SN. We conducted the study of children with SN living in institutions of two different types - family-like (FI) and traditional (TI). The goal was to show that in the conditions of a sensitive and responsive environment, children with SN, having medical diagnoses and developmental disorders, can develop strategies of emotional regulation that are comparable to those of typically developing children. Participants included SN children aged 9 to 44 months old from FI and TI. The children were divided into groups by the Functional Abilities Index (Muhamedrahimov, Palmov, Istomina, 2000). Emotional regulation was measured using Dyadic Affect Manual (Osofsky, Muhamedrahimov, Hammer, 1998) in a set of episodes: child-caregiver interaction/separation/reunion. In the previous study, we found out that in interaction with the primary caregiver children from TI demonstrated a higher positive affect, and greater motor activity than FI children. We expect that strategies of emotional regulation of FI children will be different from those of TI with SN, and, possibly, will be comparable with the strategies of regulation of typically developing children. The results highlight the role of a sensitive social and emotional environment for the children with SN. When targeting the stored functions, emotions and signals of the child, it is possible to achieve a level of emotional development in which emotional regulation strategies may not differ from the strategies of typically developing children.

P02.62

### **HOW IS MATERNAL EXECUTIVE FUNCTIONING ASSOCIATED WITH MOTHERS' INTERACTION WITH THEIR 8-MONTH-OLD AND 2.5-YEAR-OLD CHILDREN? FINNBRAIN BIRTH COHORT STUDY**

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Executive functions (EFs) are essential for mental and physical health, cognitive, psychological and social development. Little is known about how development of EFs is related to maternal caregiving. EF is a crucial component of maternal caregiving, the quality of which in turn affects the development of the child's EFs. A greater understanding of the significance of EF in the caregiving context is needed for the development of health supporting interventions. We explored the association between maternal EFs and the interaction between mothers and their children at the age of 8 months and 2.5 years. A sample of 47 mothers was drawn from the FinnBrain Birth Cohort Study. They were video-recorded while interacting with their 8-month-old child during a 15-20 min free-play situation. At 12 months postpartum, the CogState (CS) neuropsychological battery was used to assess the mothers' EFs. The free-play situations are being analyzed using the Emotional Availability (EA) Scales, with 4 variables describing the mother's part and 2 variables describing the child's part of the interaction. The CS test battery consisted of 13 tasks, measuring e.g. processing speed, verbal and spatial working memory, set-shifting, and visual and verbal learning. In addition, another sample of 90 mothers were assessed with CS 30 months postpartum, and were video-recorded while interacting with their 30-month-old children during a similar free-play situation as above. In a preliminary analysis of data from the first measurement point, moderate associations ( $r_s = .29 - .47$ ,  $N = 47$ ,  $p = .001 - .047$ , two-tailed) were found between CS tasks measuring reaction time/working memory, and the EA in mother-child interaction.

P02.63

### **EARLY START DENVER MODEL (ESDM) INTERVENTION IN AUTISM SPECTRUM DISORDERS DELIVERED IN AN ITALIAN KINDERGARTEN SCHOOL**

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**Aim of the study:** This study evaluated the effectiveness of ESDM (Early Start Denver Model) in a small group of toddlers, during the frequency of the pre-school years. Teachers and educational assistants use the model in the class-room where are included one or two autistic children. **Introduction:** International research proved that rehabilitation in Autism spectrum disorders must be early and intensive. Actually the diagnosis of autism is possible at the age of 12-18 months old. Early diagnosis combined with an early intervention program can positively influence the natural history of autism spectrum disorders. **Method:** The Early Start Denver Model (ESDM) is a comprehensive behavioral early intervention approach for children with autism, ages 12 to 48 months. The program encompasses a developmental curriculum that defines the skills to be taught at any given time and a set of teaching procedures used to deliver this content. The model can be delivered by therapy teams and/or teachers in group programs. Nine toddlers with diagnosis of

autism spectrum disorder, 12-48 months, received the program in ecological ambience (kindergarten school). The teachers and the educational assistants received a beginning short training and applied the model under the supervision of a therapist, during the whole school year. Results: Autistic children show a significant improvements in the communication and social engagement domains. Conclusions: It is considered that ESDM applied in ecological background may be a action with strong therapeutic dimension and may be widely used in the school.

P02.64

### **NEWBORN COMPETENCES AND TRANSITION TO PARENTHOOD – KNOWLEDGE AND PRACTICES OF A GROUP OF PORTUGUESE NURSES AFTER TOUCHPOINTS TRAINING**

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It is undeniable the association between nursing training and quality of care, skills development and the ability to apply scientific knowledge in the nursing care context. The Touchpoints model emphasizes the individual developmental characteristics and the influence of relationship-based and family-centered care. Thus, Touchpoints model represents an useful tool for quality nurse practice during the transition to parenthood. This work aims to explore nurses' knowledge and care practices with newborns and their parents after training in Touchpoints. We contacted via e-mail all nurses with training obtained in the first six Touchpoints courses of Portugal (n=23). Fifteen nurses agreed to participate in this study. Semi-structured in-depth interviews were conducted (in person or via Skype) based on a script developed by the research team. All interviews were audio recorded and later verbatim transcribed. The content was then analyzed using a semi-inductive approach supported by software the Nvivo. From the analysis of the interviews resulted three main categories (Parents-bBaby Relations, Pparents-NurseRrelations and Neonatal Period). Data are presented and discussed taking into account the purpose of the study, revealing nurses' knowledge about newborn characteristics and professional practice with newborns and their families in transition to parenthood. Principles of Touchpoints model are evident in diverse categories. The study highlights the importance of nurses' role working with families in the neonatal period and the pertinence of Touchpoints principles for the quality of their practices.

P02.65

### **CORRELATES OF MIND-MINDED REPRESENTATIONS OF INFANTS AND TODDLERS AMONG LOW-INCOME PARENTS RECEIVING INFANT MENTAL HEALTH SERVICES**

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Parents who ascribe mental agency to their children may be more likely to have insight into their children's intentions and behaviors, and, therefore, respond more sensitively to their emotional needs. Little research has examined how representational mind-mindedness (RMM), including parents' use of mental attributes when describing their children (Demers et al., 2010; Meins et al., 1998), is related to parental psychosocial functioning and parenting beliefs. This study examines

associations between parental psychosocial functioning, parenting beliefs, and parental RMM of their infants/toddlers. Low-income parents (N = 74) participating in infant mental health home visiting services gave audiotaped, bi-weekly descriptions of their children's personalities. Parents' first two baseline assessments were coded as reflecting: RMM (e.g., child's emotions, cognitions, intentions, desires), behavioral (e.g., busy), physical (e.g., cute), or general (e.g., good baby) content. Parent responses were also coded for positive, negative or mixed valence. Self-report questionnaires included: Depression (Patient Health Questionnaire-9), Parenting stress (Parenting Stress Index-SF), Beliefs about children's emotions (Emotion Styles Questionnaire) and Mindful parenting (Interpersonal Mindfulness in Parenting- self-acceptance). Child age was related positively to parental use of mental descriptors,  $r = .21$ ,  $p < .05$ , and negatively to physical descriptors,  $r = .27$ ,  $p < .05$ . Parental RMM was not associated with depression. Parents' negatively-toned attributions while describing their children were related to depression,  $r = .35$ ,  $p = .002$ , and parenting stress,  $r = .47$ ,  $p = .01$ . Parents' acceptance of children's negative motions,  $\beta = .36$ ,  $p < .01$ , and self-acceptance without judgement in parenting,  $\beta = .23$ ,  $p < .10$ , were associated with parents' RMM,  $F(3, 61) = 3.21$ ,  $p < .05$ . RMM was negatively associated with parenting stress,  $r = -.22$ ,  $p < .05$ . RMM is related to parental functioning and attitudes and may be an important intervention target.

P02.66

## **AN EXAMINATION OF MOTHERS' AND FATHERS' SELF-REPORTED PARENTING STYLES IN PREDICTING CHILDREN'S SOCIAL AND EMOTIONAL BEHAVIOURS**

**Martinovich V.\*, Rinaldi C.**

*University of Alberta ~ Edmonton ~ Canada*

Mothers' and fathers' parenting styles have been found to uniquely and significantly predict certain child outcomes (Rinaldi & Howe, 2012). One significant limitation of the existing literature, however, is that it is overwhelmingly mother-centric. Moreover, relatively few studies that include fathers consider their parenting style in conjunction with their partner. In adopting a family systems perspective, examining the combination of mothers' and fathers' parenting styles in relation to children's social-emotional functioning provides a more comprehensive picture. Two main research questions were proposed: (1) Do different combinations of mothers' and fathers' self-reported parenting styles in preschool predict children's externalizing problems and adaptive skills as rated by their school teachers? Based on findings reported in a similar study conducted by Braza and colleagues (2015), it was hypothesized that when both parents endorse a permissive parenting style children will exhibit higher levels of aggressive behaviour. Furthermore, this study sought to address (2) whether or not the relationship between the combination of different parenting styles and children's externalizing difficulties and adaptive skills is mediated by children's temperament. This short-term longitudinal study (12 months) included over 100 mothers and fathers of preschool aged children, and their teachers. Both parents were asked to complete the Parenting Styles and Dimensions Questionnaire and Child Behaviour Checklist (Time 1) and teachers completed the Behavioural Assessment System for Children, Second Edition approximately one year later (Time 2). This study's results will add to the limited literature on the mutual contribution of mothers' and fathers' parenting styles in relation to child behaviour and explore the mediating role of temperament. Findings will be meaningful to practitioners, as they will contribute to their understanding of the influence of parenting styles on preschool aged children's social-emotional functioning from a family systems perspective and aid in intervention work.

P02.67

**PARENT-CHILD INTERACTIONS ACROSS TASKS: USING OBSERVATIONAL RESEARCH METHODS TO ADVANCE PARENTING RESEARCH AND PRACTICE**

**Rinaldi C.\*, Martinovich V.**

*University of Alberta ~ Edmonton ~ Canada*

Observational research methods are an invaluable resource for researchers and clinicians studying parent-child interactions (Whitcomb & Merrell, 2012). Such methods shed light on how parents and their children interact within daily activities in more ecologically valid settings. Observational measures have been used to examine interactions amongst clinical populations to evaluate treatment outcomes, as well as within typical familial interactions (Aspland & Gardner, 2003; Bergmeier et al., 2016). The purpose of our presentation is to demonstrate the use of an established observational coding scheme, the Parent Child Interaction System (PARCHISY; Deater-Deckard et al., 1997), within the context of our longitudinal early childhood parenting study. Two hundred parent-child dyads were filmed at home engaging in 4 tasks (Lego, clean-up, puzzle building, emotion cards) and coded with the PARCHISY by a team of trained research assistants, resulting in individual and dyadic scores across all tasks. The individual measures include 7 parent dimensions (e.g., verbalizations, positive affect, positive content), as well as 8 child dimensions (e.g., non-compliance, positive affect, negative affect). Our presentation will incorporate a variety of parent-child video clips PARCHISY codes. We will review (1) the strengths and limitations of using an existing parent-child observational coding system to assess bidirectional processes, and (2) how the PARCHISY codes have been utilized within our research lab to answer specific questions about parenting in early childhood via the demonstration of video clips. Finally, we will present options for using mutuality/dyadic coding in clinical practice work.

P02.68

**THE INTERVIEW ABOUT THE CHILDBIRTH EXPERIENCE: ITS RELATION WITH PARENTAL AND INFANT'S CHARACTERISTICS**

**Candelori C., Babore A.\*, Trumello C.**

*Department of Psychological Sciences, Health and Territory, University of Chieti ~ Chieti ~ Italy*

It is well known that the quality of the perception of childbirth experience influences caregiving behaviors and maternal health. More recently, fathers' emotional experiences as regards the birth of their first child has also been considered, highlighting relevant outcomes both for fathers and children. The present study aims to explore the association between childbirth experience on behalf of mothers and father and their post partum psychological functioning. 40 mothers and 40 fathers at their first experience as parents were assessed by means of the Interview about the Childbirth Experience (Candelori et al., 2005). Parents were also longitudinally assessed on depression through the Edinburgh Postnatal Depression Scale (EPDS; Benvenuti et al., 1999), and on anxiety through the State-Trait Anxiety Inventory (STAI; Spielberger et al., 1983). Significant associations were found among all the included variables both for mothers and fathers. Results highlight the usefulness of the Interview about the Childbirth Experience in detecting mothers and fathers at risk in the perinatal period of life. Early preventive interventions are therefore to be recommended and should include fathers in addition to mothers.

P02.69

**BENEFITS OF A CLINICAL PROTOCOL OF AQUATIC SENSORY STIMULATION FOR BABIES.**

**Almeida C.\*, Neto J.**

*ForBabies ~ Porto ~ Portugal*

Evidence shows that touch plays a critical role in early physical, cognitive and emotional development of babies. Also many studies document the positive effects of hydrotherapy on different body systems. By combining both approaches we expect to improve sleeping patterns and motor skills, to have positive effects on respiratory, digestive and immune systems, to reduce stress levels and to promote attachment. We created a clinical protocol with a combination of massage and hydrotherapy benefits. Before hydrotherapy babies do a series of motor exercises, then during hydrotherapy, infants are supported by a flotation device thus moving freely in the water and are unaffected by gravity, where their motor and sensorial abilities are stimulated. After hydrotherapy sensorial massage begins, at this pleasant time caregiver are elucidated about the benefits and procedures of massage and invited to do it on their Baby. Data collection was performed using a specific questionnaire to analyse parent's perception on the effects of our protocol on attachment, relaxation, motor development, respiratory, digestive and immune systems, and skin condition. A preliminary analysis of the results allows us to infer a trend towards the positive effects of our protocol. 72.83% parents report improvement in sleep (quieter sleep, sleep for longer periods and falling asleep easier). 93.22% reported improvements in baby's relaxation, 57.63% greater affectivity and 62.71% reported global development improvement. In fields related to flexibility, skin, respiratory system, immune system and digestive gains are not significant, but we emphasize that 50% of parents of infants younger than 3 months reported high improvement in digestive system pointing to a positive influence in colic and constipation. Babies showed psychological and physical benefits from the clinical protocol with both hydrotherapy and massage

P02.70

#### **METHYLATION OF DAT AND RISK FOR PSYCHOPATHOLOGY: INTERGENERATIONAL TRANSMISSION BETWEEN PARENTS AND CHILDREN IN A NON REFERRED SAMPLE**

**Ballarotto G.\*<sup>[1]</sup>, Marzilli E.<sup>[1]</sup>, Cimino S.<sup>[1]</sup>, Cerniglia L.<sup>[2]</sup>, Pascale E.<sup>[3]</sup>, D'Addario C.<sup>[4]</sup>, Adriani W.<sup>[5]</sup>, Tambelli R.<sup>[1]</sup>**

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The effect of DAT1 gene polymorphisms and promoter methylation of DAT, associated with maladaptive developmental outcomes, vary depending on environmental factors (e.g. parental psychopathology). Studies that investigated the association between methylation levels and psychological difficulties in children have focused primarily on clinical samples and have mainly investigated the maternal figure, whereas no study has investigated the paternal role. We aimed to explore: 1) correlations between bio-genetic and psychological characteristics within the same individual (children, mothers, fathers); 2) correlations between parental and offspring bio-genetic characteristics; 3) predictive effect of parental psychopathological symptoms on children's bio-genetic characteristics; 4) predictive effect of children's bio-genetic characteristics on their own emotional-behavioral functioning. Sample was composed by 21 families, recruited through primary schools in Central Italy. We addressed parents' psychopathological symptoms (through Symptom Checklist-90items-Revised); offspring emotional-behavioral functioning (through Child Behavior Check List-6-18); Dopamine Transporter gene (DAT1) for epigenetic status of the 5'-UTR and for genotype, i.e. VNTR polymorphism at the 3'-UTR. DAT methylation of CpG at positions M1, M6 and M7 in mothers was correlated with maternal (Phobic) Anxiety, whereas in fathers' position M6 was related to paternal Depression, Anxiety, Hostility, Psychoticism and higher Global-Severity-Index.

No significant correlations were found between maternal and offspring DAT methylation. Significant correlations were found between fathers' methylation at CpG M1 and children's methylation at CpG M6. Linear regressions showed that mothers and fathers' Global-Severity-Index predicted children's methylation at CpG sites M2, M3 and M6, whereas fathers' Global-Severity-Index predicted children's methylation at CpG sites, particularly M1, M2 and M6. Moreover, offspring methylation of DAT at CpG M2 predicted Somatic Complaint, Internalizing and Attention Problems; methylation of DAT at CpG M6 predicted Withdraw. Our findings underline the importance of further studies that take into account the whole family in order to understand epigenetic changes that may lead to increased risk of development in children.

P02.71

**POSTNATAL REPROGRAMMING: COULD THE EFFECT BEHIND INFANT SEX MODERATED ASSOCIATION BETWEEN BREAST MILK CORTISOL AND INFANT TEMPERAMENT BE MODIFIED BY GUT MICROBIOTA COMPOSITION AND DIVERSITY?**

**Aatsinki A.\*<sup>[1]</sup>, Uusitupa H.<sup>[1]</sup>, Nolvi S.<sup>[1]</sup>, Munukka E.<sup>[2]</sup>, Karlsson H.<sup>[1]</sup>, Karlsson L.<sup>[1]</sup>**

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Breast feeding is known to be one of the most profound factors affecting infant gut microbiota composition (GMC), but the effect of breast milk (BM) compositional variance to GMC is less characterized. BM cortisol (BMC) intake during infancy has been proposed to impact HPA axis development and stress responsiveness. Our recent findings indicate that in girls, BMC at 2,5 months is associated with infant observed fear at 8 months. Also, maternally-reported fearfulness and infant GMC and diversity at 2,5 months were associated. However, it remains unknown if these findings are interrelated implying that BMC could affect infant temperament through gut microbiota and gut-brain axis communication. The aim of present study is to reveal if the modification of GMC and diversity could be the mechanisms of BMC-mediated lactational programming in shaping infant temperament. A breast milk cortisol samples (n=437) as well as fecal samples (n=517) were collected 2.5 months postpartum as part of the FinnBrain Birth Cohort Study (n=4011, [www.finnbrain.fi](http://www.finnbrain.fi)). Cortisol assays were conducted using validated luminescence method at the Institute of Finnish Occupational Health and GMC with 16S next generation sequencing as previously described in Toivonen et al. 2014. Maternal psychological stress was assessed 3 months postpartum using Edinburgh Postnatal Depression Scale (EPDS) and Symptom Checklist -90 (SCL-90). Infant fearfulness was assessed with Infant Behavior Questionnaire (IBQ-R) at 6 months postpartum and Laboratory Temperament Assessment Battery (Lab-TAB) Masks episodes at 8 months postpartum. BMC had an association to GMC at genus level (Lactobacillus (r=0.122, p=0.035); A. Actinobaculum (r= 0.4978, p<0.005); f. Clostridiaceae (genus unknown) (r=0.124, p=0.031)), and there were differences between sexes. BMC and GM diversity were not associated. In multinomial model (p-value: 0.02952) maternally reported fearfulness was explained by infant sex (0.33, p=0.0350) and GM diversity (-0.41, p=0.0735), but not by BMC. Based on our data it seems that both BMC and GMC affect infant temperament development, but via two different routes. In the presentation these two possible routes, cortisol-mediated and GM-mediated, are discussed.

P02.72

**FATHERS' INVOLVEMENT IN CHILD CARE AND SELF-REGULATORY ABILITIES OF PRESCHOOLERS**

**Breidokiene R., Jusiene R.\***

*Vilnius University ~ Vilnius ~ Lithuania*

As many research suggest the importance of maternal care for the optimal development of self-regulatory abilities (Bernier et al., 2010; Colman et al., 2006), much less is known about the unique contribution of fathering to emerging self-regulation, especially in preschool age. The current study aimed to analyze how fathers' involvement in child care in the first two years of life is related to self-regulation of 4-years-old preschoolers. This study is the part of the longitudinal study. The participants were 142 children (71 girls and 71 boys, mean age is 50.27 mo). To assess child's self-regulation at the age of 4 years we used observational laboratory self-regulatory tasks, adapted from Kochanska et al., McCabe et al., 2004 and Fagot & Gauvain, 1997 and the attention and behavior regulation problems and emotion regulation problems scales derived from maternal ratings on CBCL/1½-5 (Achenbach & Rescorla, 2000). The mothers also reported fathers' involvement measured as time spend together with child, participating in child everyday care, and the performing different social activities with child at the age of 6 mo, 1 and 2 years. The results revealed that higher observationally measured self-regulation is related to larger amount of time fathers spent with their child at 1 year old. In addition, more active involvement of fathers in child care and social activities at 1 and 2 years old is associated with less maternal-rated attention and behavior regulation problems at the age of 4 years. The possible mediators and moderators of the interplay between paternal involvement and child regulation (e.g., child's gender, developmental skills, sociodemographic factors, quality of parental relationships) are further analyzed in the study. The findings raise the possibility that interventions aiming to enhance paternal involvement may carry benefits for the development of emerging self-regulation of preschoolers.

P02.73

#### **DO INFANTS REALLY HAVE AN IMPLICIT RELATIONAL KNOWING?**

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Infants and their mothers use coherent communicative behaviors to co-regulate their interactions. Over time with repeated experiences of being together they create implicit relational procedures and knowing about the ways they engage with each other. Some of the ways are typical, such as an open handed wave, while others are unique to each mother-infant dyad, such as a particular finger game. The purpose of this study was to investigate infants' individualized procedural communicative behaviors as strategies for eliciting mothers' typical response during the Still-Face Paradigm (FFSF). In particular, we aimed to observe 1) the dyadic unique interactive behaviors exhibited by the infant in a normal playful interaction, and 2) whether the unique interactive behaviors are then utilized as eliciting behaviors (UEBs) in a perturbed interactive context, when the mother is acting in an unresponsive manner (Still Faced). 86 mother-infants dyads were observed in the FFSF at one of two different ages: 24 and 43 weeks of age. Play Episode and Still-Face Episode were coded by two independent coders to identify dyadic unique interactive behaviors in the Play Episode, and the same dyadic unique interactive behaviors displayed by the infants in the Still Face episode. Results showed that only the 43-weeks old babies displayed UEBs (29.3%) whereas no UEBs were observed in the 24-weeks old infants, pointing to an important early developmental difference,  $\chi^2(1, N=119) = 25.390, p < 0.001$ . When comparing across age groups, older infants were more likely to show UEBs than younger infants. These findings suggest that infants acquire UEBs with repetitions of typical interactions with their caretaker and are able to make use of these behaviors with the development of different capacities (cognitive, motor, emotional), in an attempt to elicit a response from an unresponsive mother UEBs can be incorporated into a procedural relational knowledge, which can then be used for different purposes in a different context. This research contributes to

the understanding of implicit relational knowing as a form of procedural knowledge that arises in the interactional processes between infants and caregivers.

P02.74

### **EARLY RISK FACTORS FOR POSTPARTUM DEPRESSION UNTIL 3 MONTHS AFTER DELIVERY: A LONGITUDINAL POPULATION BASED STUDY FROM JAPAN**

**Nakano M.\*<sup>[1]</sup>, Luntamo T.<sup>[2]</sup>, Chudal R.<sup>[2]</sup>, Sourander A.<sup>[2]</sup>, Kaneko H.<sup>[3]</sup>**

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Postpartum depression may have negative impact on the maternal health, development of children, and parenting. The prevalence of postpartum depression have been reported 5.0% to 27.0% among Japanese. The risk factors of postpartum depression have been investigated in longitudinal population based samples, however, most of these studies collected the data in western countries. To identify risk factors for postpartum depression until 3 months after delivery with longitudinal population based sample in Japan. The data was collected at four time points: first trimester, after the birth, and one and three months after delivery as a routine work of the maternal and child health care services in Hekinan city, Aichi prefecture, Japan. One thousand and forty six mothers participated in the study. Mothers completed the Edinburgh Postnatal Depression Scale (EPDS) 1 month and 3 months after delivery. Mothers who had high EPDS score (Japanese cutoff score:  $\geq 9$ ) 1 or 3 months after delivery, were recognized as having postpartum depression ( $n=91/8.7\%$ ). In the multivariate logistic regression analysis, mother's answer "unexpected but happy" about the pregnancy (OR=2.3, 95%CI = 1.4-3.9), younger maternal age ( $\leq 19$  years : OR=5.4, 95%CI = 1.6-18.8; 20-24 years : OR = 3.5, 95%CI = 1.8-7.0), maternal sleeping problems during pregnancy (OR=7.2, 95%CI = 3.4-15.24, poor social support during pregnancy (OR=5.4, 95%CI = 1.2-24.5), and low birth weight (OR=2.5, 95%CI = 1.2-5.3) were significantly associated with postpartum depression until 3 months after delivery. These results indicate that younger maternal age, unexpected pregnancy, poor social network and sleep problems might be early risk factors for postpartum depression. Low birth weight of the infant also increased the risk for maternal postpartum depression. The findings emphasize importance of identifying mothers with these risk factors to assess possible postpartum depression.

P02.75

### **THE PRENATAL ROOTS OF INTERSUBJECTIVE ENGAGEMENT: SECURING THE FOUNDATIONS OF ATTACHMENT PRIOR TO BIRTH AS ESSENTIAL TO DEVELOPMENT**

**Sansone--Southwood A.\***

*University of Queensland, ISPPM ~ London, Brisbane ~ United Kingdom*

This presentation discusses the value of prenatal attachment and its correlations with maternal mental health, birth and infant development outcomes. It aims at demonstrating that the quality of prenatal attachment is essential for development, for the interactions on which it is based provide an intersubjective matrix on which the mind is created. Therefore, it needs to be fostered through nurturing practices such as Mindfulness. This is an urgent call for healthcare professionals and science to acknowledge the prenatal relationship and adopt a compassionate, mindful, relationship-focused approach towards mothers and their babies in the womb. This can help mothers in the tuning-in process with the baby in the womb, the newborn and infant. Being aware of babies' consciousness from conception leads us to a new way of relating to them and their mothers and

providing a nurturing environment. Investigators have explored whether the propensity to socially interact is already present before birth. Findings consider the quality of foetal-maternal interactions as psychobiological precursors to adaptive infant development. The other is present in the self-experience since conception. Clinical accounts argue that parents' mental suffering can harm the vital bonds, birth and development. This provides a foundation for assessing and improving prenatal attachment to help give children a healthy head start before birth. This presentation draws on scientific and clinical findings, my work with becoming parents and infants, my experience with indigenous mothers and children, and lyrical accounts of my prenatal communications, leading to my PhD design and a new integrative preventive program.

P02.76

### **BELIEFS ABOUT PLAY IN CHILEAN PARENTS AND EARLY CHILDHOOD EDUCATORS**

**Aldoney D.\*<sup>[2]</sup>, Coo S.<sup>[2]</sup>, Valdivia M.J.<sup>[1]</sup>**

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Play has been increasingly recognized as integral to child development (Lester & Russell, 2010), yet, children have less opportunities to play than in the past (Whitebread et al., 2012). Values and beliefs held by adults influence the way in which they organize and promote diverse activities in children's life (McGillicuddy-De Lisi, 1985). Thus, it is fundamental to examine the beliefs held by parents and early childhood educators (ECE) about play. The few studies to date have focused on developed countries and include mostly mothers. The aim of this study was to explore Chilean mothers', fathers', and ECEs' beliefs about children's play. Participants rated a list of 26 activities in terms of frequency with which their child engaged in them, degree of playfulness and relation to academic learning (Fisher et al., 2008). Preliminary results from one-way ANOVA and Tukey post hoc analysis with 292 mothers, 51 fathers, and 38 ECE showed high agreement between participants in the degree of playfulness and relation to academic learning assigned to activities. However, some significant differences were found. Mothers and fathers differed on the degree of playfulness they assigned to Having a book read to them, Fathers reported that Watching TV programs on their own and interacting with the show was more related to academic learning than mothers and ECE did. Also, ECE considered more activities to be related to academic learning than parents. Upcoming analysis will explore the association between the degree of playfulness and relation to academic learning of activities to the frequency with which children engage in them. Demographic characteristics will be included in the analysis and a factor analysis to better characterize the activities will be performed. These findings suggest that values and beliefs about play may vary among children's caregivers.

P02.77

### **USING PLAY TO HEAL THE RELATIONSHIP IN PARENT-PRESCHOOL DYADIC THERAPY: INTRODUCING THE 'PATHWAY TO PLAY AND HEALING'**

**Novell V.\***

*The Guidance Center ~ Southgate ~ United States of America*

The period of preschool, a complex and emotionally charged time for families, involves changing domains of development, more advanced communication skills, cognitive growth, and emerging symbolic play. Families with abuse, neglect, and trauma, experience even more difficulty and heightened stress. Infant Mental Health principles compel clinicians to work with both the partners, parents and preschoolers, in joint therapy, simultaneously holding the child and parent's needs in mind, while working towards the ultimate therapeutic goal of (re)building the parent/child

attachment as the vital path for healing. An intervention matrix, the Pathway to Play and Healing, was created to assist with the joint work with preschoolers and their families. This tool examines a preschool child's developmental domains, communication, attachment styles, and play skills, while also assessing parental domains, internal working models, and, most importantly, levels of regulation. Using the play domain as an intervention, the matrix provides guidance for balancing the child's and parent's therapeutic needs, without choosing one over the other. Staged of 'ports of entry' are used as a way to use of symbolic play to allow the child to explore and express feelings, while scaffolding the parent's regulatory and reflective capacity, so that the parent can stay emotionally connected with their child, building a secure base/safe haven. Specific clinical goals are presented, such as the parental need for 'in vivo' co-regulatory calming strategies and balancing the child's needs to be seen/understood. Step-by-step attending roles are offered to the parents: calm witness, quiet attender, wise historian, and brave rescuer.

P02.78

### **COMMUNICATION IN THE NEONATAL PERIOD**

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Since Brazelton's groundbreaking work on newborns' active regulatory capabilities and the discovery of neonatal imitation, the short period of life right after birth has begun to be considered as a developmental stage in its own right. It is a period marked by the sudden change to an airborne and intensely social environment, after a period of rapid development in the intrauterine milieu with active perception in multiple senses and memorization of experience. Experimental studies have described a rich and varied neonatal cognition, one that enables recognition of faces, of smells, of language and musical structures. Although much is known today about the non-reflex behaviors and selective attention of newborns, very little is known about their ability to communicate their states and needs other than through crying.

P02.79

### **ACCULTURATIVE STRESS AND ITS ASSOCIATION WITH PARENTING AND CHILD INTERNALIZING PROBLEMS**

**Jolie S.\*, Figge C., Martinez--Torteya C.**

*DePaul University ~ Chicago ~ United States of America*

Studies suggest acculturative stress impacts parenting and child internalizing problems (Weiss et al., 1999). Additionally, some researchers have explored parenting outcomes as mediators between acculturation related stressors and child mental health (Lee, Lee, & August, 2011). However, few studies have examined the interrelationships between acculturative stress, parenting (confidence and relational frustration), and child internalizing problems in Latino families in the United States. Thus, the current study will examine whether acculturative stress predicts child internalizing problems in this sample, and whether parenting confidence and relational frustration mediate the relationship between acculturative stress and later child internalizing problems. Participants included 72 (50.7% boys) caregiver-preschooler dyads of primarily Latino descent as part of a longitudinal study focused on assessing the effects of stress and trauma on child development and family functioning. Participants completed interviews for two waves of data collection, about 7 months apart. To measure acculturative stress, parenting, and child internalizing problems, the Riverside Acculturation Stress Inventory (Benet Martinez, 2003), Parent-Relationship Questionnaire (Short-Form; Kamphaus & Reynolds, 2006;), and Child Behavior Checklist were utilized (Achenbach, 1999). Analyses controlled for child internalizing problems from Time 1 of data collection. SPSS

PROCESS macro Mediation analysis revealed an indirect effect of relational frustration in the association between acculturative stress and later child internalizing problems ( $B = .02$ ,  $SE = .02$ , [CI .0019 – .0665]). Findings highlight the interplay of acculturation and parenting on child socioemotional outcomes, and can inform appropriate intervention programs that target relevant parenting dimensions and improve child outcomes among families facing acculturative stress.

P02.80

#### **EPIGENETIC MODIFICATIONS AND THEIR ASSOCIATIONS WITH PARENTAL PSYCHOPATHOLOGICAL RISK AND EMOTIONAL-BEHAVIORAL FUNCTIONING IN EARLY CHILDHOOD**

**Cimino S.<sup>[2]</sup>, Cerniglia L.<sup>[1]</sup>, Ballarotto G.\*<sup>[2]</sup>, Marzilli E.<sup>[2]</sup>, Pascale E.<sup>[2]</sup>, D'Addario C.<sup>[3]</sup>, Adriani W.<sup>[4]</sup>, Tambelli R.<sup>[2]</sup>**

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Several authors in the Developmental Psychopathology framework suggested a dynamic systems model to represent the multidirectional interchange between the organism, the genome and various aspects of the environment, which eventually result into the phenotype. The present study used a bio-psycho-social model, incorporating biological and genetic measures in the psychosocial-environmental perspective of Developmental Psychopathology to explore epigenetic processes (such as DNA methylation) in mothers, fathers and children linked to parental psychopathological risk and offspring emotional-behavioral functioning. Biological sampling was performed through buccal swabs to obtain salivary samples; parental psychopathological risk was assessed through the SCL-90-R; and children's emotional-behavioral functioning was evaluated through the CBCL 1,5-5. (Ntot=189). Our results show that subjects (both adults and offspring), who suffer from psychological difficulties, can show DAT methylation in several sites of the 5'-UTR promoter region, and that specificity seems to exist in mothers, fathers and children's bio-psychological profiles. Moreover, we found correlations for the methylation at some very specific CpG sites in fathers and children, but no methylated CpG in mothers correlated with any methylated sites in offspring. Finally, psychopathological risk in mothers was associated with offspring DAT methylation at CpG sites M2, M3 and M6, whereas paternal GSI was associated with offspring DAT methylation at all CpGs we investigated; these associations, in turn, predicted offspring somatic complaints, attention problems, internalizing problems, and withdraw. These results may be important because they included fathers in the study and focused on school-age children in a community sample, which is very rarely done in this field. Moreover, this is one of the very few studies in this branch of research considering sub-clinical psychopathological symptoms and emotional-behavioral functioning, rather than severe psychiatric conditions such as Schizophrenia and PTSD.

P02.81

#### **HOW HIGH IS HIGH AND HOW LOW IS LOW? EVALUATING "LEVELS OF SUPPORT" AMONG TODDLERS AND PRESCHOOL CHILDREN WITH ASD**

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One major change in the autism diagnosis in the DSM-5 is the inclusion of severity classification named "levels of support". Currently there is still not enough clinical and research experience in the field to be used in determining this part of the diagnosis. The aim of the presentation is to further

explore the connections between impairment components and the determination of the level of support. This will enable a better coherence between research criteria and clinical operationalization to determine ASD severity. Data on the connections between ASD symptom severity, intelligence scores and adaptive functioning will be presented from our established autism database the hospital-university-based (HUB) on toddlers and preschool children.

P02.82

### **OVERWEIGHT CHILDREN'S TRAJECTORIES OF DEPRESSIVE AND AGGRESSIVE SYMPTOMS FROM EARLY TO MIDDLE CHILDHOOD**

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The scientific literature has shown that overweight in childhood may represent a predictor for severe negative physical and psychological outcomes in adolescence and adulthood. It has been demonstrated that children's growth curves in the general population can have linear or non-linear trajectories in the period from early to middle childhood, differently shaped based on children's sex. Some authors have also posited that overweight children may suffer from a constellation of physiological and psychosocial problems, particularly internalizing and externalizing symptoms. However, only a few studies based on longitudinal designs have focused on specific clinical manifestations, such as depression and aggression in offspring with overweight. To fill this gap in literature, the present research used a growth curve modeling to analyze data of N=90 subjects over three assessment points with the aim of: (a) describing BMI paths in 2-8 years old children (divided into two sub-groups overweight and normal-weight); (b) describing their developmental paths in terms of aggressive and depressive problems. Children's parents were administered the CBCL 1,5/5 and 6-18 versions. Our results showed that overweight in females was steadily high, whereas BMI in boys increased over time. Aggressive problems at T1 were equally distributed in all subjects; however, a significant divergence manifested from T1 to T2 in both samples, with different directions. In addition, normal-weight offspring showed lower depressive symptoms than overweight children. Overweight girls scored lower in depressive symptoms than overweight boys at T1, but they manifested higher depressive problems at T3. This study may orientate clinical work in pediatric settings suggesting that overweight children can show higher psychopathological risk, and that notwithstanding a normalization of BMI from early to middle childhood, those children who were overweight and suffered depressive and aggression problems in the first 2 years of life, may still manifest high psychopathological symptoms at 8 years of age.

P02.83

### **PREMATURITY AND PARENTAL STATES OF MIND: A COMPARISON BETWEEN MOTHERS AND FATHERS**

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The scientific literature has demonstrated that the birth of a child and the transition to parenthood are powerful emotional and joyful experience for parents, but some of them may also experience distress and preoccupation. It has been suggested that parents of preterm children may suffer significantly more than parents of full term infants, and that mothers and fathers may show different responses to this difficult experience. The main aim of the current study was to compare mothers' and fathers' reactions to the preterm birth of their child, in terms of anxiety levels, depressive levels and mental representations of the infant and themselves as parents. 50 couples of premature

infants (gestational age < 35 weeks) were longitudinally involved from the premature delivery till the child's hospital discharge. Self-report questionnaires (State-Trait Anxiety Inventory; Edinburgh Postnatal Depression Scale) and a clinical semi-structured interview (Clinical Interview for Parents of High-Risk Infants) were used to deeply explore parents' affective and emotional states, during the hospitalization in the Neonatal Intensive Care Unit (NICU). Both among mothers and fathers we found significant correlations between parental states of mind (as evaluated with the clinical interview) and affective states (detected through the self-report questionnaires). These findings show that a preterm childbirth may affect both maternal and paternal role with possible effects on the development of the first parent-child bonds. Results also suggested the importance for nurses and clinicians working in neonatal intensive care units to consider not only the maternal difficulties but also the paternal ones, even if these are often less visible.

P02.84

### **THE EFFECTS OF EARLY SEPARATION DUE TO NEONATAL INTENSIVE CARE ON BREASTFEEDING IN TERM INFANTS**

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Breastfeeding has many positive effects on infant and maternal health. WHO recommends exclusive breastfeeding for 6 months, but that is poorly met especially in western countries. Early admission to neonatal intensive care unit (NICU) has been shown to disturb normal mother-infant interaction and may have effects on breastfeeding success. We aimed to study the effects of early mother-infant separation due to NICU admission on exclusive breastfeeding duration in term infants. The study subjects were drawn from FinnBrain Birth Cohort Study ([www.finnbrain.fi](http://www.finnbrain.fi)). The study group consisted of 190 term infants (gestational weeks  $\geq 37$ ) admitted to NICU < 2 days after delivery and discharged < 4 days of admission. The control group comprised 1758 term infants cared for in well-baby nursery. Duration of exclusive breastfeeding was determined by questionnaires at 3, 6 and 12 months. The mean duration of exclusive breastfeeding was 2.84 months in the study group and 3.69 months in the control group ( $p=0.000$ ). There was no statistically significant correlation between the length of NICU stay and the duration of exclusive breastfeeding. However, there was a group of mothers succeeding to breastfeed for 6 months despite of NICU admission ( $n=17$ ). Early mother-infant separation due to neonatal intensive care was associated with almost 1 month shorter duration of exclusive breastfeeding in term infants, even with neonatal conditions considered mild. In order to promote breastfeeding, if admission to NICU can't be avoided, breastfeeding support should be emphasized in neonates requiring intensive care. It's important to understand, which factors offer protection for succeeding in breastfeeding after NICU admission.

P02.85

### **THE RELATIONAL SYNAPSE: BRAIN, MIND AND INTERACTION THROUGH A COMPLEX SYSTEMS LENS IN EARLY DEVELOPMENT**

**Boyatt J.\***

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I'm interested in exploring how the human mirror neuron system and the relational surround can give us insight into the flow of psychological development. A core theoretical construct that has

emerged is what I call the relational synapse. The relational synapse describes the physical and experiential space in-between two people when they engage each other in relationship. Using a complex adaptive systems framework, I think of the relational synapse as the location of emergent, co-created relational phenomena. These emergent phenomena are then recursively folded in to each individual's internal and interpersonal experience. What is created in the relational synapse becomes both internalized paradigms of self, other and relationship AND in-vivo relational expectancies. Research on the human mirror neuron system corroborates this idea while also laying the foundation for understanding how some psychological processes such as attachment and intersubjectivity begin and unfold as well as how things like post-partum depression or unresolved trauma can derail the healthy unfolding of these developmental processes. I will map three clinical vignettes onto the idea of the relational synapse in order to better understand how development moves either towards complexity, coherence and flexibility or moves towards the outer edges of a 'good enough' complex system; rigidity or chaos.

P02.86

### **NEWBORNS' CROSSMODAL PERCEPTION OF DYNAMIC EVENTS THROUGH TOUCH, AUDITION AND VISION**

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Touch is the first sense to develop in utero, providing fetuses with the sensory scaffold on which they come to perceive the world (Lejeune & Gentaz, 2013). It has been recognized as playing a major role in early establishment of reciprocal interactions and attachment between infants and caregivers (Harlow and Zimmermann, 1959). Yet, most studies on the origins of social perception have focused on infants' processing of visual, auditory and audiovisual social events, giving little attention to passive tactile perception (Bremner and Spence, 2017). Thus, we do not know how touch is associated with other sensory modalities at birth and how it contributes to the construction of infants' multisensory perception of social events. The aim of our study is to test newborns' ability to perceive congruent associations between touch and audio-visual dynamic stimuli. Our hypothesis is that because of the maturity of audio and tactile sensory systems at birth, newborns will show a bias for congruent stimuli in the audio-tactile condition but not in the visual condition. Healthy newborns aged between 0 and 3 days (n=20) will be tested at the maternity hospital of Nanterre. After a familiarization phase, newborns will receive tactile stimulation on the arms and the legs (up or down movement) performed by an experimenter. Stimuli will be presented with congruent or non-congruent and synchronous or asynchronous visual and auditory cues. The experimenter's hand movements (speed and intensity) will be translated into visual and auditory displays. Looking behavior as well as physiological changes (heart rate and EMG) will be measured. We still lack knowledge about newborns' intersensory perception of social situations. Enhancing knowledge on the way newborns integrate multimodal inputs from dynamic events will help us to orient caregiving actions and sensitize professionals as well as parents to the interpersonal world of infants.

P02.87

### **DIFFERENT TRAJECTORIES AND IMPACTS OF DYSFUNCTIONAL SENSORY INTEGRATION AND AWARENESS**

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Autism raises the issue of the constitution of personhood and identity. This identity is defined by an integration of consciousness and the differentiation of the self from the other. The construction of

this identity relies on environmental stimuli, the way the child interprets their bodily experiences within the environment, and the parents' role in helping awaken the child's corporeality. Infants are already plural and inter-subjective, and further optimal development is based on a double anchoring: self-awareness of one's body and interaction of oneself with the environment (Golse, B., 1985). Autistic children, in their incessant search for sensory integration and awareness, seem to be at the interface of the double rooting, as if they could not find a balance between the two domains. The objective is to differentiate the clinical presentation of dysfunctional sensory integration and awareness. We present two cases of in-patients at a pediatric psychiatric hospital in Paris, France. The ADOS, ADI, Sensory Profile, Psycho-educational Profile 3 and observation videos were used to develop patient profiles. Both patients (3-6 years old) presented with impairment in integrating sensory information and distinguishing external stimuli from their own bodies. They displayed strong feeding preferences for specific types of food, hypersensitivity of sound, and were reticent to touch. The autistic patient displayed a disinterest in social communication while the other patient had atypical social communication. The autistic patient displayed repetitive movements while the other patient displayed a rigidity of thought processes. At the junction of body and psyche, between neuroscience and psychoanalysis, this research offers to evaluate children exhibiting signs of dysfunctional sensory integration and awareness to better understand autism. Future research will incorporate neurophysiological and psychoanalytical techniques to understand this developmental condition and help design suitable interventions to ensure optimal development of the individual.

P02.88

#### **PROMOTING DEVELOPMENT THROUGH FLOORTIME: A CASE EXAMPLE**

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All too often, approaches to early intervention attempt to correct behaviors that are deemed unwanted. This is particularly true of children with autism. As many autistic self advocates point out, all too often the goal of intervention is to normalize the look of the child rather than to truly promote their development. This may include correcting repetitive behaviors, poor attention, hyperactivity, or other externally evident behaviors. What we should be asking is not about what we are seeing; it is about what we are not seeing. Looking underneath the behaviors allows us to identify the core capacities of development that are lacking or weak. Through the Floortime developmental approach we can promote development from the inside out. This leads to much more meaningful change and promotes the core capacities needed for healthy development and mental health. This is particularly true for children with developmental challenges such as autism. We will present a case study example from a clinic in Italy that shows how Floortime helped to improve a child's development through an interactive, engaging, and respectful playful process. We will show video examples of the Floortime process and interviews with the parents. We will examine the core Functional Emotional Developmental Capacities (FEDCs) and look at how the child's individual profile is understood and utilized in the process. This workshop will examine this particular case in depth and also provide an excellent overview of the evidence-based Floortime approach and how it can effectively promote development in children, including those with autism.

P02.89

**PSYCHOLOGICAL ADJUSTMENT IN ADOLESCENCE AMONG INTERNATIONAL ADOPTEES: DOES THE ADOPTIVE FAMILY HAVE A CRUCIAL IMPACT?**

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Most international adoptees were exposed to severe conditions of deprivation prior to adoption. Although major improvements are observed in the years following adoption, adopted children show more behavior problems than their non-adopted peers (Juffer & van IJzendoorn, 2005). Those who suffer from the loss of their birth parents or have special needs are also at risk of low self-esteem. According to the Stress and Coping in Adoption model (Brodzinsky, 1993), while early adversity may affect children's adjustment after adoption, parenting practices and parent-child relationship have a stronger impact. The aim of this longitudinal study was to investigate the impact of early adversity and adoptive families on international adoptees' adjustment in adolescence. We hypothesized that high levels of parenting stress and poor quality of parent-child relationship would be stronger predictors of adolescents' behavior problems and low self-esteem than conditions of deprivation prior to adoption. Sixty-nine mothers and their adolescents adopted from Asia and Russia before 18 months of age participated in this study. Child health status was assessed shortly after arrival in their adoptive family to provide indices of malnutrition and deprivation (e.g., height/age ratio, head circumference, neurological signs). Mothers completed the Child Behavior Checklist (Achenbach & Rescorla, 2001) and the Stress Index of Parents of Adolescents (Sheras et al., 1998) while adolescents completed the Dominic Interactive Adolescent (Bergeron et al., 2010), the Coopersmith Self-Esteem Inventory (Coopersmith, 1981), and the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987). Multiple linear regressions revealed that parenting stress and quality of parent-child relationship were strong predictors of psychological adjustment in adolescence. However indices of malnutrition and understimulation (height/weight ratio and small head circumference at arrival) were also predictors of adolescents' adjustment. The difficulty to disentangle the impact of early risk factors and adoptive families' variables on psychological adjustment will be discussed.

P02.90

**PRENATAL EXPOSURE TO MATERNAL CORTISOL AND INFANTS' COGNITIVE DEVELOPMENT**

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Accumulating evidence indicates that maternal depression during pregnancy can influence fetal development and increases risk for adverse infant outcomes, including delays in motor and cognitive development. Distress-linked alterations in the functioning of maternal Hypothalamic-Pituitary-Adrenal (HPA) axis are hypothesized to mediate these effects. However, few human studies investigated both maternal prenatal cortisol and depressive symptoms and evaluated whether they have independent or interacting effects on infants' development. We aimed to explore the effects of maternal depressive symptoms and diurnal cortisol levels in late pregnancy on infants' development at 3 months. 110 women provided six saliva samples on two days between 34-36 gestational weeks and completed the Edinburgh Postnatal Depression Scale on the same occasion and 3 months later. Infants' cognitive, motor and language development was evaluated

through the Bayley Scales for Infant Development (BSID) at 3 months of age. Hierarchical linear regressions were performed to test the effects of prenatal variables on infants' development and control for possible confounders (i.e. infants' gender, gestational age, maternal IQ and postnatal maternal depression). Prenatal cortisol diurnal levels predicted infants' cognitive development at 3 months, while no significant effect related to antenatal maternal depression was found. Specifically, 3 month-old infants antenatally exposed to higher levels of maternal cortisol obtained lower scores at the cognitive scale of the BSID. On the contrary, there were no significant effects of prenatal variables on infants' motor and language development. Maternal HPA axis functioning during pregnancy seems to exert an influence on infants' development at 3 months, independently from antenatal and postnatal depressive symptoms. Specifically, increased cortisol in utero was directly associated with impaired cognitive development, thus suggesting that excessive exposure to glucocorticoids in the third trimester of gestation may have detrimental effects on infants' neurodevelopment.

P02.91

#### **FACTORS ASSOCIATED WITH SYMPTOMS OF COMMON MENTAL DISORDERS (CMD) IN MOTHERS WITH CHILDREN BETWEEN ZERO AND 72 MONTHS**

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Mothers' mental health and the quality of the initial interactions between the baby and his caregiver will have significant implications in the child's emotional development. This study investigated the prevalence of symptoms of common mental disorders (CMD) and their associated factors in mothers of children between zero to 72 months (6 years). Participants were 651 mothers who answered the SRQ-20 instrument and a questionnaire on sociodemographic, clinical and developmental data. Descriptive and inferential analyzes were performed to identify the variables with a predictive power on CMD symptoms. The results showed that the variables with most predictive power were income, health of the mother during pregnancy, infant gender, maternal education, pregnancy desirability and satisfaction with the partner. The importance of early interventions to reduce problems related to maternal mental health and child development is reinforced, in order to provide a higher quality of life for the mother- child dyad.

P02.92

#### **TURN TAKING AND CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD): COULD AN IMITATION-BASED TRAINING PROMOTE IT?**

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Imitation has two faces. Imitate and being imitated. Imitation skills are significantly impaired in children with ASD whereas their response to "being-imitated" seems relatively preserved. Some evidences suggest that ASD patients, like typically developing children, strongly recognize and respond positively when adult partners imitate their own actions. Therefore, behavioral interventions involving imitation of the child's actions have been demonstrated to be effective in improving social attention and responsiveness, imitation and playing skills, as well as promoting social engagement. Early interventions might result not only in an increase of social abilities, but also in a reorganization of neural circuits altered in ASD. The aim of our study was to evaluate turn

taking as a non-verbal communication skill before and after a specific imitation-based training, assuming that the alternation of imitation and being-imitated phases could encourage communication reciprocity. In our non-randomized controlled trial we submitted to two groups of 20 preschool children a game with a clear turn taking structure during an intensive group therapy Denver-oriented. Each group was composed of four ASD patients and six children with language disorders but without interaction impairment. Using a five-level-item Likert scale we measured the children propensity to be engaged in a turn taking game and their ability to respect their turn. Moreover two examiners blindly filled-out a CGI-scale for each child. After the turn taking activity only one of the two groups received a specific training imitation and being imitated-based, as suggested by Nadel et al. in addition to the Denver-oriented intervention they were attending. Our results suggest the efficacy of the imitation-based training. Moreover, our trail provides positive evidence on intensive rehabilitative therapy groups too, showing, also for the patients who did not receive the specific training, improvements, even if smaller, of the turn taking skill regardless of their diagnosis.

P02.93

### **THE ROLE OF SOCIAL SUPPORT, MATERNAL STRESS AND MOTHERS' PERCEPTION OF INTENTIONALITY IN TODDLERS' BEHAVIORAL PROBLEMS**

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The Ecological System Theory (Bronfenbrenner, 1981) suggests that parental attitudes can shape child development and are linked with internalizing and externalizing problems. Throughout childhood and adolescence, the effects of problem behaviors may continue (Angold & Egger, 2007; Anselmi et al., 2008; Eisenhower et al., 2009) and are associated with poorer cognitive development (Turney & McLanahan, 2015), low school grades (Kristoffersen & Smith, 2015), and risky behaviors (Racz, et al., 2011). High level of maternal stress (Haapsomo et al., 2013), and mothers' negative perception toward their infants' behavior (Burchinal et al., 2010) are the risk factors and social support can be a protective factor (Hsiao, 2016) for developing problem behaviors during toddlerhood. In line with the findings, we examined the relationship between social support, parenting stress, mothers' perception of child intentionality in internalization and externalization behaviors of toddlers according to Bronfenbrenner (1981). Turkish mothers (N=463; Mage=32.03, SD=4.82, AgeRange=18-47) of toddlers (M=23.74, SD=7.47, AgeRange=12-46) filled Multidimensional Scale of Perceived Social Support (Zimet et al., 1988), Parenting Stress Index-Short Form (Abidin, 1995), Infant Intentionality Questionnaire (Feldman & Reznick, 1996; Reznick, 2008), and Child Behavior Checklist (Achenbach & Rescorla, 2000). The model fit indices of the proposed model were in acceptable ranges ( $\chi^2(21)=65.06$ ,  $p<.000$ , P(CMIN) is .000; CMIN/DF: 3.098; GFI: .97; RMSEA: .07; SRMR: .05) (Cunningham et al., 2001; Hu & Bentler, 1999). The results indicated that maternal parenting stress positively predicted negative intentionality ( $\beta=.324$ ,  $p<.000$ ), internalizing ( $\beta=.015$ ,  $p<.000$ ) and externalizing ( $\beta=.021$ ,  $p<.000$ ) behaviors. Social support negatively predicted only internalizing problems ( $\beta=-.004$ ,  $p<.03$ ). Negative intentionality negatively predicted internalizing problems ( $\beta=-.005$ ,  $p<.018$ ) and mediated relation between maternal stress and internalizing problems ( $\beta=-.002$ ). The results indicated that both mothers' parenting stress and their attributions about their children's behaviors can contribute to problem behaviors. These factors can be crucial in designing future intervention.

P02.94

### **A PROSPECTIVE STUDY OF CHILD MENTAL HEALTH PROBLEMS FROM PRESCHOOL TO EARLY SCHOOL AGE**

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A substantial number of preschool and school age children exhibit mental health problems that have an impact on their own and their families' lives. There exist several large longitudinal studies on child mental health problems, but longitudinal assessments with several assessments during preschool age are scarce. The aim of the current study was to investigate increase/decrease in emotional and behavioral symptoms at three assessment points in preschool (t1, t2) and early school age (t3). The sample consisted of 3,505 children (49% girls) drawn from the general population. At t1, children were about 4;3 years old, at t2 about 6;0 and at t3 about 8;6. At t1 to t3, parents completed the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ encompasses five subscales: emotional symptoms, conduct problem, hyperactivity/inattention, peer problems and prosocial behavior. We applied latent growth curve models (LGM) using repeated measures as indicators of two latent factors: intercept and slope (change parameter). Significant change parameters indicate increase/decrease of symptoms/strengths. By applying LGM, we found that from preschool to school age, emotional symptoms increased and conduct problems decreased, while hyperactivity/inattention did not change. Moreover, peer problems significantly decreased and prosocial behavior increased indicating rising competence in contact with peers and adults. Further analyses showed higher mean intercepts in conduct problems and hyperactivity/inattention for boys. Our prospective longitudinal study showed that behavior problems either decreased (conduct and peer problems) or remained stable (hyperactivity/inattention). However, the increase of emotional symptoms until school age underscores the importance of taking early-childhood onset of these symptoms seriously. High emotional symptoms in preschool age require close monitoring and, if necessary, early intervention.

P02.95

### **NEUROPSYCHOLOGICAL APPROACH TO EARLY CARE FOR CHILDREN WITH STRUCTURAL INTRACRANIAL CHANGES**

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Early care is considered as a complex of medical, psychological, pedagogical approaches. A unified classification for it is the ICF. The concept of early care has a special importance for children with structural intracranial changes, in which disorders of cerebral structures can be diagnosed even during the prenatal period or immediately after birth and with the severity of disorders of the brain structures or in violation of the functions of the body or significant limitations of life activity are prolonged to 7-8 years of age. Functioning for children of preschool age is determined by the learning opportunities, for its evaluation we used a neuropsychological approach. The aim of the study is to reveal the neuropsychological features of the development of preschool children with hydrocephalus. Hypothesis - children of preschool age with hydrocephalus in mental development differ from their peers with specificity and some lag in the formation of higher mental functions. The study used clinical, psychological, pedagogical methods with the use of neuropsychological examination according to the methodology of J.M. Gluzman, based on the theoretical propositions of A.R. Luria and L.S. Vygotsky. The results of the study showed a significant difference in the

development of the HPF between the two groups. Regular features of the development of higher mental functions in preschool children with hydrocephalus were revealed: motor disorders (impairment of visual motor, motor coordination), low development of mnemonic (in particular, motor memory) and intellectual functions (insufficient synthesis and analysis, weak the ability to identify a significant feature and to generalize. The most developed sphere in children with hydrocephalus was the speech sphere. The dependence of the degree of severity of neuropsychological disorders in children of preschool age on the severity of structural intracranial changes was revealed. Based on the results of the study, further ways of corrective-developing and pedagogical work for children with hydrocephalus were identified and developed.

P02.96

### **EFFECTS OF INFANTILE MALNUTRITION IN THE DEVELOPMENT OF SENSORI-MOTOR INTELLIGENCE IN BABIES OF 6 TO 30 MONTHS OLD IN ARGENTINA**

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Early infancy is considered a critical and vulnerable period for child development. Multiple factors, such as genetic, congenital, emotional, environmental and also nutritional, may interfere in the normal course of the development of the child. One of those factors is malnutrition: its negative effects on the psychomotor development have been proven, although it has not been demonstrated the effect on the intelligence of young children. The objective of this study is to present the effects that malnutrition has on the development of intelligence in babies of 6 to 30 months old. Methods: descriptive, transversal observational study. The EAIS (Argentinean scale of sensori-motor intelligence) and EEDP were administered, as well as a social-environmental assessment tool and an observational index to evaluate emotional behaviour. 57 malnourished children and 74 eutrophic children (control group) were assessed in the health center of Buenos Aires, Argentina. It was observed that 51% of dystrophic babies are going through stages considered adequate to their age, in comparison to a 77% of children of the control group. A highly significant association was found between malnutrition and the results that indicate delay in the development of sensorimotor intelligence ( $p < 0.001$ ). The problem resolution reaction laps doubled in malnourished children, particularly in stage VI ( $p < 0.01$ ), none of the dystrophic children were able to finalize it. Emotional behaviors were studied, and a highly significant association was observed ( $p < 0.001$ ) between negative emotional attitudes of the malnourished babies and the indicial results of risk and delay in intelligence. It was demonstrated that if the mother stimulates with positive attitudes, their children are able to resume the game and solve the problems. This study allowed to determine that the resolution of problems in malnourished children is slower, the reaction laps require more time and the intellectual development process is prolonged in relation to the evolutionary rhythm.

P02.165

### **IMPLICATIONS OF SUBSTANCE USE DISORDER ON MATERNAL NEURAL AND BEHAVIORAL RESPONSES TO INFANT CUES**

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Parenting children requires being empathic and sensitive to their signals in order to adequately respond to their needs. Recent research in neurosciences found associations between parental behaviors and specific neurophysiological processes, such as hormones and brain networks that show specific patterns of activation in response to infant stimuli. Specific brain circuits might be

associated with the ability to take care of the child. These associations were primarily investigated in non-referred samples whereas fewer studies focused on clinical samples. This study aimed to investigate empathic neural responses to infant cues, as index of functional parenting, and quality of mother-child interactions in the context of maternal Substance Use Disorder (SUD). Fifteen mothers with SUD and 16 control mothers and their children aged 3-36 months underwent Event-related potentials (ERPs) recording during a pain decision task used to elicit empathic responses to both adults and infant cues. Quality of mother-child interactions was assessed during 20-min interactions through the Emotional Availability Scales (EAS). ERPs analyses revealed similar empathic responses (measured through the N2 component) to painful adult stimuli in both SUD and non SUD mothers. Significant differences were observed to painful infant stimuli in early time-windows (i.e. N1 and P2), with mothers with SUD showing lower amplitudes. Furthermore, in SUD mothers significant correlations were found between empathic responses to painful infant stimuli and maternal sensitivity. Mothers with SUD are at higher risk for experiencing difficulties in parenting and in mother-child interactions. Difficulties in responding to infant cues are observable both at a behavioral and a neural level, suggesting the need to adopt an integrated perspective during the implementation and the assessment of treatment. Clinical implications of the results are discussed.

P02.166

#### **ORANGA WHANAU-ORANGA TAMARIKI HEALTHY FAMILIES-HEALTHY CHILDREN**

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As providers of support to parents in our community, Ohomairangi and Mangere East ACCESS Trust were keen to better support the growing numbers of parents directed to attend parenting programmes when they did not have day-to-day care of their children. Parents with children in both permanent and temporary care of others, were interviewed about their experiences attending a mandated parenting programmes alongside the parents with their children in their care. We were also interested in their experiences of having their children removed, and what they understood the future held for them and their child or children's relationships. Various insights were identified from the transcripts of the interviews with 13 mothers and 12 fathers, by parents and interviewers highlighting the most important points in the parents' stories.

#### **Observation and assessment: diagnosis, treatment and clinical issues**

P02.97

#### **CHILDREN'S SLEEP HABITS QUESTIONNAIRE – INFANT VERSION**

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Infant sleep problems are one of the most prevalent concerns of parents and clinicians during the first years. The Children's Sleep Habits Questionnaire (CSHQ) is an instrument designed to identify sleep problems in pre-school and school aged children, based on the International Classification of Sleep Disorders (ICSD-1). A version of the CSHQ for infants will allow clinicians to (1) identify sleep problems during early age, (2) based in a standardized classification system of sleep disorders; and researchers to (1) conduct longitudinal studies on infant sleep problems development. This study proposed a version of the Children's Sleep Habits Questionnaire for infants under 12 months (CSHQ-I). Sample was comprised of 299 infants, aged between two weeks and 12 months. Factor analysis was performed and, after removing items with factor loadings <.30, 33 items remained. The

Bartlett's test of sphericity revealed significant correlations and indicated data adequacy for principal component analyses. Exploratory factor analysis revealed four subscales, accounting for 35.3% of the total variance: Bedtime Resistance, Sleep Anxiety, Positive Sleep Habits, and Daytime Sleepiness. The CSHQ-I total scale presented good test-retest reliability and internal consistency. The CSHQ-I also showed good concurrent validity, with significant associations found between the CSHQ-I total scale and subscales and a measure of infant sleep-wake behaviors. Good internal consistency was also found for three age ranges in the CSHQ-I total scale: 0-3 months, 3-6 months and 6-12 months. The present study suggested the CSHQ-I is useful for clinicians to assess sleep problems and to detect potential specific sleep difficulties in infants under 12 months. This study also provides preliminary guidelines for how to use this instrument in infants.

P02.98

**INITIAL VALIDITY AND RELIABILITY OF A NEW MEASURE OF DISTORTED MATERNAL REPRESENTATIONS: THE MOTHER-INFANT RELATIONSHIP SCALE**

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Maternal representations - mother's ideas, understanding, and feelings about the infant - shape early interaction and the emerging attachment relationship. Distorted interactions reportedly affect infant attachment and socioemotional development and may be associated with maternal mental disorder, past attachment experiences, abuse, and trauma. Limited measures are available that could be used as screening tools of risk of disturbance in mother-infant interaction. The goal of this study was to examine initial validity and reliability of Mother-Infant Relationship Scale (MIRS) - a measure designed as a screen of risk of relational disturbance in mother-infant interaction at the level of internal representation, in high-risk populations. Principal component analysis (PCA) was undertaken with 19 items emerging in the model and reliability was tested across 2 samples: 78 adult psychiatric patients with features of borderline personality, and 86 individuals from a community sample (N=164). Measures employed include the RF on the PDI, borderline symptoms on the BSC-24, childhood trauma on the CTQ, and depression on the EPDS. Results showed that the MIRS items were reliable with 3 components emerging from the PCA. While the complete and clinical sample presented the same structure, the non-referred sample had some variation and held essentially the same meaning across the 2 samples (i.e., measurement invariance). The scale demonstrated good criterion validity in a subsample on whom corroborative data were available. This sample was small and the scale complex, therefore further research is required. Adjustment of item's intent being more closely worded around the emergent components, namely: hostility/rejection, parenting/attachment, and anxiety/helplessness may assist in this process. Although preliminary, the results suggest a link between distorted maternal representations, borderline features, and maternal trauma history.

P02.99

**MENTAL HEALTH ASSESSMENT IN EARLY CHILDHOOD: VALIDATION OF A GERMAN VERSION OF THE DSM-5-BASED DIAGNOSTIC PARENT INTERVIEW DIPA**

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There is growing evidence that serious mental health problems, including depression, anxiety disorders, and many others, may emerge in very young children (0-5 years old). Currently, there are a few diagnostic classification systems that consider mental health problems during early childhood;

these are the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), the International Classification of Diseases (ICD-10; World Health Organization, 2012), and the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC: 0-5; ZERO TO THREE, 2016). Regardless of the classification system, reliable and valid diagnostic assessment is required not only for diagnoses and therapeutic indication but also for clinical research purposes. Generally, during early childhood, structured diagnostic interviews for parents are considered the “gold standard” in mental health assessment. However, in German-speaking countries, diagnostic parent interviews that capture the specific features of mental health problems in early childhood are rare. The aim of our study was to clinically validate the parent interview called the Diagnostic Infant and Preschool Assessment (DIPA; Scheeringa & Haslett, 2010). Therefore, the DIPA was translated into German and implemented in our outpatient unit for infant and preschool children. The inter-rater agreement was examined, and the external validity of the interview diagnoses was determined by questionnaire data on child psychopathology (Child Behavior Checklist; Achenbach & Rescorla, 2000; Strengths and Difficulties Questionnaire; Goodman, 1997). Results are discussed in view of advancing and refining the assessment of mental health problems in early childhood, and in the light of DSM-5 and DC:0-5 criteria.

P02.100

**THE WELCH EMOTIONAL CONNECTION SCREEN (WECS): DEVELOPMENT, VALIDATION AND RELIABILITY OF A BRIEF CLINICAL MEASURE OF MOTHER/ CHILD RELATIONAL HEALTH**

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The WECS was developed to quickly assess mutual relational health of a mother and child with a brief observation during well-child visits. These visits provide opportunities for pediatricians/primary care providers to clinically observe disturbances in mother-child emotional connection (EC), a construct currently not measured. Strong EC between mother and child is essential for optimal development. We describe training, with preliminary results on WECS validation, reliability and clinical dissemination. The theory of the EC-construct and methods for assessing EC with the WECS were presented at weekly web conferences. Videotaped cases of pairs taped during the course of a Family Nurture Intervention trial at Columbia University Medical Center were coded independently by team members, and discrepancies were resolved through conferencing. A manual was updated to reflect new insights and clinician feedback. To calculate interrater reliability, the team rated two sets of twelve, three-minute videos: One consisting of mother/infant face-to-face communications at infant age 4 months, another during a lap-test at child age 4 years. Intraclass correlation coefficients (ICC) evaluated interrater reliability. A two-way random effects model evaluated absolute agreement of scores among raters. Six clinical providers participated, helped shape the manual and validate use of mutual-only rather than separate mother-child WECS. Mutual WECS proved feasible live in clinic. The group achieved reliability; ICC scores were above 0.85 on all dimensions, indicating excellent reliability. Emotional connection is a new and potentially effective measure of mutual relational health to identify at-risk pairs. Use of the WECS by pediatricians during well-child visits is practicable. The rapidity of assessment may provide opportunities for brief family nurture intervention by pediatricians.

P02.101

**A CLINICAL INTERVENTION FOR AT-RISK INFANTS: COMBINING INFANT OBSERVATION WITH CLASSICAL PSYCHIATRIC CONSULTATIONS AS PREVENTION AND TREATMENT OF DEFICIT AND DELAY**

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*HUG ~ Geneva ~ Switzerland*

The poster presents a new clinical intervention developed and tested at the Guidance Infantile, Geneva University Hospital, for the prevention and treatment of emotional deficit and developmental delay in at-risk infants. The intervention combines Bick-Tavistock psychoanalytic infant observation, parent-infant psychiatric consultations and infant-caretaker relationship scales as a model for addressing the mental health needs of infants who are difficult to reach using classical mental health services. The Relationship Scale is used to track the observer and child psychiatrist's respective understanding of the emotional quality of the infant-caregiver relationship as it evolves over the duration of the intervention.

P02.102

**A PRELIMINARY STUDY ON SOCIAL COMMUNICATION AND INTERACTION SCREENING IN TODDLER-QUESTIONNAIRES FOR TEACHERS (SISO-Q/T) DEVELOPED IN REPUBLIC OF KOREA**

**Lee K.S.\*<sup>[1]</sup>, Jung S.J.<sup>[2]</sup>, Cho Y.I.<sup>[3]</sup>, Park S.O.<sup>[4]</sup>, Chae J.Y.<sup>[5]</sup>, Kim S.H.<sup>[6]</sup>**

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This study examined validity of SISO-Q/T. Subjects included 1,085 typical Korean infants and toddlers aged nine to 47 months and 61 clinical infants and toddlers aged 12 to 47 months. The validity of SISO-Q/T was checked by correlation analysis against the Korean version of M-CHAT, the social relatedness item cluster and the atypical item cluster of K-BITSEA, the overall developmental problem scale of the Korean version of CBCL (K-CBCL) 1.5-5, and the Korean version of the Developmental Screening Test (K-DST). This study was supported by the Social Services R & D Project of the Ministry of Health and Welfare of Republic of Korea (Grant No: HI14C2719). SISO-Q/T showed correlation of .64 to .84 with the Korean version of M-CHAT, .41 to .53 with the social relatedness item and atypical item clusters of K-BITSEA and .45 to .57 with the overall developmental problem scale of the K-CBCL 1.5-5. Its correlation with the K-DST was .01 to -.60. These findings indicate that SISO-Q/T will be useful in the screening of Korean infants and toddlers with ASD.

P02.103

**ASSESSING THE QUALITY OF THE PARENT – INFANT RELATIONSHIP: RELIABILITY AND VALIDITY OF THE PARENT - INFANT RELATIONAL ASSESSMENT TOOL (PIRAT) GLOBAL SCALES**

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The PIRAT Global Scales (Broughton, Hommel & the Parent-Infant Project, 2016) have been manualized to provide a global assessment of the infant-parent and parent-infant relationship up to the age of 2 years. They offer a shared language and understanding among health professionals from various disciplines as to what constitutes risk and resilience. Preliminary research into inter-rater reliability showed that PIRAT Global Scales provide a reliable assessment of the overall

relational quality and can be used as a screening tool to identify infants at risk (Hommel, Broughton, & Target, 2014, 2015, 2016). The study evaluates PIRAT Global Scales' psychometric properties based on the standardised 3.5 day reliability training. Further research evaluates PIRAT Global Scales' reliability and validity on a larger sample of mother-infant dyads. The PIRAT Global Scales reliability and validity study uses data from a Parent-Infant Psychotherapy Randomized Controlled Trial. The research establishes PIRAT Global Scales' reliability, in particular internal consistency and inter-rater reliability. Furthermore, the study establishes PIRAT Global Scales' validity compared to a number of widely used, well-validated measures of parent-infant interaction, such as the Emotional Availability Scales (EAS; Biringen, 2000), the Coding Interactive Behavior (CIB; Feldman, 1998) and the CARE-Index (Crittenden, 2001) and indicators of risk, such as 'Disorganized Attachment' (Main & Solomon, 1986, 1990), low 'Reflective functioning on the Parent Development Interview' (PDI-R; Slade, Aber, Berger, Bresgi, & Kaplan, 2003) and high 'Parental Stress' assessed by the Parenting Stress Index – Short Form (PSI-SF; Abidin, 1995). PIRAT Global Scales are shown to be reliable and valid, and therefore enable the user to set their observations within a reliable and validated assessment framework of the parent-infant relationship. Implications of the research findings for the clinical use of PIRAT Global Scales in a variety of clinical settings and for future research will be discussed.

P02.104

#### **PSYCHOEDUCATIONAL PARENTAL GROUP AND TODDLERS' EATING PROBLEMS**

**Siirtola A.\* , Aholainen A.**

*Tampere University Hospital ~ Tampere ~ Finland*

To describe a parental group intervention to toddlers' eating problems. We'll describe the aims, construct and themes of our group intervention and a short evaluation of the possible benefits. The group consists of 6 to 10 parents and meets five times, four times weekly and then after a month. The aim is to alleviate toddlers' eating problems, reduce parental anxiety and empower the parents. A psychiatric nurse leads the group, another health-care professional joins at the theme. The two-hour meeting begins with a welcome and proceeds to the theme of the day. The parents discuss at the theme. A break with some refreshments is kept. At the end, take home messages are concluded, new ideas to follow, new behaviors to be established, and give positive feed-back to parents. The atmosphere is kept positive, curious, playful, listening, and appreciative. The themes are semi-structured and open to parents' suggestions. First, get acquainted with issues of everyday life. Second, the parents learn how complex a process eating is. Third, prejudices to unfamiliar tastes in focus; how does it feel to eat something you've never tasted before. Fourth, the importance of play is discussed and practiced, and fifth, what have we achieved and issues of further improvement. The parents' (2016, N=6) were asked anonymously did they feel empowered or was their child's eating problem alleviated. At one month, the intervention had been encouraging and given new ideas. One child ate somewhat better. A year after the intervention two children out of three ate normally.

P02.106

#### **THE BABY IN THE ROOM: ANALYSIS OF CLINICIANS RECORDED OBSERVATIONS OF INFANTS' EXPERIENCE OF FAMILY CONTACT**

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This research aimed to explore how clinicians observe and document infants' experiences of family contact, when the infant is subject to child protection intervention and does not reside in the care of their parent. This qualitative study used theme-oriented discourse analysis to explore how infants' (0-2 years) experiences of family contact is observed and documented. The research comprised two parts: analysis of written observations of infants during supervised family contact, and a focus group with clinicians to explore their experience of observing and documenting observations of infants during family contact. Main themes within the case notes included: observing infants' affect and behaviour and monitoring change, noticing the infant in the interactions with the parent, and exploring how clinicians interpret infants' cues and the dyadic interactions. Clinicians often used discourse markers such as qualifiers, to seemingly reduce their epistemic certainty around statements, an observation which was supported during the focus group. Focus group findings highlighted how, in order to capture the infant's experience, it was important to include the overall context and describe in detail the infant's expressions and actions. The research found that by observing the infant during family contact, the infants' experiences can be illuminated and mentalized. This research highlights some of the difficulties of clinicians effectively recording the infant's own experience of family contact. The research suggests that the practice of observing infants during family contact can be used to guide decisions regarding family contact arrangements with the infant's psychological, emotional, relational and developmental needs in mind.

P02.107

#### **A PRELIMINARY STUDY ON SOCIAL COMMUNICATION AND INTERACTION SCREENING IN TODDLER-QUESTIONNAIRES FOR PARENTS (SISO-Q/P) DEVELOPED IN REPUBLIC OF KOREA**

**Lee K.S.\*<sup>[6]</sup>, Jung S.J.<sup>[1]</sup>, Cho Y.I.<sup>[2]</sup>, Yoon H.S.<sup>[7]</sup>, Oh G.M.<sup>[3]</sup>, Lee K.J.<sup>[4]</sup>, Jung H.S.<sup>[8]</sup>, Kim S.H.<sup>[5]</sup>, Shin Y.O.<sup>[9]</sup>**

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This study examined validity of SISO-Q/P. Subjects included 1,655 typical Korean infants and toddlers aged nine to 47 months and 137 clinical infants and toddlers aged 12 to 47 months. The validity of SISO-Q/P was checked by correlation analysis against the Korean version of M-CHAT, the social relatedness item cluster and the atypical item cluster of K-BITSEA, the overall developmental problem scale of the Korean version of CBCL (K-CBCL) 1.5-5, and the Korean version of the Developmental Screening Test (K-DST). This study was supported by the Social Services R & D Project of the Ministry of Health and Welfare of Republic of Korea (Grant No: HI14C2719). SISO-Q/P showed correlation of .69 to .81 with the Korean version of M-CHAT, .41 to .49 with the social relatedness item and atypical item clusters of K-BITSEA and .43 to .51 with the overall developmental problem scale of the K-CBCL 1.5-5. Its correlation with the K-DST was low (.01 to - .41). These findings indicate that SISO-Q/P will be useful in the screening of Korean infants and toddlers with ASD.

P02.108

#### **CASE PRESENTATION OF AN 18-MONTH-OLD BOY WITH EATING AND SLEEPING PROBLEMS AND FOOD ALLERGIES**

**Scheuring N.\*, Gulácsi Á., Kecskeméti J.**

We introduce the effectiveness of parent-infant consultations in combination with medical treatment and dietary counselling. The 18-month-old boy had often been crying heavily since birth, and he also had sleeping problems. At the age of two months, he had eczema, hence he and the mother were put on a milk and egg free diet. The symptom persisted, he was continuously scratching himself, his stool was frequent and watery, still cried a lot, had difficulty sleeping and only breastfeeding could comfort him. Based on the results of further investigations for nutritive allergies, the diet was restricted for five more types of food. Thereafter the skin problems and the scratching resolved, but the sleeping problem was still present. He had difficulty accepting weaning, preferred breastfeeding even 15-20 times a day. Besides medical controls and dietetic consultations, parent-infant consultations were also included in the management of the case. The following subjects were discussed: the possible aspects behind the child's behaviour, the parental perception and interpretation of the infant's cues, daily schedule, the parental support of the development of self-feeding. Positive results were seen after the third consultation as the mother reported that the situation was gradually improving. Finally, the infant was breastfed 5-6 times a day, he was eating with spoon without problems, although his diet was still limited because of the dietary restrictions, sleeping was more balanced. The child was treated at the Early Childhood Eating and Sleeping Disorders Clinic at Heim Pál Children's Hospital, that was set up in January 2017.

P02.109

**HEARTBEAT FREQUENCY AS A POSSIBLE INDICATOR OF STRESS RESPONSE IN CHILDREN WITH NEURODEVELOPMENTAL DISORDER : A PILOT STUDY**

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The presented study is the result of a collaboration between the Child and Adolescent Neuropsychiatry Unit, the Department of Information Engineering, Electronics and Telecommunications and the Department of Mechanical and Aerospace Engineering of "Sapienza", University of Rome. The aim of this pilot study is to evaluate the usefulness of heartbeat frequency (HF) as a possible indicator of stress response in children affected by autism spectrum disorder (ASD) and by pre-school language disorders observed in structured and non-structured situations of interactive session. A sample made up of 30 children aged between 2 and 5, 15 with ASD and 15 with language disorders. The children were HF monitored, through sensorial bend linked to ECG electrodes, during activities specifically designed to evaluate competences related to intersubjectivity, sharing and communicating with the operator. A protocol was made up of specific subtests from Leiter-R scale and three game activities from ADOS (Autism Diagnostic Observation Schedule). The sessions were recorded and the variation in the heartbeat frequency was subsequently analysed in relation to the specific activity carried out. Some common variation patterns in the HF associated with specific tasks have been detected in the children with ASD as opposed to those with language disorders. The activities mostly connected to those patterns resulted as the activities involving more interaction and sharing with the operator. The analysis of the HF variation in patients with ASD allowed the study to highlight a higher level of stress in these patients, compared to the ones with language disorders in carrying out relation-based tasks, distracting their attention from the specific object of interest and drawing it to the person. These

findings open up new perspectives for using heartbeat frequency monitoring in evaluating children with ASD.

P02.110

### **MATERNAL SELF-EFFICACY, PARENTING STRESS AND PERINATAL DEPRESSION IN MIGRANT WOMEN IN GENEVA**

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*university of geneva ~ Geneva ~ Switzerland*

Parenting stress results from discrepancy between the environmental demands (p. ex., child crying) and lack of capacity to face this demand. Parenting stress has been often associated in the literature to perinatal depression, but also to low maternal self-efficacy. Maternal self-efficacy is the perception by the mother of her capacity to produce a given task. Maternal sense of self-efficacy may be reinforced by a solid social support. It is unclear if migrant women, who lack social support in the host country, report lower self-efficacy, and experience higher parenting stress. The question is relevant as the literature has shown that migrant women are at higher risk for perinatal anxiety and depression. The aims of this prospective study are (1) to compare migrant and native women in Geneva, Switzerland, in terms of antenatal and postnatal depression and anxiety rates, maternal sense of self-efficacy and parenting stress, and (2) to examine multivariate relationships among these concepts. A sample of 43 migrant and 41 Swiss pregnant women were recruited during the third trimester of pregnancy. Depression was assessed by using the Edinburgh Postnatal Depression Scale and anxiety by using the State Trait Anxiety Inventory. Maternal self-efficacy was assessed using the Maternal Efficacy Scale, and Parenting Stress using the short form of Parenting Stress Index. Preliminary path analyses revealed that antenatal depression is the major predictor of postnatal depression, both predicting parenting stress. Maternal self-efficacy mediated the relationship between antenatal depression and parenting stress in native women, and independently predicts parenting stress in migrant women. Our study clarifies the relationships between perinatal depression and anxiety, maternal self-efficacy and parenting stress, and underlines the importance of early identification/screening/detection and treatment of perinatal depression.

P02.111

### **MODEL FOR OBSERVING CHILD PATIENT TRANSFORMATIONS**

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Child psychotherapy has its own special characteristics. Since children are undergoing an accelerated process of development and are hence constantly changing, therapists have to consider this process so as to guide their patients towards a healthy growth. How can psychotherapists, then, be able to determine whether they are producing these transformations, how they are achieving them, and what consequences such transformations have for the child? To answer these questions we have developed the Three-Level Model for Observing Child Patient Transformations. This model is basically a heuristic for refining, systematizing and conceptualizing clinical observations. It can be used in personal reflection or deliberation processes. It could also be used as an open guide for discussion groups who want to enhance clinical observation through the systematic analysis of clinical material. The first aim of the model is to refine the report of the transformations that took place in an analysis, through the discussion of the phenomenological description. The second aim is to identify the main dimensions of psychic functioning, according to the development level of the

child, along which transformations do or do not occur (subjective experience of illness of child and parents, mental functioning, sensory and affect regulation, structure, self and object representation, conflicts, defences, relationship patterns, type of disorder). At a higher level of abstraction, the third level considers different explanatory theoretical models for transformations, examined in order to assess strengths and weakness. We will illustrate the use of the model through an inter-active and participative work of clinical materials.

P02.112

**STUDY OF THE PRACTICE FOR DEVELOPMENTAL PSYCHOLOGICAL ASSESSMENT OF CHILDREN 0 TO 7 YEARS OF AGE AND THE ASSESSMENT INSTRUMENTS SPECIALISTS IN BULGARIA USE**

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Monitoring child's development in the early and preschool years is of utmost importance for his/her future functioning as an individual and for his/her contribution to society as a whole. Early identification of developmental deficits allows for better prognosis for their overcoming by taking concrete steps for early intervention. On the other hand, early diagnostics and interventions are the best prevention of individual developmental problems and future costs for such activities. An integral part of conducting psychological assessment in early and preschool childhood are psychodiagnostic instruments. A fact shared by the professionals is that there is currently a shortage of psychometric instruments in Bulgaria that have been translated, adapted and / or standardized according to the requirements for early childhood assessment. There is not enough information about the practice of assessing children in this age range, nor about the instruments that are in use. The aim is to present the results of a study conducted among psychologists working in the field of health care (child psychiatry, hospitals, pediatric and other medical centers), education (nurseries and kindergartens) and social services (child centers). The study explores a significant problem for the guild of psychologists in Bulgaria. This analysis shows where the deficits lie, the successful/good practice, and where there is a need for the development of other new instruments adequate to the situation in Bulgaria. Information about the instruments that are in use allows for a detailed analysis of the situation in our country. The results of this study give opportunities for planning a number of practical measures in order to improve the work of psychologists with children aged 0-7, as well as to improve the well-being of children in Bulgaria.

P02.113

**TEENAGE PREGNANCY IN ROMANIA: RISK FACTOR FOR MENTAL HEALTH DISORDERS IN MOTHERS**  
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In 2016 Romania had the highest teenage pregnancy incidence from U.E countries, according to Eurosta, with records for adolescent fertility rate of 34 births per 1,000 women ages 15-19. In Romania, 10% of the total births are occurring during adolescence and approximately 30000 adolescents/year give birth to their first children / or are pregnant before becoming 18 years old. Adolescents mother have significantly higher rates for depression then adult mothers or not pregnant teenagers (16 - 44% vs 5-20%). 11-30% adolescents mother present suicidal thoughts and 9% have attempted suicide. We evaluated the presence of psychiatric symptoms in teenage mothers and assessed its association with socio-demographic factors, obstetric history and psychosocial variables. An observational descriptive study is being conducted which includes teenage girls hospitalized during 2016-2018 on the Child and Adolescent Psychiatry Department in Bucharest and

who developed psychiatric symptoms during or after pregnancy. The study is based on medical records and interview. Our hypothesis is that psychiatric symptoms in teenage mothers are associated with a lower birth age and lower age for first sexual experience, no sexual / motherhood education and also lower socio-economic status, school attendance and seem to be frequent in rural areas. Teenage mothers have also a mother who gave birth during adolescence. They do not attend medical follow up during pregnancy and have a high number of obstetrical difficulties during birth. Early intervention and identifying teenage mothers at high risk for developing mental health problems are the keys for a better outcome for quality of life in both mother and child. In this context it is mandatory the introduction of a screening protocol for depressive symptoms and associated risk factors for teenage mothers during their periodical medical visits

P02.114

### **POST -TRAUMATIC EFFECTS OF CHILD'S DISABILITY ON PARENTS. QUANTITATIVE AND QUALITATIVE STUDIES**

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In a sample of 44 children (0 to 17 y.o.) with disabilities, we compared the cognitive, motor, sensor, neuropsychological, communicative, emotional and relational functioning of children through an ICF-CY assessment with the parental perception of child's personal, domestic and community ability, evaluated by VABS and the social orientation and the emotional regulation, utilizing the QUIT. The parents responded to three questions Interview: how high was their satisfaction about the household and the quality of life of children; what their own perception was of the children's conditions; what the future expectations (and queries) are about the disability of their offspring(s). The narrative was analyzed considering the quality of formal conversational rules (Grice, 1975). In more than one third of parents in our sample showing many difficulties in regarding his/her offspring, we found very significant differences in the inconsistencies between: the child's actual functioning and the level of his/her abilities as reported by the parents; the child's emotional evaluations coming from parents and professionals. We found a 45% share of interviewees revealing issues related to the quality of conversation - i.e. confused, or disorganised, or detached narratives - and/or loose realistic contents. We can consider our results as an evidence of post-traumatic effects, with a significant narcissistic dimension, in some parents of children with disabilities, and in a percentage comparable to other evidence of trauma

P02.115

### **EXPANDING THE AGE-RANGE OF DYADIC PARENT-CHILD PSYCHOTHERAPY**

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The paper focuses on the "treatment of choice" for children whose chronological age locates them in middle childhood, but developmentally present pre-latency behavior and relationships. Those children are usually referred to therapy because of difficulties at home and school: behavior is usually aggressive, temperamental and unregulated. The Oedipal drama has not been repressed by "Childhood Amnesia" (Freud, 1905), triangular psychic space and the ability to be in a "third position" (Britton, 1989) have not yet developed, and thus the child is not free to be involved in learning and social peer relationships as expected in Latency. Child's difficulties, as well as parents' history and representations of him, can influence parents' ability to escort the child successfully towards Latency (Britton, 1980; Furman, 1987; Kaplan, 2010). Dyadic Parent - Child Psychotherapy

(Ben-Aaron, at el, 1997) is a model suitable for Pre-Latency children, up to 6 years of age, and their parents. The process takes place in mother-child/father-child alternating play sessions, and the parental dyad comes in separately to work on meaning, reflection and parents' representations of their child. According to current clinical experience, many referred children, although attend the first grades of elementary school, are not developmentally in the Latency stage. Our argument is that the Dyadic model is the "treatment of choice" in those cases, as difficulties in the child's transit into Latency occurred in the mother-child/father-child relationships, and the model enables therapeutic work in those domains. A detailed psychotherapy process will be presented as an example.

P02.116

### **THE CIRCLE OF AUTISM SPECTRUM SYMPTOMATHOLOGY**

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Autism is an information processing disorder, but the presentation is depending on the strengths of the individual. Everyone has strengths and weaknesses. In the theoretical model that we present we show that the strength of a person may lead to autism when the strength is becoming to predominant. Instead of a line, we see the clinical characteristics as a circle with two different sides that both may lead to autism, although the way towards this diagnosis can be completely the opposite of the regular diagnostic characteristics. On the right side of the circle people are presented with the strength of being able to focus on details, who are very precise and can work individually. These strengths are very necessary in society in number of occupational groups. However, when these strengths of an individual become to predominant, it hinders one's functioning. When this functioning is hindering to much, the strength becomes a weakness. In this part of the circle, the characteristics are represented that have been described in diagnostic manuals. A large part of this represented group is male. In the left part of the circle, people with other skills are represented. In this part of the circle, people are more focussing on others, and are for example more creative. When these strengths become to predominant, it also hinders the functioning of an individual and these strengths becomes weaknesses. The characteristics on this side of the circle are more presented by woman and are now being studied. Regardless the fact that the characteristics are different, both sides of the circle lead to autism when the characteristics are hindering functioning to much, but only when all characteristics are studied and described thoroughly, autism can be diagnosed in a proper way.

P02.117

### **NEW OBSERVATIONAL AND CLINICAL METHODS IN THE TREATMENT OF DEVELOPMENTAL AGE PSYCHOPATHOLOGY**

**Gatta M.\*, Miscioscia M., Svanellini L., Sisti M., Sudati L., Comis I., Toldo I., Simonelli A., Battistella P.A., Battistella P.A.**

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The evaluation of the treatment in the context of the public services for developmental age is a complex subject and this explains the increasing interest in tuning diagnostic and therapeutic methods shared within the scientific community and supported by scientific research. Authors present data from an ongoing research, which involves a longitudinal study lasting 24 months, run at the Childhood Adolescence Family Service, Ulss 6 –University of Padua. The sample consists of patients, aged 3- 18 years, and their parents, involved in a psychodiagnostic assessment because of emotional- behavioral problems and then suggested for a psychotherapy both parents and sons.

Authors aim to verify the effectiveness of the treatments after two years according to the symptom improvement and improved relationship skills, paying particular attention to the use of video feedback with parents. Concerning the methodology, the families were randomly divided into two groups: in the group A the patients were subjected to an intervention of psychotherapy (30 sessions, weekly or fortnightly) and his/her parents to a parental support intervention (20 session fortnightly), in the group B the son's treatment was associated with video feedback intervention for parents. During the diagnostic phase the following tests were administered to all parties involved: YSR 11-18, 20 TAS, CBCL, FES, PSI, WAI-t and LTP. Each test was then repeated every 10 sessions, after initiation of therapeutic intervention and at the 3-6 months follow up after the end of the treatments. This project gave the opportunity to take in charge up to 70 families with an intensive and regular treatment in a public health service, with very little drop out. The outcome was good in terms of both symptom's improvement and improved relationship skills. LTP with associated VIT could be an efficacy and efficient tool to treat children and adolescent psychiatric patients and their parents.

P02.118

### **DEVELOPING BEST PRACTICE IN NORWEGIAN CHILD WELFARE FOR AT-RISK FAMILIES WITH INFANTS AND TODDLERS (0-6 YEARS) IN RESIDENTIAL PARENTING CENTRES**

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The aim of this presentation is to give an overview of a newly assembled national centre of expertise. The development of infants and toddlers is extremely vulnerable when exposed to parental neglect and/or maltreatment. If there are clear signs that the parents are not providing developmentally sound and sensitive care for their children, the Norwegian Child Welfare Services is obligated to provide the necessary assistance to ensure that children and adolescents are cared for. When there are serious doubts about the parent's abilities as caregivers, the Child Welfare Services encourages the family to receive comprehensive assessments, supervision and/or treatment at a residential parenting centre. The centre of expertise consists of fulltime professionals whose main goal is working to develop best practice for residential parenting centres that provide services to at-risk families with infants and toddlers. The centre of expertise is organized under The Office for Children, Youth and Family Affairs (Bufetat), an agency under The Norwegian Directorate for Children, Youth and Family Affairs (Bufdir). The centre of expertise's mandate given by the Directorate will be presented in more detail. In addition, the centre of expertise will start out by conducting a survey among the residential parenting centres throughout Norway. The survey will address inclusion- and exclusion criterias, which assessments and treatment programs are in use at the respective centres, the length of standard assessment and treatment periods, and alternative models to residential care for these at-risk families. The results from this survey will also be presented.

P02.119

### **HOW MANY PROFESSIONALS DOES IT TAKE TO OVERCOME A COMPLEX CASE?**

**Barak D.\*, Valik N.**

*Schneider children's medical center ~ Petach Tikva ~ Israel*

We would like to present our work in the multidisciplinary Failure to Thrive (FTT) clinic through a case study of an infant. Feeding is a complex process. Disorders include medical, oral motor, and behavioral aspects. In the past, FTT was considered a syndrome arising from either organic or nonorganic mechanisms. Today, FTT is not viewed as a syndrome, but rather as a physical sign that a child is receiving inadequate nutrition for optimal growth and development. ( Scholler & Nittur,

2012; Shield et al, 2012; Williams, Field & Seiverling, 2010). The various facets of the feeding process are represented by the multidisciplinary team of our clinic. Upon arrival at the clinic, the infant's family is met by a nurse, doctor, dietitian, occupational therapist and a psychosocial team member. The questions at hand are "What are the reasons that brought this family here? Which of them relate to this infants' nature, and which to its nurture?" The case we are presenting highlights the significance of teamwork for explaining the FTT and the solid food refusal. The complex treatment included medical conditions such as adenoid hypertrophy, cardiac malformation, difficulties in oral-motor eating skills, maladaptive behaviors and the need for enriched nutrition. The therapeutic line kept moving back and forth between the different disciplines. Working in the same clinic allowed the team to work the case together, from different angles. Rapidly noticing the changes or lack thereof, while supporting the family through all the changes and fears for their son's health and wellbeing.

P02.120

**MEASURING THE PARENT-INFANT RELATIONSHIP: GLOBAL AND MICROANALYTIC PERSPECTIVES AND THEIR VALUE IN CLINICAL PRACTICE**

**Broughton C.\***

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Parent-infant interaction has been characterised as a dance by turns coordinated and mismatched, synchronised and mistimed, cocreated by both partners, and moving constantly between rupture and repair (Stern 1998, Tronick 1989), a dance in which embodied transactions shape the infant's nascent sense of self (Fotopoulou & Tsakiris, 2017). By revealing the subtle, sometimes out of consciousness, moment to moment events that constitute parent-infant interaction, video microanalysis has generated new ways of understanding communication patterns in infancy (Beebe 2016). This understanding has enabled codified measures of the quality of parent-infant interaction both at microanalytic and global levels. This presentation aims to evaluate observational measures applied to parent-infant interaction and their value in practice. We will apply global (PIRAT Global Scales; Broughton, Hommel & the Parent-Infant Project, 2016) and microanalytic/global (Munich Assessment Scales (MAS; Papoušek, 1996) coding systems to DVD of parent-infant interaction in order to compare observational tools designed to evaluate risk and resilience in the parent-infant relationship. The measures discussed offer reliable and validated frameworks in which to set observations of parent-infant interaction. The quality of the measure and its diagnostic value are decided by the setting, nature and intended clinical use of the observation. Global and microanalytic observational measures of the early parent-infant relationship offer insight at different levels of analysis into the embodied transactions between parent and baby that come to shape for good or for ill the infant's sense of self and 'ways of being with the other' (Stern, 1998).

P02.121

**SENSITIVITY OF THE NEONATAL INDIVIDUALIZED DEVELOPMENTAL CARE AND ASSESSMENT PROGRAM OBSERVATION SHEET**

**Alvarez A.\***

*UTCCB, Universitat Autònoma de Barcelona ~ Barcelona ~ Spain*

The assessment techniques for the preterm babies have been improved in the last years. A lot of work has been carried out in order to dispose of even more reliable (test), with earlier deficits detection and less invasive. At the same time programs have been implemented in order to improve the care of the premature baby. In this presentation the sensitivity of the Newborn Individualized Developmental Care and Assessment Program (NIDCAP) Observation Sheet is evaluated. A group of

preterm infants was assessed at 34 weeks gestational age (GA), during their stay in the neonatal intensive care unit (NICU), using the NIDCAP Observation Sheet. After, at 40 weeks GA, this group was assessed with the Neonatal Behavior Assessment Scale. And finally, at 9 months of corrected age were assessed with BSDI-III. A group of term babies were also assessed at 40 weeks and at 9 months to set a comparison group. The results analyzed statistically found variables providing an early diagnosis and showing up the more important sign in the assessing process. Testing the assessment of the preterm babies in the Neonatal Intensive Care Units and its sensitivity. The NIDCAP Observation Sheet has sensitivity to identify differences between newborns with developmental impairment.

P02.122

**STANDARDIZED ASSESSMENT OF PARENT-INFANT COMMUNICATION IN CLINICAL PRACTICE: RELIABILITY AND CLINICAL APPLICATION OF THE MODIFIED MUNICH ASSESSMENT SCALES**

**Georg A.\***

*Heidelberg University Hospital, Institute for Psychosocial Prevention ~ Heidelberg, Germany ~ Germany*

The Munich Assessment Scales (MAS, Papoušek, 1996) have been developed for the microanalytic assessment of non-verbal parent-child communication up to the age of six months. The scales offer a differentiated and dimensional assessment of interactional problems primarily related to early regulatory disorders, and its implications for diagnosis and therapy. This study uses a modified version of the MAS, in which observation length has been shortened and frequency of ratings have been reduced to a global rating per scale in order to improve its usability in clinical settings. The study aims to investigate the reliability of the modified MAS in clinical and non-clinical samples. Inter-rater reliability on the global score and systematic tendencies of particularly high ranges among single ratings were assessed. A sample of N = 25 parent-child dyads (clinical group: n = 12, regulatory disorders in infants and parents with postpartum mental disorders, and controls: n = 13). 3-minute video clips were recorded in a standardized face-to-face situation, and rated by seven reliable observers. Reliability was evaluated and difficult to rate cases were identified, and subsequently analysed in more detail. Reliability analyses revealed moderate levels of weighted Kappa and high percentages of inter-rater agreement in both subgroups. High ranges in ratings were mostly related to the behavior of the child. Short video clips rated with the modified MAS provide reliable assessment of the quality of preverbal parent-child communication from 0-6 months. The findings and their clinical relevance, in particular their impact on age restrictions and the setting of assessments will be discussed.

P02.123

**THE STABILITY OF PSYCHIATRIC DIAGNOSIS IN YOUNG CHILDREN IN FOSTER CARE**

**Davidson Z.\***

*NHS ~ Glasgow ~ United Kingdom*

There is growing evidence for the negative impact of early adverse life experience on the health and development of children, with recognition that significant mental health problems may arise in infancy. Children in foster care are a particularly vulnerable group with higher than average rates of psychiatric morbidity, but little is known about psychiatric diagnosis over time in care. This study aims to investigate the stability of psychiatric diagnoses in young children, in a period of time after being placed into foster care. We hope this study will evidence the need for urgent systemic change in the way we care for a particularly vulnerable group of infants and encourage the emergence of evidence based interventions to reduce substantiated long term negative outcomes. The Best

Services Trial is an RCT recruiting infants new into care and randomising to an infant mental health service or social work services as usual. All children are screened for ICD 10 psychiatric diagnoses at baseline, 15 months and 2.5 years using the validated Development And Well Being Assessment. The Strengths and Difficulties Questionnaire was also used as a measure of general well-being. Analysis of this data is underway and results are anticipated late 2017. Analysis intends to explore changing patterns of diagnosable disorders from the point of going in to care, particularly homozygous and heterozygous persistence of diagnoses and changes in SDQ scores. As far as the authors are aware, this study will be the first to investigate the persistence of a range of psychiatric diagnoses in very young children being followed up after being placed in foster care. Results may go some way in communicating the need for urgent intervention to improve the mental health and long term outcomes for infants in foster care.

### **Prematurity and high-risk infants**

P02.124

#### **HOSPITAL STAFF'S FUNCTIONS AS SPONTANEOUSLY MENTIONED BY MOTHERS OF PREMATURE BABIES AND THEIR REVERBERATIONS**

**Ramos Da Silva L.\*, Sobreira Lopes R.D.C.**

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Premature babies need to be hospitalized in a Neonatal Intensive Care Unit (NICU) due to their physiological immaturity, where health professionals take care of them after birth. As hospital discharge gets closer, the staff needs to help mothers get involved in caring for their babies, preparing to go home. The aim of this study was to investigate hospital staff's functions as they were spontaneously mentioned by mothers and the reverberations they can have on these mothers near their babies' discharge. The participants were 42 mothers of preterm babies hospitalized in public hospitals in southern Brazil, who answered a structured interview. Through inductive thematic analysis, five different themes emerged: Support, Information, Orientation, Interdiction and Surveillance. Results pointed out that the support offered by staff was considered by mothers to be instrumental or emotional, and both had an impact on mothers. The information given by staff concerned not only baby's health status, but also the baby as a person, which had important reverberations on mothers, who felt the staff was attentive to both their babies and themselves. The function of orientation was at times, seen as impositions on mothers. Mothers also reported that the staff would impose certain limits on their relationship with the baby, which was related to an interdiction function. Few mothers had the feeling the staff was keeping an eye on them to see if they were taking care of the baby correctly. It is highlighted how mothers were permeable to the subtlety of communication and relations with the staff, which demonstrates the need to reflect on the staff's functions and how they were carried out. Psychologists could help the staff in sensitizing for these subtleties and being aware of the functions mothers consider they have towards them, so they can be able to better exercise them.

P02.125

#### **INFANT SOCIAL WITHDRAWAL BEHAVIOR AND MATERNAL DEPRESSIVE SYMPTOMS IN A KANGAROO MOTHER CARE PROGRAM (KMC) SAMPLE**

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Social withdrawal behavior has been widely studied as a sign of psychological distress in infants. Risk factors associated with prematurity may contribute to the development of social withdrawal behavior. The Kangaroo Mother Care Program (KMC) consists of the follow-up of infants born prematurely and their parents, with the aim of giving medical and emotional support to this population at risk. The objective of the current study is to explore the social withdrawal behavior in infants participating in the KMC program, and the postnatal depression in their mothers. Thirty-four Colombian infants and their mothers participated in this exploratory study. On average, the corrected age of the infants was 8.00 months, at the time of evaluation. The mother's age ranged from 16 to 38 years, with a mean of 27.47 years. Social withdrawal behavior was assessed through the Alarm Distress Baby Scale (ADBB) during the infant-clinician interaction. Depressive Symptoms in mothers were evaluated with the Edinburgh Postnatal Depression Scale (EPDS). The average of the ADBB total score was 5.62 (SD=4.19). 61.7% of the infants showed signs of social withdrawal, of which 14.7% reported severe social withdrawal (i.e., ADBB score >10). Besides, 37.9% of the mothers reported depressive symptoms with EPDS score over 10. In our study, the percentage of infants considered socially withdrawn was very high. Moreover, the percentage of depressed mothers was also greater than that reported in previous studies with premature babies. That is, infants and mothers participating in the KMC program showed high levels of psychological distress. These results emphasize the importance of developing intervention programs to reduce infant social withdrawal and postnatal depression, as well as to help mothers to interact positively with their infants, in the context of the KMC program.

P02.126

#### **IS THE EFFECT OF INFANT MASSAGE DIFFERENT BASED ON GENDER?**

**Lusane Y.\***

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For centuries, massage has been used in cultures throughout the world to support, enhance, stimulate, and encourage development of infants and young children. Studies have indicated that massage has positive effects on many disease processes and conditions in children. Specifically, massage therapy can assist in enhancing the growth of infants, increasing attentiveness, decreasing depression and aggression, reducing pain, and enhancing immune function. The effects of massage on enhancing development of children with varying types of health conditions and of various ages have been explored; however, determining whether there are differences in response to massage based on the gender of the child has not been studied. The purpose of this study is to complete a secondary data analysis of existing research data to determine whether there is a significant difference in the effect of infant massage based on gender. Secondary data analysis was used to analyze the premature infant database of Dr. Tiffany Field, which included data from 160 infants born between 23 and 35 weeks gestation and participated in studies on infant massage. Overall, there was no significant difference in the effect of massage when comparing males and females. A regression model did indicate that gestational age and birth weight were significant in predicting days in the Neonatal Intensive Care Unit (NICU). Further research is needed to determine the exact cause(s) of difference between infant boys and girls. Once these determinants are identified, further research on the effects of infant massage when combined with these determinants can be explored.

P02.127

### **MATERNAL PERCEPTIONS OF CHILD VULNERABILITY IN A PRETERM SAMPLE: RELATIONS TO CHILD AND FAMILY FACTORS**

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Mothers of preterm-born children often persist in perceiving their children as vulnerable to illness or accidents, even though the children's current functioning does not justify that perception (Potharst et al., 2015). These perceptions may lead to negative child outcomes, dysfunctional parenting and unnecessary healthcare utilization (Potharst et al., 2015; Samra, McGrath, & Wey, 2010). Therefore, identifying the early predictors of maternal unjustified perceptions of child vulnerability seems crucial. As part of an ongoing longitudinal project about the development of preterm-born children, the purpose of the current study was to explore child-related antecedents (neonatal risk status and temperament) and family antecedents (familial-psychosocial risk, maternal psychopathology and maternal sensitivity) of maternal unjustified perceptions of vulnerability at 24 months old (corrected age), in a preterm sample. Seventy-six mothers and their preterm-born children were assessed when children were 12 months (T1) and 24 months old (T2), corrected for prematurity. At T1, mothers reported on infant temperament, maternal psychopathology and several familial-psychosocial risk variables (e.g., low family income). Maternal sensitivity was coded using Ainsworth's sensitivity scale (Ainsworth et al., 1978) during a mother-infant interaction (free play, play without toys, play with a challenging toy). Additionally, a neonatal risk index (e.g., gestational age, days in NICU, respiratory distress) was created based on the review of infants' medical records. Also, in order to control for actual child vulnerability, child development was assessed using Griffiths Mental Developmental Scale (Griffiths, 1984). At T2, mothers reported on perceptions of child vulnerability. Partial correlations showed that T1 maternal sensitivity was negatively related to T2 maternal perceptions of child vulnerability. Regression analysis showed that maternal sensitivity predicted perceptions of child vulnerability after controlling for child development. Mother-child interaction constitutes an important context for the development of accurate perceptions of child vulnerability. Potential clinical implications of the results will be discussed.

P02.128

### **MODERATION EFFECT OF FAMILY SOCIOECONOMIC STATUS IN DEVELOPMENT: THE CASE OF PREMATURE PRE-SCHOOL CHILDREN**

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The adverse consequences of prematurity in the neurodevelopment of preterm infants remains a relevant topic, considering their vulnerability along the development process and the consequences in psychosocial adjustment. The aim of this study was to examine the possible moderator role of family variables in the relation between Developmental status and Emotional and Behavioral Problems in a sample of premature preschool-aged children. Fifty-five premature babies (<32 weeks and/or < 1500gr; 58% male) were assessed at 55.4 months of age (SD = 3.66) with the Griffiths

Mental Scales (Griffiths, 2006). Children's mothers were asked to complete The Child Behavior Checklist 1 ½ - 5 (Achenbach & Rescorla, 2000, Portuguese version Achenbach et al., 2014). Information regarding family socioeconomic status was collected (parent's professional status and educational level), as well as child medical risk condition at birth (e.g. birth weight, gestational age). All children were attending pre-school settings at that time. General Developmental Quotient (GDQ) scores mean was 89.13 (SD = 10.53), and for Internalizing, Externalizing and Total Problems was 54.18 (SD = 11.61), 48.18 (SD = 8.03) and 50.80 (SD = 10.34), respectively. 71% of the families presented a low socioeconomic status. As hypothesized, a moderation effect of the family socioeconomic status in the relation between internalizing, externalizing and total problems and the child GDQ score was found. Children with lower GDQ scores presented more internalizing, externalizing and total problems when their families had a low socioeconomic status. Results highlight the importance of family socioeconomic status in premature children's development and mental health in the first years of life, suggesting a comprehensive approach addressing developmental risk factors in this vulnerable group of children.

P02.129

**TEACHERS ASSESSMENT OF BEHAVIOURAL PATTERNS IN A SAMPLE OF PUPILS PREVIOUSLY BORN EXTREMELY OR VERY PRETERM (EP/VP) AT THE AGE OF SEVEN YEARS – A FOLLOW-UP WITHIN A PROSPECTIVE LONGITUDINAL STUDY**

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Previous studies indicate that preterm birth can increase the risk for inattention, social difficulties and emotional problems in (early) childhood and beyond. This behavioural pattern is known as "preterm behavioural phenotype" (Johnson & Marlow, 2011). N=47 pupils previously born EP/VP (mean weeks of gestation: 27.47) at the mean age of 7.32 years (corrected for prematurity) were assessed by their teachers, who completed the German Teacher's-Report-Form (TRF) of the Child-Behaviour-Checklist. The majority of the pupils previously born EP/VP did not show severe behavioural problems that reached clinical cut-off. Nonetheless, there was an overall trend toward "preterm behavioural phenotype"-symptoms, namely inattention, social withdrawal, anxiety/depression, and social problems. Further, teachers' ratings of the TRF, overall, the externalizing and attentional problems significantly correlated with the "gestational age" but not with the birthweight: The earlier a child was born ( $\leq 28$  weeks of gestation), the more behavioural problems had been observed. In comparison with the age-matched field sample our preterm sample did not reach significantly higher TRF group mean scores. According to the comparison between our preterm and the age-matched field sample our findings are in line with a contemporary review by Montagna & Nosarti (2016). The authors found that EP/VP children often have higher but non-significantly group mean scores than term-peers, probably since they do not reach clinical cut-off. Moreover, our EP/VP pupils showed primarily symptoms that are associated with the "preterm behavioural phenotype". Clinical relevance: To conclude, the more preterm children are born, the more children show behavioural problems at school. Therefore, it is an urgent need to inform teachers about long-term developmental consequences of preterm birth.

P02.130

**ANXIETY AND DEPRESSION IN PRETERM INFANTS' MOTHERS AND FATHERS DURING THE FIRST YEAR OF LIFE: THE EFFECTS ON INFANT DEVELOPMENT**

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Literature has underlined how a premature birth may represent an unexpected and stressful event for the parents and a heightened risk for perinatal psychopathology (Lasiuk et al., 2013). The aim of the study was to investigate the prevalence of depression and anxiety in preterm babies' parents and the effects on preterm infant development at 3, 9 and 12 months of infant corrected age. The study compared 350 parents (175 mothers, 175 fathers) of 150 preterm infants (60 classified into Extremely-Low-Birth Weight-ELBW; 90 into Very-Low-Birth Weight-VLBW) and 200 parents of healthy Full-Term infants (FT Group). Depression and anxiety were evaluated in parents by Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987) and Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990), respectively. Infant development was assessed using the Griffiths Mental Development Scales (Griffith, 1996). A significant effect of the interaction between birth weight and time of assessment emerged on EPDS ( $p < 0,0005$ ) and PSWQ scores ( $p = 0,004$ ): ELBW parents showed significantly higher depressive symptoms than VLBW and FT group at 3 ( $p < 0,0005$ ;  $p < 0,0005$ , respectively) and 9 months of infant corrected age ( $p < 0,038$ ;  $p < 0,050$ , respectively). At 3 months, ELBW parents were significantly more anxious than those of VLBW and FT infants ( $p = 0,0003$ ;  $p = 0,0004$ , respectively). No differences emerged at 9 and 12 months. According to parent gender, no significant differences emerged. Considering infant development as outcome, a significant interaction between birth weight and PSWQ scores emerged, with lower GMDS-General Quotient at 12 months ( $p = 0,004$ ) in association with anxious parents, but only in ELBW infants, compared to FT ones ( $p = 0,011$ ). The severity of prematurity, in interaction with the degree of parents' symptomatology, may influence the level of infant development. These results suggest the relevance of considering severity of prematurity and parental symptomatology in order to implement appropriate interventions for supporting parenting role after a preterm birth and promoting an adequate infant development.

P02.131

### **COGNITIVE FUNCTIONS AMONG THE 6-YEAR-OLD CHILDREN BORN VERY AND EXTREMELY LOW BIRTH WEIGHT**

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In recent years, the survival rate of very low birth weight (VLBW) and extremely low birth weight (ELBW) infants has been improving rapidly according to the progress of perinatal medical care. However, many researchers reported higher rate of neurodevelopmental disability among VLBW/ELBW children. Clinicians and parents caring or rearing VLBW/ELBW children would like to know how low birth weight affect their cognitive functions. The aim of this study is to examine how low birth weight affect the cognitive development of VLBW/ELBW children at the age of six years and how we should support the cognitive development of VLBW/ELBW children. The subjects were 81 VLBW/ELBW children (37 boys and 44 girls) aged 6 years born at Yamagata Prefectural Central Hospital (YPCH) from 2000 to 2010. The parents of the subjects gave written informed consent to participate in this study. The subjects were administered Wechsler Intelligence Scale for Children 3rd Edition (WISC-III) at the age of 6 years as part of the annual follow up examinations. The mean birth weight was 1029.8g (SD 302.9) and the mean gestational age was 28.3 weeks (SD 3.1). For boys, the mean scores of Verbal IQ (VIQ), Performance IQ (PIQ) and Full Scale IQ (FSIQ) at the age of 6 years were 109.5 (range 80-133), 94.8 (range 71-134) and 102.6 (range 81-131) respectively. For

girls, the mean scores of VIQ, PIQ and FSIQ were 108.7 (range 75-124), 98.8 (range 72-129) and 105.6 (range 85-126) respectively. In both boys and girls, VIQ was significantly higher than PIQ. These results suggested that FSIQ among VLBW/ELBW children was within normal limits. However, we should pay more attention to low PIQ among ELBW/VLBW children and consider educational and psychological supports for ELBW/VLBW children with low Performance IQ.

P02.132

**EFFECTS OF PEDIATRICIANS STANDARDIZED VERBAL INTERVENTION ON LATE AND MODERATELY LATE PRETERM INFANTS WITH SUSTAINED SOCIAL WITHDRAWAL: A RANDOMIZED CONTROLLED TRIAL IN SANTIAGO DE CHILE**

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Pre-term babies often spend their first weeks of life in a neonatal ward, with inadequate parental care leading to early disruptions in the mother/father infant relationship. The sustained social withdrawal (SSW) is understood as an early sign of emotional distress expressed in low reactivity with the environment and is frequently associated with severe psychopathological conditions. Different studies have revealed a prevalence of 11.4% to 22.1% of SSW in preterm infants. The increase and the persistence of SSW can become a risk to the adequate development of an infant's potential. The aim of this study is to determine the effect of a standardized verbal intervention, performed by pediatricians trained in the Alarm Distress Baby Scale (ADBB), on the decrease in SSW in late and moderately late preterm (MLP) infants. MLP newborns and their parents are invited to participate in this randomized controlled trial. When an infant is an eligible patient for the study, he/she is assigned randomly into the intervention group or the control group. Infants in the intervention group will receive a standardized verbal intervention, if the pediatrician detects SSW. In both groups, neonatal pain scores (PIPP), painful-invasive procedures, and the total time of skin-to-skin contact, breastfeeding and parental visits, will be registered and quantified. After discharge, both groups will be controlled at 2, 6 and 12 months of corrected age by trained pediatricians. In each visit the infants will be assessed using the ADBB scale, and both parents will be assessed using the Edinburgh Post-natal Depression Scale (EPDS), the Modified Perinatal Post-Traumatic Stress Disorder Questionnaire (PPQ-m) and the Revised Impact of Events Scale (IES-R). Assessing SSW in preterm infants using a standardized and simple scale like the ADBB Scale permit monitoring the infant and implementing some cost-effective interventions that could benefit him and his family.

P02.133

**PRETERM BIRTH AND ADULTHOOD WEALTH: A META-ANALYSIS**

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Preterm birth increases the risk of cognitive deficits and academic underachievement. Large, registry-based studies from Scandinavian countries have further documented that preterm birth may not be only associated with adverse functional outcome but with decreased wealth across adulthood. In contrast, few prospective cohort studies from other regions have studied adult wealth-related outcomes after preterm birth and they have produced inconsistent findings. Two independent reviewers extracted data on higher educational qualifications, employment rates, social benefits, and independent living using a predesigned data collection form. Of the 984 articles

screened, 22 studies met the inclusion criteria. Preterm birth was associated with decreased likelihood of attainment of higher educational qualifications (OR= 0.75; 95% CI= 0.70-0.80), employment rates (OR = 0.82; 95% CI= 0.74-0.92), and increased likelihood of receiving social benefits (OR= 1.23; 95% CI= 1.08-1.41). On the other hand, preterm and full-term born adults did not differ significantly from each other in terms of the likelihood of independent living (OR = 0.78; 95% CI= 0.60-1.01). Preterm birth is associated with decreased rate of employment and educational qualifications and increased rate of social benefits in adulthood. However, the findings are less clear for independent living.

P02.134

### **COHORT STUDY OF BABIES AT RISK OF AUTISTIC DISORDERS: PSYCHOANALYTICALLY ORIENTED PSYCHOTHERAPY**

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The baby is in progressive construction and it is necessary to consider brain and genetic plasticity. Scientific advances have taught us that the early stages of the relation to the other do not happen from the outset for babies at risk for autistic disorders. These risks are known as PREAUT signs (Ouss, 2013), developed from M-C. Laznik's hypothesis (2006). Each baby is seen with their parents once a week. Each session is filmed by a trainee in psychoanalytical formation. One hundred babies have been seen between 2008 and January 2017. These babies have been classified in different major categories. A control group is constituted by the babies who presented some risk of autistic disorders but whom parents could not commit to the psychotherapy. Also, our population of babies are divided into three parts depending on the age they were at in the first session. All sessions are filmed until the babies are 18 months and we study them precisely by applying PREAUT's evaluation at 4 and 9 months and PREAUT/m-CHAT's tool at 18 months. Among the 100 babies: 41 are defined with autistic disorders' risk; 1 with relational withdrawal without autistic disorders' risk; 2 with other troubles; 13 with seriously depressed/traumatized mothers or mothers with mental disorders. 18 of the babies were under 3 months at the first session; 19 between 3 and 6; 11 between 6 and 12. Those who are not quantified still remain to be carefully studied. We are also interested in studying the average number of sessions per baby and the average duration between two sessions. Early psychotherapeutic intervention appears to be absolutely essential but training health workers in psychoanalytically oriented psychotherapy is also necessary.

P02.135

### **GROUP INTERVENTION FOR CHILEAN IMPRISONED MOTHER-INFANT DYADS: EFFECTS ON MATERNAL DEPRESSIVE SYMPTOMS AND ON THE CHILD'S DEVELOPMENT.**

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The number of women sentenced to stay in prison has increased throughout the world over the last decade, also increasing number of children affected by this situation. (Walmsley, 2012; Birmingham, Coulson, Mullee, Kamal & Gregoire, 2006). Adequate support for facilitating positive experiences of pregnancy and birth whilst in prison may improve long-term health outcomes for mothers and their children, (Windham, 2016; Shaw, Downe & Kingdon, 2014; Muzik, et al., 2015; Dolan, Birmingham, Mullee & Gregoire, 2013; Walker, Hilder, Levy & Sullivan, 2014). Literature supports brief interventions that are effective in improving maternal depressive symptoms and child development (Sleed, Baradon & Fonagy, 2013; van Ijzendoorn, Juffer & Duyvesteyen, 1995; Miller et al., 2013) Of

the total Chilean penitentiary population, 11.24% are women (15,730), 85% are mothers of 2-3 year old infants. Most frequent symptomatology is related to depression (Gendarmeria, 2015), which supports international findings (Chen, Lai & Lin, 2014; Birmingham, Mason & Grubin, 1996). The present study seeks to evaluate the effects of a group intervention on pregnant women and mother-infant dyads in jail, specifically looking at maternal depressive symptomatology and child development factors. A quantitative design using pre- and post-evaluations was used to study these factors. Participants included 30 inmate women who participated in the pregnant women intervention and in 30 inmate women and their children in the mother-infant dyads intervention. Depressive symptomatology was assessed using the Beck Depression Inventory (BDI) and child development using the ASQ-3. A repeated measures analysis was conducted. Results show inmate mothers who participated in group interventions reduced depressive symptoms significantly, and children that attended the mother-infant dyad intervention showed improved development. The relevance of early interventions in mother-infant inmate dyads is discussed in relation to women's health and in child development. Prison context's complexities are analyzed.

P02.136

### **PARENTAL ATTACHMENT REPRESENTATIONS IN PARENTS WITH INFANTS AT RISK FOR CEREBRAL PALSY (CP) DIAGNOSIS**

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Parental internal working models and representations of their child guide the parent's mental involvement in the caregiving relationship. Risk conditions stemming either from parent or child, or both, could compromise parental representations. This in turn could hamper the development of a positive infant-parent relationship, the infant's socio-emotional development and the infant's attachment patterns. Receiving the medical information that the child is at risk for CP can be a shock to parents, resulting in increased levels of parental stress, anxiety and/or depression. The severity of the infants' injuries or illness may also play a role. A caregiving relationship starting off with the added stress of perinatal complications such as having an ill child, or going through a traumatic birth could put the child at risk of less optimal development. Given the scarcity of research in this group of parents with infants at risk for CP, careful investigation is warranted. The aim of this study was to identify parental representations and describe mental health in 39 parents with high-risk infants at risk for receiving a CP-diagnosis. Families were recruited from the neo-natal follow-up program at the Karolinska Hospital in Stockholm. Parents were interviewed (mainly in their homes) with Working Model of the Child Interview (WMCI). Parental stress was self-reported by using Swedish Parenthood Stress Questionnaire (SPSQ) and anxiety/depression by Hospital Anxiety Depression Scale (HADS). Parental working models and self-rated parental stress, anxiety and depression will be reported. Conclusions, concerns and implications for clinical interventions will be discussed.

P02.137

### **PLAY THERAPY FOR BOTH AN INFANT WITH SEVERE COMPLICATED DISABILITY AND HIS MOTHER** **Saino H.\***

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The attachment between the infants with severe complicated disability and their parents likely become insecure because of the abnormal responsiveness of the infants and/or the unhealthy

condition of their parents. The author has experienced a play therapy for both a boy of two years old with severe congenital malformation syndrome (M) and his mother for four years. The aim of the presentation is to examine the therapeutic process of the case. M had feeding disturbance and forced to undergo multiple hospitalization for pneumonia and operations of anomalies. The author saw M and his mother during their hospitalization for rehabilitation in our hospital. M could not sit alone and continued to bang his head rhythmically on his wheelchair like avoiding the author. His mother showed dark expression and said "I have been continuing suction of his septum. I do not know what he thinks about. I have no problem." The author tried to play with M thinking what might be comfortable for him and listened attentively to his mother's struggle. They seemed relieved and the mother requested the continuation of the therapy. M's fear for the outside world and the mother's sadness had gradually been getting decreased. In six years old M expressed his feelings to his mother by a few expressions and voices, and his mother replied kindly. Playing with M being taught what was comfortable by him intersubjectively and paying sympathetic attention to the mother both seemed effective for becoming the attachment securer.

### **Problems with parenting and high risk families**

P02.138

#### **WARM CONNECTIONS: PREVENTION IN ACTION TO SUPPORT THE HEALTH AND WELL-BEING OF LOW-INCOME WOMEN, INFANTS, AND CHILDREN**

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Mental and physical health disparities among low-income women and children in the United States are well established and demand innovative collaboration to achieve health equity. Warm Connections is a community-based program in Denver, Colorado that reflects a partnership between WIC (Special Supplemental Nutrition Program for Women, Infants and Children) and local universities, public health agencies and community mental health centers. WIC, a U.S. federally funded program, seeks to safeguard the health of low-income and high-risk women, infants, and children up to age 5 by providing nutritious foods, information on healthy eating, and referrals to health care. Warm Connections integrates infant mental health specialists into WIC clinics and provides early intervention and support in a setting that serves 53% of infants born in the U.S. Warm Connections provides on-site, "just-in-time" infant mental health prevention and intervention services to WIC participants in order to address the psychosocial needs of this under-served population and improve access to the early childhood system of care. This poster presents the results of the initial program evaluation that includes a psychosocial needs assessment and pre- and post-intervention measures (e.g. program effectiveness, participant satisfaction, and referral rates). Results indicate that WIC participants identify managing their child's mood, fussiness, and difficult behavior as some of their most salient psychosocial needs. Pre- and post-intervention measures suggest caregivers experience a reduction in distress following participation in Warm Connections, are satisfied with the program, and receive referrals for supportive services. Warm Connections advances the field in reducing health disparities in this population.

P02.139

#### **EXPLORING PRENATAL MATERNAL REPRESENTATIONS OF MOTHERS AT RISK OF REPEATED CARE PROCEEDINGS: A THEMATIC ANALYSIS**

**Meier J.\***

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A highly vulnerable and marginalized population of at-risk mothers repeatedly loses care of their children through care proceedings following child protection concerns. The majority of these are of infants, often removed at birth, and intervals between successive maternal pregnancies are typically short. To date, there has been no concerted service response to repeat removals or the needs of birth mothers following care proceedings, although child removals have been linked to subsequent pregnancies in various high-risk samples. The perspectives of mothers experiencing repeat removals and their experiences of pregnancies are insufficiently researched. The study sought to improve understanding of repeat pregnancies in mothers who have had multiple children removed from their care. It aimed to explore possible mechanisms and personal meanings of repeat pregnancies through prenatal maternal representations. The current qualitative study aimed to explore maternal representations of five pregnant mothers at risk of recurrent care proceedings. A Thematic Analysis of mothers' responses to the Pregnancy Interview (Slade, 2007) focused on their representations with regards to themselves as mothers, their babies, and the mother-baby relationship. Mothers were recruited from a holistic 2-year support programme for pregnant mothers who have previously lost children to care, the Early Family Drug and Alcohol Court in England. Seven key themes were identified: (1a) 'Uncertainty and fear of losing the baby', (1b) 'Uncertainty but hope to become a mother', (2) 'Not wanting to be like their own mother', (3) 'Experiencing recovery and pregnancy as two interdependent processes', (4) 'Struggling to imagine the baby', (5) 'The omnipresence of previous children', (6) 'Starting to have a connection with baby brings joy', and (7) 'Noting the baby's dependency'. The results are clinically relevant as they highlight important areas of intervention, including mothers' grief, maternal self-identity, recovery from substances, and managing uncertainty.

P02.140

#### **KIDSTIME WORKSHOPS: FACING STIGMA IN FAMILIES AFFECTED BY PARENTAL MENTAL PROBLEMS**

**Cardenas M.\*, Ardevol I., Ribalta T., Grasses N., Fuentes M., Salto C., Sanchez T., Perez O., Lacasa F.**

*Barcelona ~ Barcelona ~ Spain*

We have evaluate the effects of this intervention in the competence and trust of parents in their roles, self-esteem, stigma, resilience and in the relationship among parents with mental illness and their children. The Kidstime workshop is a support group that provides information to parents with mental illness as well as their children and adolescents. The 'Kidstime Barcelona' Project is the first program of primary prevention and multifamily intervention with this population, carried out in Spain. The workshops are carried out monthly during one-year span, each workshop lasts 2 hours, and is held in community settings. The workshop consists of a multi-family meeting, separated groups of parents and children creating film scripts, filming drama, and a multi-family closing encounter where the family members watch the video filmed by their children, express their opinions about the experience and share a pizza. We have evaluate the effects of the Kidstime workshops in Barcelona, finding an improvement in the competence and trust of parents in their roles and also on self-esteem, stigma, resilience and satisfaction in adults. The workshops have shown to be beneficial for family communication related to mental illness.

Conclusions: The Kidstime workshop is a support and informative group for parents with mental illness and their children, which allows the families to promote resilience, prevents and identifies behavioral and emotional difficulties arising in these children, while helping to maintain parental involvement with mental health services.

P02.141

**RISK AND PROTECTIVE FACTORS FOR PARENTHOOD OF MOTHERS WITH A PSYCHOTIC DISORDER**  
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*université paris descartes ~ paris 5 ~ France*

Parenting of mothers with a psychotic disorder remains little studied and mostly considered from the point of view of dysfunctions and risk factors for the child. Following an exploratory study carried out in 2012 on the retrospective experience of 9 parents with a psychotic disorder, several issues emerged: the notion of partial parenthood, the need to promote appropriate therapeutic devices during some key periods of child development, the incidence of intra-familial violence. In order to increase the understanding of this question, a new study was conducted in 2015 with 18 mothers diagnosed with a psychotic disorder who attended a psychiatric department. They responded to an interview and to 6 scales including: the SUMD scale of insight's capacity, the RSA resilience scale, the SSQ social support scale, the PACOTIS parental competence scale and the RQ attachment scale. The aim of this study was to highlight the individual and environmental factors that can help mothers in their maternal role and to explore their specific needs of support. Results showed high levels of parental stress, as well as significant and positive correlations between feelings of parental competence and high levels of insight about their disorder, and perceived social support. However, no significant relationship has been found between mother's insight's capacity and resilience scores. According to these results, an eco-systemic approach, taking into account personal and environmental factors, seems to be more appropriate in order to understand the parenting of mothers with a psychotic disorder and to promote a process of individual or family resilience.

P02.142

**NATURE AND NURTURE IN THE DEVELOPMENT OF MALTREATED PRE-SCHOOL CHILDREN – AN ILLUSTRATION FROM TWO STUDIES**

**Minnis H.\***

*University of Glasgow ~ Glasgow ~ United Kingdom*

We are conducting a study (the Best Services Trial – BeST?) that aims to determine whether an infant mental health approach, or a social work approach, is the most cost-effective intervention to improve the mental health of maltreated pre-school children coming into foster care. We have noticed that slightly less than half of the children in the BeST? study have a mental health problem as they enter care, yet those who do have a psychiatric disorder often have overlapping problems. In other words, it appears that if maltreated children have psychiatric or neurodevelopmental problems, these problems are often complex and overlapping. We investigated the likely aetiology of this overlap of neurodevelopmental complexity. A co-twin control design in a large Swedish twin study (the CATSS study) of 8,192 9 year olds. We found that maltreated children were much more likely to have overlapping neurodevelopmental disorders compared to non-maltreated children, e.g. maltreated children were almost ten times as likely to have three or more neurodevelopmental disorders. Maltreatment did not appear to cause the neurodevelopmental complexity: genetic factors appeared to be responsible for both the maltreatment and the neurodevelopmental complexity. The complex interplay between nature and nurture therefore seems to be particularly important for maltreated children who may not only have experienced a wide range of adversities, but may also have a high genetic loading for mental health problems. This presentation will describe how we are attempting to capture this in BeST? by making detailed measurements of the child's early adversities (using the ACEs questionnaire and the Maltreatment Classification System), their current care environment (using the Parent-infant relationship global assessment scale) and any

neurodevelopmental and psychiatric problems (using Strengths and Difficulties Questionnaire and Development and Wellbeing Assessment).

P02.143

### **THE IMPACT OF LEGAL AND STRUCTURAL FRAMEWORKS AND PRACTICES ON THE PROMOTION OF NURTURING CARE TO MALTREATED CHILDREN**

**Kainth G.\***

*University of Glasgow ~ Glasgow ~ United Kingdom*

It is widely recognised that it is essential for maltreated children in foster care to receive good quality, nurturing care in order to experience positive outcomes. When making decisions about such children, parents, carers, social services and legal forums must ensure that the welfare of the child is of paramount concern and that efforts to meet identified need should be developmentally sensitive. There is also a duty to promote family life (an in particular contact with birth families) and any curtailing of this right must be proportionate. This element of the symposium seeks to outline the nature of structural and legal tensions in the promotion of positive nurturing care for maltreated children in foster care (including some of the means by which the system itself impacts on the mental health of children in care). It seeks to outline some of the dangers implicit in exposing children to adverse family contact and in withholding positive contact (and the difficulty in identifying which is which). Focus groups involving social workers, psychologists, and soon lawyers and judges, have been undertaken as part of the process evaluation for the BeST? trial. Focus group data has been analysed and key themes drawn out. Focus group participants highlighted that there may be a tension in Scotland between the duty to promote the welfare of the child and the duty to promote family contact- particularly where family contact is thought to be detrimental to the welfare of the child. Participants suggested that promotion of the child's welfare might now be a lower priority than the promotion of family contact. The focus groups suggest a number of reasons for this (including the nature of legal provision for parents, the absence of legal provision for young children, the nature of the membership of the tribunals that make the decisions, the lack of a focus on outcomes for the child). There is debate about the welfare of the child maintaining paramountcy where the exercise and promotion of the rights of parents and children may be in conflict. Further work is required to assess and quantify the scale of this issue.

P02.144

### **PREDICTING CHILD WELFARE SYSTEM INVOLVEMENT FOR MOTHERS WHO ARE SUBSTANCE-INVOLVED**

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Over two-thirds of child maltreatment cases referred to child welfare systems include parents who are substance-involved (Dore & Doris, 1998). Further, almost half of women entering substance use treatment were involved with child welfare systems (Grella et al., 2005). Mothers who were substance-involved and who were involved in child welfare systems also were more likely to have experienced childhood physical abuse compared to mothers who were substance-involved but who had not been referred to child welfare systems (Grella et al., 2006). This study examined possible factors involved in the disproportionate representation of mothers who are substance-involved and have experienced childhood adversity in child welfare systems. Several characteristics (i.e., adverse childhood experiences, childhood abuse/neglect, parenting stress, affectivity, emotion dysregulation, and emotion regulation strategies) were used to predict child welfare involvement. Mothers (N=127; mean age=30.03-years) with at least one child between 0- and 5-years completed

a packet of questionnaires at the substance use treatment facility where they were receiving services (61.4% outpatient; 38.6% residential). The majority of our sample (65.1%) reported involvement with child welfare systems. Binary hierarchical logistic regressions demonstrated that adverse childhood experiences (i.e., ACEs) predicted child welfare involvement ( $p < .04$ ), even when other characteristics were included. In contrast, childhood abuse/neglect, stress, affectivity, emotion dysregulation, and emotion regulation strategies did not predict child welfare involvement. The path leading from ACEs to child welfare involvement was direct and unaffected by other characteristics examined in this study. This relationship can be attributed to the number of adversities experienced in relation to caregivers' actions and in the context of household dysfunction. These were stronger indicators of child welfare involvement than other characteristics, including the severity of maltreatment experienced regardless of perpetrator or context. Preventing child welfare involvement may be best achieved through the overall prevention of ACEs, especially for mothers who are substance-involved.

P02.145

### **KIDSTIME WORKSHOPS: A PROJECT FOR FAMILIES AFFECTED BY PARENTAL MENTAL PROBLEMS**

**Cardenas M.\*<sup>[1]</sup>, Coromina M.<sup>[1]</sup>, Fagin L.<sup>[2]</sup>, Francis D.<sup>[2]</sup>**

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The Kidstime Project, developed in England, is an example of a preventive community-based intervention; it is a supportive and psycho-educational approach for families with parents who suffer from a mental conditions. The Kidstime workshop is a support group that provides information to parents with mental illness as well as their children and adolescents. Kidstime workshops aim at facilitating resilience, minimizing the impact of the mental disorder in the family and improving the parental skills. We included 55 adults with a diagnosed mental disorder from whom 29 were women and 16 men. The intervention consisted in 10 monthly multifamily workshops lasting 3 hours, including a multifamily seminar, a psicoeducational group for parents and a children drama session on mental health/illness issues. We applied scales for adults: Inventory of breeding patterns, CD Risc, SDQ, self-rated social stigma scale, Rosemberg self-esteem scale, satisfaction-evaluation survey of the workshops, final satisfaction survey. We have found significant differences between PRE and POST evaluation of Adults scales:

Π Inventory of parenting-expression of affection (sign .038): After the intervention, there is an improvement in the parents' ability to express affection and emotions to their children

Π Stigma self-perception scale (sign .038): after the intervention, less stigma associated with a mental disorder is observed

Positive trend in the other variables evaluated, not significant but small N (between 21 and 27 depending on the evaluated variable). We have found that Kidstime workshops are an effective tool in the prevention and intervention for a vulnerable population such as the children of parents with mental illness, enhancing their resilience.

P02.146

### **INTERRELATEDNESS OF ADVERSE CHILDHOOD EXPERIENCES: EXPLORING PATTERNS IN INFANCY AND TODDLERHOOD**

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Children living in poverty face a range of parenting and environmental risks (Adverse Childhood Experiences; ACEs) that, in the absence of a nurturing caregiver, can result in toxic stress. Unfortunately, many risks co-occur; increasing the number of ACEs experienced by children. This

study examined patterns of co-occurring ACEs at ages one (N = 2,361), two (N = 1,993), and three (N = 2,154). Participants were enrolled in the U.S. Early Head Start Research and Evaluation Project. At enrollment, caregivers were 22.7 years of age (SD = 6) and about half (45.7%) had not completed high school. Participants were racially/ethnically diverse (35% African-American, 23% Hispanic, 38% White, 5% other). Infants/toddlers were assessed using the Bayley Scales of Infant Development. Using finite mixture models, three similar ACEs groups were identified at each age. The largest group (Low ACEs; range 61%-75% of sample) shows relatively low levels of ACE exposure with some elevation on Physical Neglect and Parent Separation. The second largest group (Parenting ACEs; range 13-27%) has the highest levels of exposure to Emotional Abuse, Physical Abuse, and Physical Neglect. The smallest group (Family ACEs; range 13-15%) has the highest levels of exposure for Physical Separation, Domestic Violence, Substance Abuse, Parent Mental Illness, and Jailed Family. Patterns were associated with cognitive abilities at ages 1 ( $F(2, 1,773)=3.32, p=.04$ ), 2 ( $F(2, 1,558)=8.19, p<.001$ ), and 3 ( $F(2, 1,416)=5.51, p=.004$ ) and with emotion regulation at ages 1 ( $F(2, 1,926)=5.74, p=.003$ ), 2 ( $F(2, 1,1676)=5.44, p<.001$ ), and 3 ( $F(2, 1,505)=10.59, p<.001$ ). Findings suggest that both the Parenting ACEs and Family ACEs groups performed less optimally than the Low ACEs group. As a whole, findings from this study highlight the need to consider the interrelatedness of ACEs. Findings also suggest the importance of both family and parenting risks for infants and toddlers.

P02.147

#### **THE TRAUMATIZED BRAIN - GLOBAL AND/OR SPECIFIC EFFECTS OF MALTREATMENT DURING CHILDHOOD?**

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Early childhood maltreatment causes numerous severe physical and psychological consequences, which are associated with enormous economic costs and suffering of the affected individuals. Previous studies provided evidence for the association between early childhood maltreatment in general and neuroanatomical changes. However, the differential effects of specific types of maltreatment on the neuroanatomy of children and adolescents have not received much attention yet. We hypothesize that early childhood maltreatment in general is associated with a lower volume of the prefrontal cortex, hippocampus, cerebellum, and corpus callosum. For the maltreatment subtypes physical abuse and neglect we assume a volume reduction in the medial frontal gyrus and anterior cingulate gyrus as well as a volume increase in the amygdala, respectively. This research project aims to broaden our knowledge about the effects of specific types of maltreatment during early childhood on brain structure in distinction from the effects of early childhood maltreatment in general. Additionally, a moderating protective factor (i.e. social support) and mediating neuroendocrine process (i.e. hypothalamic-pituitary-adrenal axis activity) will be examined. Our study will include 80 maltreated children and adolescents aged 9-16 years and 40 non-maltreated controls (N=120). The participants with maltreatment experiences mainly suffered either physical neglect (n1=40) or physical abuse (n2=40) mostly during early childhood. The groups will be matched according to age and gender. All children will be examined regarding their maltreatment experiences, social support, and neuroanatomy using Child Protection Service files, interviews as well as structural magnetic resonance imaging. The hypothalamic-pituitary-adrenal axis activity will be investigated based on hair cortisol concentrations. Simultaneously, several confounding factors (i.e., handedness, socioeconomic, and puberty status) will be controlled.

P02.148

**PROMOTION OF MATERNAL SENSITIVITY WITH HOME-BASED INTERVENTION FOR SINGLE MOTHERS WHO NEGLECT THEIR PRESCHOOL CHILDREN**

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*Cooperativa Sociale Cospexa ~ Roma ~ Italy*

The pilot project aimed to explore the effectiveness of a mother-child support intervention for single mothers with preschool children reported to the children protection system –social services and judicial- for neglect. A home visiting program with Video Feedback (VIPP-SD; Juffer, Bakermans-Kranenburg & van Ijzendoorn, 2008) was presented to public social workers who used services of “Centro Fregosi”, a public Center for contrasting child maltreatment. Participants. Of 24 single mothers reported to social services eligible for the home visiting intervention, 12 mothers agreed to the project. Of these 12 mothers only 8 completed the home visiting program. Procedure. The VIPP-SD consists of seven biweekly home sessions in which mother-child interactions were videotaped and the mother received a feedback on the video. A preliminary session was made to collect the pre-test data. At the end of the seventh session the post-test data were collected. Measures. A free-play mother-child interaction was videotaped and coded with Coding Interactive Behavior (CIB; Feldman, 1998); Parenting Stress Index (PSI-SF; Abidin, 1995) and Child Behavior Check-List (CBCL; Achenbach, 1992) were filled in by mothers. Statistical Analysis with nonparametric test showed a significant improvement of quality of mother-child interaction -with an increase of maternal sensitivity and a decrease of maternal intrusivity-, a decrease of Parenting Stress and a decrease of Child Total Problem after the VIPP-SD. The neglecting single mothers are highly needing to get support but they also have a deep instability that can make it difficult to activate or to complete the interventions. Home visiting program with VIPP-SD has the strength of being concrete and short and seems a valid support in order to improve maternal sensitivity. A greater spread of knowledge about neglect and about intervention programs can improve the compliance with social workers and reach a higher number of families.

P02.149

**PARENTING SUPPORT IN CHILDREN CONTACT CENTERS: AN IMPLEMENTING METHOD**

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The Children Contact Center is a specialized intervention aimed at "maintaining and/or retrieving relationships between children and non-custodial parents (or with reference persons with which the child has or will be able to develop a significant affective bond in the future) according to their needs in the context of parental conflict or other situations which may compromise the non-cohabiting parent/child relationship" (Guidelines for Visiting Rights Services of Rome, 2014). The objective is to present a clinical procedure which enabled us to verify that the Children Contact Center intervention allows a substantial change in the way of visiting and in parent/child relationship when parents participate to individual and/or joint support sessions besides parent/child meetings. The intervention is used both to ensure the right of access and to evaluate the quality of the parent-child relationship (Buchbinder, E., 2015; Caffrey, L. 2015; Morrison, F. & Wasoff, F. 2012; Gibbs, A. et 2007). The procedure provides for parents to be offered individual and/or joint support sessions at the same time as meetings with the child. Sample: 37 sets of parents (29 fathers meeting children and 8 mothers; 49 children: 17f and 32m) recruited at the Centro Fregosi of Rome, sent by Social Services or Judicial Authority. 20 sets of parents accepted parental support: 7 in individual sessions, 13 in joint sessions. 55% of the parents who participated to support sessions, restored and maintained the relationship with their children.

Participating to support sessions at the Children Contact Center, is associated to a gradual liberalization of the frequentations in natural contexts, the restoration of phone calls between the non-custodial parent and the child, a higher involvement in shared triadic activities.

P02.150

### **NEUROBIOLOGICAL STRESS REACTIVITY IN YOUTH: RELEVANCE OF MALTREATMENT AND SOCIAL SUPPORT**

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Maltreatment is associated with numerous behavioral and physiological sequelae. Former research provided evidence for blunted cortisol reactivity in maltreated children, whereas social support might ameliorate this effect. The present study examined the effects of maltreatment and social support on steroid reactivity in a psychosocial stress task with children and adolescents. Stress was induced in a sample of 92 children (43.5% girls) aged 9-15 (M=12;4; SD=1;6) using the Trier Social Stress-Test for Children (TSST-C). The sample included children with maltreatment experiences (n=40) and a non-maltreated control group (n=52). Maltreatment was assessed with the Maltreatment Classification System, whereas the Arizona Social Support Interview Schedule was used as a self-report measure of children's social support. During the stress test saliva cortisol and plasma steroid levels (e.g., cortisol, cortisone, androstenedione, pregnenolone-sulfate) were determined for nine and two time points, respectively. Preliminary data analyses showed a significantly lower increase in saliva cortisol during the TSST-C in maltreated children ( $F(1,89)=4.59$ ,  $p=.035$ ,  $\eta^2=.05$ ). Moreover, significant interaction effects of maltreatment and social support emerged for saliva cortisol ( $\beta=-.51$ ,  $p=.002$ ) and several neuroactive plasma steroids (i.e., cortisol, cortisone, androstenedione, pregnenolone-sulfate;  $ps\leq.044$ ) showing a higher hormonal stress reactivity in the non-maltreated group with more social support. This effect will be explored in further analyses. Our study is the first to investigate the interplay of maltreatment and social support on the reactivity of several neuroactive plasma steroids in a psychosocial stress task with children and adolescents. The results emphasize the importance of social support for HPA axis functioning.

P02.151

### **EXPLORING THE PATTERNS OF SENSORY PROCESSING IN A POPULATION OF 0-8 YEAR OLDS WITH SUBSTANTIATED CHILD ABUSE**

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Children who have experienced significant abuse and trauma are particular vulnerable to the development of maladaptive self-regulatory strategies. Occupational therapy assessment of these children's sensory processing can add valuable information to the care team to inform intervention planning. Sensory Profiles were administered with 70 randomly selected clients (0-8 years) of Take Two, Berry Street. The Sensory Profile was utilized with the aim to better understand the child's pattern of sensory processing. This tool provided information that assisted clinicians in their work

with carers to adjust the child's environment to facilitate greater emotional and behavioural regulation. Increasing clinicians and carers' understanding of traumatized children's sensory processing patterns will enable greater specificity in intervention planning and opportunities for co-regulation with these children. Where significant abuse, neglect and trauma has occurred, infants and children can demonstrate complex and idiosyncratic sensory responses and needs, negatively impacting their capacity to heal and to develop relationships with others. If these sensory experiences are understood by their workers and carers, interventions can be developed that greatly assist development and recovery.

P02.152

### **MATERNAL SENSITIVITY AND REPRESENTATIONS OF ATTACHMENT OF INCARCERATED MOTHERS WITH THEIR CHILDREN IN URUGUAY**

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Mothers in prison face multiple adversities that may negatively impact the quality of mothering. In Uruguay, mothers can remain together with their infants in jail until they are four years old. The aims of this study were to characterize the maternal sensitivity and representations of attachment as well as to promote secure attachment, mentalizing and emotional regulation, through group sessions, of mothers cohabiting with their children in prison. We assessed the maternal sensitivity in a dyadic context by the CARE-Index (Crittenden, 1997, 2004) and the adult representations of attachment (Adult Attachment Interview [AAI]) of eight women living together with their children in the "Unidad 9", Montevideo. We also carried out nine monthly group sessions of one hour each to encourage mentalizing, emotional regulation and secure attachment. The qualitative analysis of the results show that the mothers established a close bond with their infants but most needed support. The group sessions were evaluated positively by the mothers. Being together in jail allowed mothers to establish a close bond with their infants although support was needed to reduce the negative impact of incarceration and early adversities on the maternal sensitivity and representations of attachment. This support could be provided, in part, by group sessions. These results should be taken with caution as this study comprised a small and heterogeneous group of mothers and should be considered as a first step towards characterizing the quality of mothering in prison and a contribution for reflection and future research of this highly vulnerable group.

P02.153

### **CONNECTING CHILDCARE WORKERS IN FUKUSHIMA: PROTECTING CHILDREN LIVING IN THE AFTERMATH OF THE EARTHQUAKE**

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Children's lives were greatly affected by the 2011 Great East Japan Earthquake in Fukushima. Fears related to radiation and mass evacuations altered the family environment dramatically, resulting in the unsettling of states of mind for many children. In childcare centers, the numbers of children with symptoms of developmental disorders and with behaviors beyond adult control have been rapidly increasing. Whether these symptoms are due to organic developmental disorders or related to stress is unknown. Given that inappropriate responses and management by childcare workers can have profound consequences on the future of these children, efforts to improve the knowledge and skills of childcare workers are needed. We held conferences among childcare workers in Fukushima

every 2 months; during each conference, we discussed 2 to 3 cases. The presenter and participants discussed the cases. Pediatric mental health specialists offered comments. We collected questionnaires from participants to determine the effects of the case conferences. Analyses of conference proceedings and questionnaires revealed that (1) some children presented with both organic and stress disorders in childcare centers, (2) some childcare workers worried about not knowing how to manage children with challenging symptoms, and (3) childcare workers played important roles in children's growth and development. Childcare workers regarded these conferences as useful, especially in improving communication with both children and their caregivers; they expressed a desire for more such information. Today, years after the Great East Japan Earthquake, the parenting environment continues to be challenging. Inappropriate response to and management of stress behaviors in children may affect their future lives. The wide dissemination of up to date knowledge and practical skills among the childcare workforce is critical.

P02.154

### **THE FAMILY SYSTEM AND THE DEVELOPING CHILD**

**Dollberg D.\***

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Introduction: Family systems theory views the family as comprising of multiple subsystems which are mutually influencing each other and together shape and are shaped by the developing child. The couple is considered to be a major subsystem within the family system and serves as a key factor in determining the family's life quality, parents' wellbeing and child development and adjustment (McCoy, George, Cummings, & Davies, 2013). Of interest are the ways the couple subsystem handles tension, conflict and dissatisfaction; are these factors linked to child development; and what are the family mechanisms through which tension is transferred on to the developing child. Aims: To examine links between factors associated with the individual parent, the parental couple and family and the child's development and socio-emotional adjustment. Method and Measures: Three studies, using varied methodologies and developmental stages to address the question of association between the parental couple and child development are presented. The first study examines links between parental psychopathology, couple's relationship and child socioemotional adaptation. The second study uses observations of parents' and child in order to identify the mechanisms by which parental conflict and dissatisfaction are transferred and contribute to child socioemotional adaptation. The third study examines prenatal coparental dynamics under conditions of stress and high arousal, and investigates whether such dynamics account for children's individual differences at 18 months. Results and Conclusions: All three studies show that child development and adaptation is linked, directly and indirectly, to the observed and reported parental couple's dynamics. Tensioned and dissatisfied couples' relationships present a significant risk factor for child development.

P02.155

### **HELPING DIVORCED PARENTS WITH AN MBT INTERVENTION APPROACH**

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Divorce constitutes as one of the most stressful life events for parents and children. In Spain, in 2016, 101.294 marriages ended in divorce, and a 57% of them had children, so 57.738 children are experiencing a recent divorce actually. For parents, divorce means physical health problems, risk of substances abuse, increased perceived distress, depression and anxiety. For children divorce means psychological and educational functioning problems. The 23% of divorces were contentious, and

court processes cause an increase of emotional and behavioral problems in children. It's urgent, then, to create specialized therapeutic services and help divorced parents to create an strong co-parenting alliance in the benefit of both parents and children's wellbeing. We have created an assesment unit for divorced families, that works with the mentalisation-based therapeutic intervention (MBT), following the way created by Leezah Hertzmann in the UK, helping parents to establish "a more 'help-seeking state of mind'". The axis of our model is based on the support of the family in a time of great crisis. It's necessary to stabilize the basic operation of children, but also contain and guide parents, in a process of shared mourning. We suggest a brief intervention with a mentalisation-based approach and temporized in three phases: confrontation, knot and consolidation. The focus of work, in agreement with the family, is the improvement of the conditions of mourning and recovery of the individual and systemic strengths, in order to improve the functionality and social and personal adaptation of parents and children to their new reality.

P02.156

**STUDY 1: RELATIONS BETWEEN PARENTS' ANXIETY SYMPTOMS, MARITAL QUALITY AND INTERNALIZING AND EXTERNALIZING BEHAVIORS IN PRESCHOOLERS**

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Children's' development is influenced both by parent's anxiety (Glasheen et al., 2010) and marital quality (Davies, Sturge-Apple, Winter, Cummings, & Farrell, 2006). Family systems theory asserts that parent's psychopathology imposes distress onto the individual parent, the couple, and the child. However, it is not clear whether and how these variables are inter-related. Furthermore, studies examining differences between fathers' and mothers' reactivity to the marital relationship and its impact on children's development have yielded inconclusive results. The sample comprised of 58 Israeli families of heterosexual couples with a 3-5 year old child (31 boys, 27 girls). Mothers and fathers completed self-report questionnaires assessing parents' anxiety symptoms (BSI, Derogatis, 1993), marital satisfaction (DAS, Spanier, 1976) and conflict (OPS, Porter & O'Leary, 1980), and child internalizing and externalizing behaviors (CBCL, Achenbach & Rescola, 2000). Mothers' and fathers' anxiety correlated with their own, as well as their spouse's perceptions of the marital relations, and with the child's internalizing and externalizing behaviors. Preacher and Hayes' bootstrapping method was implemented to examine for mediation effects. Fathers' marital satisfaction mediated the links between fathers' and mothers' anxiety symptoms and child externalizing behaviors. The study's findings show that parental, and especially fathers' marital satisfaction is linked with parents' mental health and child adjustment. The findings highlight different links between mothers' and fathers' anxiety symptoms and children's development.

P02.157

**STUDY 2: TRIADIC FAMILY INTERACTION AS A MEDIATOR FOR THE ASSOCIATIONS BETWEEN PARENT'S MARITAL QUALITY AND CHILDREN'S ADAPTATION**

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Previous research repeatedly demonstrated the contribution of marital quality to children development. However, less is known about the particular pathways by which marital quality is transferred onto the children. Family triadic interaction is a key sub-unit in the family with unique and important links to marital relationship and children's development (Shigeto, Mangelsdorf, & Brown, 2014). The sample comprised of 101 Israeli families of heterosexual couples and a 3-5 years old child (49 boys, 52 girls). Home visits were conducted during which free-play family triadic

interactions were video-recorded and parents' independent reports of marital conflict (OPS, Porter & O'Leary, 1980), marital satisfaction (DAS, Spanier, 1976) and children's internalizing and externalizing behaviors (CBCL, Achenbach & Rescola, 2000) were collected. Triadic observations were coded with the CIB Triadic Family Interaction coding system (Feldman, 2004). Family Mutual Gaze and Didactic Play of the CIB Triadic Family Interaction measure and parents' joint OPS and DAS predicted child CBCL internalizing and externalizing behaviors. Family Mutual Gaze mediated the link between parents' OPS and child internalizing and externalizing behaviors, so that parents who reported high conflict tended to show less mutual gaze and their children were described as having more internalizing and externalizing behaviors. In families where parents jointly reported low marital satisfaction, children were similarly described as having more internalizing and externalizing behaviors, nevertheless, only a direct link was found between parents' dissatisfaction and child CBCL behaviors. Marital tension, i.e., conflict and dissatisfaction, is transferred onto children and is linked with their socioemotional adaptation. Conflicted and dissatisfied couples tend to avoid eye contact and prefer structured, didactic play (over spontaneous, imaginative play) with their young children. Averted eye contact during triadic interactions appears to mediate the link between parental conflict and child adjustment, as it may interfere with children's opportunity to engage with both parents' simultaneously and impede children's notion of cohesive parenting, which are linked with favorable socioemotional child development (Favez, Lopes, Bernard et al., 2012).

P02.158

#### **"I KNOW THAT I'M NOT SUPPOSED TO KNOW"- A CASE STUDY OF 2 BROTHERS WITH EMOTIONAL AND BEHAVIORAL PROBLEMS**

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Introduction: Family plays a crucial role in children's' development. Parenting decisions and behavior affect how children turn out physically, socially, and emotionally. Children whose parents are diagnosed with a severe chronically illness are likely to experience increased levels of anxiety, externalizing behavior problems, changes in school performance as well as changes in social and interpersonal relations. In these cases the developmental age of the child, his temperament and ability of emotional and behavior regulation complexly affect the way the child is dealing with the changes in the family functioning. In these situations children with neurodevelopmental problems are more vulnerable and more often experience serious emotional and/ or behavioral problems. Case report: Two brothers (F.M. and G.M.) at the age of 2,5y and 7y old at first evaluation in the clinic referred for behavioral problems. Grown in a family of two parents. After the second birth the mother was diagnosed with cancer and during the years complications occur. The children were not informed about their mother health issues even during her absences from home when she was in treatment. We present a 6 years of follow-up - family counseling, developmental assessment, short-term interventions. Subsequently F.M. was diagnosed with Language disorder, ADHD and externalizing emotional disorder. G.M. was diagnosed with Specific learning disorder and internalizing emotional disorder. Discussion: We discuss the course of children's development under the influence of family functioning and serious illness of the mother.

P02.159

#### **A 8-YEAR-OLD-BOY DEVELOPED DISSOCIATIVE DISORDER AT THE AGE OF 13. ~LOOKING BACK ON MULTIPLE TRAUMA OF A'S FAMILY - WHAT IS THE BEST APPROACH FOR HIS FUTURE?**

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Trauma in childhood continues to attack people throughout their lives. Based on the principles of infant mental health, we always have to reflect on family history and pursue the best approach. Case A was an 8-year-old-boy whose family had multiple trauma – attachment disorder between A’s mother and grandmother, mother’s depression, domestic violence from elder brother (B) to mother and A, B’s separation from his family. A developed dissociative disorder at 13 years old. We retrospectively analyze the therapy for A’s family and explore the best approach for A. I had 72 sessions with A’s family from 2013 to 2017. A first came to our hospital with a chief complaint of abdominal pain. He said, “Mother and I will be happy if B disappears.” B was diagnosed with developmental disorder at 4 years old. After a year, A was born and developed poor weight gain. The public nurse mentioned, “Aren’t you abusing A?” Mother became depressive. B left alone and got violence to mother and A. B moved to mother’s grandparent’s house. As mother reflected, she knew that B’s violence meant his loneliness that was same as mother’s feeling to her mother. Mother’s reflection had good effect on the relationship between mother and B. When A was 11 years old, mother cut a list in front of B. I alert her that she should hospitalize. Mother changed her mental clinic. Mother’s depression improved. A was strangled by his classmates at 13 years old. That reminded him of B’s violence in childhood. A developed dissociative disorder. Discussion : Through the therapy, mother’s depression and the relationship between mother and B improved, but A developed dissociative disorder. Now, I have to focus and reflect on his infant stage for his improvement. I would like to discuss what is the best work for his trauma in this congress.

P02.160

**STUDY 3: THE INCONSOLABLE DOLL TASK: A NOVEL PROCEDURE ASSESSING PRENATAL COPARENTING. BEHAVIORAL DYNAMICS UNDER STRESS TO PREDICT CHILDREN’S COGNITIVE DEVELOPMENT AT 18 MONTHS**

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An examination of the child development field reveals an exciting shift moving from a monadic to a dyadic, and most recently to a triadic conceptual and empirical approach to the scrutiny of child development. Attempting to examine family dynamics at its peak of ecological validity, the current study made use of a newly developed procedure that elicits coparental dynamics under conditions of stress and high arousal, and investigate whether such an examination—performed prenatally—can account for individual differences in the child’s development at 18 months, even when considering assessments of family dynamics under low emotional arousal or perceptions. The sample of this longitudinal study consisted of 105 community-based expectant co-living fathers and mothers. Data was collected parentally, at 3, 6, and 18 months in home and lab visits. prenatal and postnatal assessments included the Co-parenting Relationship Scale (CRS; Feinberg et al., 2012) - a multinomial self-report questionnaire used to evaluate parental perceptions regarding coparental relationship, and the Family Alliance Assessment Scale (FAAS; Lavanchy Scaiola, Favez, Tissot, & Frascarolo, 2008) to analyze the Lausanne Trilogue Play procedure (LTP; Fivaz-Depeursinge, & Corboz-Warnery, 1999). Prenatal high-stress coparental behavioral dynamics was assessed prenatally using the Doll simulator task developed for the purposes of the current work. The Mullen Scales of Early Learning (MSEL; Mullen, 1995) assessment was used to capture the child's cognitive, fine motor, and receptive and expressive language developed at 18 months. Results indicated that the prenatal coparental dynamic of negative escalation revealed during the IDT explained unique variance in children’s cognitive development at 18 months, even when accounting for both prenatal and postnatal assessments of low-stress coparental behavioral patterns or self-reported coparental perceptions, and when controlling for parental education. The findings illuminate the importance of considering the multifaceted nature of the coparental concept, and allude to the value of using

the IDT both empirically and clinically to prevent and intervene maladaptive child cognitive functioning as early as pregnancy, and perhaps even prior to conception.

P02.161

**IMPROVING DECISION-MAKING IN CHILD PROTECTION CASES: DOES INCLUDING A SYSTEMATIC EVALUATION OF THE PARENTAL CAPACITY TO IMPROVE CONTRIBUTE TO A HIGHER QUALITY OF DECISIONS?**

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Out-of-home placement decisions highly impact the lives of children and their parents. However, research indicates that the quality of these decisions can be questioned, given the low agreement that is often found among professionals. Moreover, significant limitations of diagnostic evaluations in child protection cases have been reported, such as a lack of evidence-based instruments and longitudinal evaluations of parent-child interactions. In this project we aim to investigate whether the quality of decisions regarding out-of-home placements can be enhanced by including a systematic evaluation of the parental capacity to improve, based on an evidence-based video-feedback intervention. The project consists of two studies. In a vignette study, Master students and professionals were presented with vignettes reflecting child protection cases. Additionally to the standard information, half of these vignettes included an evaluation of the parental capacity to improve. Participants were asked to read four vignettes (randomly selected out of 16) and were asked whether they would advise an out-of-home placement. The second study is an ongoing RCT conducted in family residential care. We investigate whether implementing a short-term parenting intervention in this setting contributes to improved out-of-home placement decisions. Results of the vignette study indicate that professionals and students agreed more often on their decisions for vignettes that included an evaluation of the parental capacity to improve than for control vignettes. However, this effect was only found for vignettes with a positive evaluation. For vignettes including a negative evaluation, decision-making agreement improved for students, but not for professionals. These findings provide initial evidence that a systematic evaluation of the parental capacity to improve can enhance the quality of out-of-home placement decisions by contributing to more agreement among decision-makers. The design of the second study testing this hypothesis in clinics will also be discussed.

P02.162

**A STUDY OF RISK ASSESSMENT AND PREVENTION OF CHILD ABUSE AND NEGLECT IN INFANTS BORN AT SIRIRAJ HOSPITAL TO MOTHERS WHO USED METHAMPHETAMINE DURING PREGNANCY**  
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Methamphetamine use during pregnancy has an impact on the health of infants in many aspects and may increase risk for abuse and neglect. This study aimed to describe the outcome of risk assessment and prevention of child abuse and neglect among prenatal methamphetamine exposed infants born at Siriraj Hospital in Bangkok during January 1, 2009 and December 31, 2013. Medical records and the records of the child protection team were reviewed. During the study period, 445 mothers who used methamphetamine were evaluated by psychiatrists and social workers, 218 cases (48.9%) were assessed as high risk and were then evaluated by child psychiatrists and the child protection team. Among those, 60 infants (13.4%) were removed from the care of their mothers; 38 were placed with relatives and 22 were placed to child protection facilities. Home visits of 402

infants who were discharged to the families revealed that 14 infants were not safe and placement were rearranged. In conclusion, this study shows that the child abuse and neglect risk assessment process at Siriraj Hospital for infants born to mothers who used methamphetamine during pregnancy enables identification and monitoring safety of the high risk infants. The process could be adopted by community hospitals with some training provided to local health professionals

P02.163

### **PARENT-TEACHER ENGAGEMENT DURING CHILD-CENTERED PEDAGOGICAL CHANGE IN ELEMENTARY SCHOOL: THE LIVED EXPERIENCES OF TEACHERS AND INVOLVED PARENTS**

**White C.P.\***

*Pennsylvania State Education Association (PSEA) ~ Pennsylvania ~ United States of America*

Parental involvement in schools has been associated overwhelmingly with students' success, but many barriers hinder such engagement. This hermeneutic phenomenological-existential study aimed to examine the lived experiences of eight teachers and nine parents in an urban elementary school in Western Pennsylvania during pedagogical changes. This inquiry was carried out through interviews; the questions were designed to elicit both teacher and parent expectations. The data arose from two focus groups--one teacher group and one parent group--in addition to six individual interviews with three teachers and three parents. Three themes emerged that pertain to parent-teacher interaction: the need for communication, a desire for human empathy, and felt oppression. School administrators' attitudes also were found to be critical in terms of teachers' success, and other elements of the curriculum pedagogical change process that promote or hinder successful curriculum change were also discussed. The findings in this study support the existing literature related to the question under consideration. School leaders and faculty may benefit by addressing the current study's findings in their curriculum pedagogical changes processes. The findings identified school leaders duties and attitudes that contribute to a successful change process, as well as elements of the curriculum pedagogical changes that promote or hinder successful implementation of the curriculum change. The implications for school counselors and school social workers relate to their potential as a system change agent in a leadership role that is designed with ethnically and multiculturally sensitive strategies to enhance the learning environment of schools.

P02.164

### **PLACEMENT OF MALTREATED CHILDREN IN FOSTER CARE: RISK OR PROTECTIVE FACTOR?**

**Fazeli Fariz Hendi S.\*<sup>[1]</sup>, Presaghi F.<sup>[1]</sup>, Nicolais G.<sup>[2]</sup>**

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Effects of placement of maltreated children in foster care are not clear. Some studies (Gunnar, 2001; Rutter et al., 2007; Juffer e van IJzendoorn, 2005) suggest that it has a negative impact on child development, while others describe a good impact on development depending on the quality of care (The St. Petersburg-USA Orphanage Research Team, 2008; McCall, 2013). Main purpose of the study was to investigate the effect of previous placement in foster care of maltreated children who have been adopted. N=39 adopted children were enrolled in the study (M age=49 months). We measured their attachment (MacArthur Story Stem Battery), quality of interaction with adoptive parents (Crowell Procedure) and social success with peers (SPI-Social Peers Index). While confirming the negative impact of placement in foster care on children's attachment, data show a positive correlation between number of months spent in foster care and child's social competence, as well as non- aggressive behavior and compliance during play interactions with adoptive parents. Our empirical evidence suggests that placement in good quality foster care can act as protective factor

for a later child's adoption, in that it provides the opportunity to develop social competence enhancing child's abilities to develop well-matched relationships with the adoptive parents.

Tuesday 29 May 2018

Poster Sessions

## POSTER PRESENTATIONS P03

### Antenatal and perinatal practices

P03.1

#### **FACTORS ASSOCIATED WITH BREASTFEEDING DURATION - RESULTS OF A HUNGARIAN LARGE-SAMPLE STUDY**

**Danis I.\*<sup>[1]</sup>, Nemeth T.<sup>[2]</sup>, Varady E.<sup>[4]</sup>, Scheuring N.<sup>[3]</sup>, Szabo L.<sup>[3]</sup>**

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Breastfeeding is the natural way of infant nutrition and in healthy mother-infant pairs and with appropriate breastfeeding practices ensures optimal growth and development. In the literature, several factors are associated with the duration of breastfeeding, but the strength and consistency of these associations varies between the studies. The 'FOR HEALTHY OFFSPRING' Project has been the first Hungarian research investigating early childhood regulatory problems. Within this project issues on nutrition, difficulties in breastfeeding and factors potentially related to breastfeeding duration were studied as well. Participants were 1133 mothers of 0-3-year-old children, who completed a questionnaire on nutrition and breastfeeding, and several background factors. 60% of mothers reported that they liked to breastfeed, but 20% had negative experiences with nursing. The duration of breastfeeding had significant negative association with lower maternal education (-2,5 months), unplanned pregnancy (-1,3 months), mothers' regular medications(-1,3 months), maternal cardiovascular disease (-2 months), maternal smoking during (-3 months) and/or after pregnancy (-2,8 months), complications of pregnancy (-1,5 months), lack of participation in prenatal classes (-2,2 months) and neonatal health problems requiring treatment (-0.9 months). Breastfeeding duration did not have a significant association with the gender and the sibling position of the child, socioeconomic factors (income, housing conditions, overcrowding), maternal age, mode of delivery, perception of birth experience (on a 10 point Likert scale), maternal diseases (other than cardiovascular), maternal support at home, illness of the child. Breastfeeding is influenced by many variables. Prenatal breastfeeding preparation, anticipatory guidance of the breastfeeding mother and prompt help in breastfeeding difficulties increases the duration of breastfeeding and helps mothers to enjoy breastfeeding.

P03.2

#### **HOW AN ATTACHMENT BASED PARENTING PROGRAMME IS USED TO IMPROVE PARENT-INFANT RELATIONSHIPS IN MULTIPLE COUNTRIES**

**Ibrahim R., Malcolm R.\***

*Mellow Parenting ~ Glasgow ~ United Kingdom*

Mellow Parenting is a Scottish based NGO that uses theory, research and best practice to develop targeted early interventions that improve parent-child relationships wherever they live in the world. Mellow Parenting programmes have developed a strong evidence-base and are regularly tested for cultural appropriateness as they are offered to families' in UK, New Zealand, Tajikistan, Moldova and across Europe. The foundation of these programmes is attachment theory with particular emphasis on the transmission of attachment and relationship styles across generations. Targeted at

families with a range of complex health and social care needs living in low social economic status or with poor mental health, domestic abuse, drug & alcohol misuse, social isolation and child protection. The aim of the poster is to share with delegates the core principles of Mellow Parenting, its approach, as well as an overview of the evidence of effectiveness in various cultures. The poster will demonstrate how the programmes have a universal language known as 'Relationships', and how it can be implemented in varying cultures whilst staying true to its core principles. Using illustrations and diagrams, the posters will share Mellow Parenting Theory of Change and how this can be related to working with vulnerable and at-risk infants across the world.

P03.3

### **THE EFFECT OF ELECTIVE CAESAREAN ON ATTACHMENT**

**Bingöl F.\*, Demirgöz Bal M.**

*Marmara University ~ Istanbul ~ Turkey*

Elective cesarean is an increasing phenomenon because of the decrease in the risk of operation, fear of birth pain, and the perception that the baby will be healthier. However, one of the most important complications of this operation is that the bonding is affected negatively. This study was carried out to evaluate the results of studies on the effects of elective cesarean sections on attachment. The articles on "elective cesarean" and "attachment" were evaluated from online scientific databases. Since there are no contractions in the elective cesarean section, some hormones are secreted inadequate in mother and baby. In particular, oxytocin and endorphin hormone, which are important for bonding are inadequate. In infants with elective cesarean section the level of cortisol in the umbilical cord is low. Cortisol is important because it enhances the effects of oxytocin. In addition, the operating room environment also affects the connection negatively. Significant problems in bonding are cold of the operating room, unable to contact the skin, the lack of privacy, feeling of observation, suppression of oxytocin and beta endorphin secretion of mother in bright light in the operating room, the baby can not open the eyes with too much light, the mother-baby can not provide the eye contact, excessive odor of cleaning materials and disinfectants in the operating room, the baby can not smell of mother's smell. Cesarean section in Turkey is in the first place in the world with a rate of 50,4%. Unfortunately, the lack of support for early attachment after cesarean section is of concern for future generations' mental health. Explaining the risks of caesarean surgery before birth, cesarean section after the contraction as far as possible, provide of skin to skin contact after cesarean section should be done in the formation of healthy attachment.

P03.4

### **THE EXPERIENCE OF CHILDBIRTH AND PERCEIVED SENSE OF CONTROL BY WOMEN DURING DELIVERY: IMPACT ON EARLY MOTHER-INFANT RELATIONSHIP?**

**Chabbert M.\*, Wendland J.**

*Paris Descartes University, Sorbonne Paris Cité - Psychopathology and Health Processes Laboratory  
~ Paris ~ France*

Giving birth to a child is a highly sensitive, sometimes traumatic, and unique experience in a woman's life. Yet, only a few studies have been carried out on women's experience of childbirth and even less on its consequences on early mother-infant relationships, in particular on mother-infant bonding. The aim of this study was to explore whether a mother's negative childbirth experience could have a negative impact on early mother-infant relationships and if the perceived sense of control by the woman during labor is correlated with the quality of early relationships. 202 mothers, who gave birth in the four months preceding the study, aged 18-39 years, responded to a socio-demographic questionnaire, to some questions about childbirth and to three scales: the Labor

Agency Scale (LAS), the Postpartum Bonding Instrument (PPBI) and the Mother Infant Bonding (MIB). Mothers with a reported negative childbirth experience have a significant lower quality of mother-infant relationship and a lower score of perceived sense of control during labor than mothers who reported a positive experience. These results urge professionals to handle more carefully the negative, or even traumatic, experiences of childbirth in the puerperium period in order to reduce its potential negative impact on early mother-infant relationship. Results will be discussed in terms of their implications for prevention and intervention strategies, such as the suitability of a debriefing intervention following negative experience of childbirth.

P03.5

### **UNDERSTANDING YOUR NEWBORN AND ADAPTING TO PARENTHOOD: THE 'UNA' INTERVENTION STUDY TO TEST THE IMPACT OF NEWBORN BEHAVIOURAL OBSERVATIONS (NBO)**

**Nicolson S.\*, Carron S., Newman L., Paul C.**

*Royal Women's Hospital ~ Melbourne ~ Australia*

Infant-parent relationship-focused interventions have been shown to help vulnerable new parents successfully adapt to the role of parenthood and even brief perinatal interventions can be helpful. The Newborn Behavioural Observations (NBO) is one such intervention. Pilot studies and clinician reports suggest the NBO is effective in varied global family contexts and settings and there is preliminary evidence the NBO is associated with reduced post-natal depressive symptoms among new mothers. However, it has not yet been shown that the NBO is an effective intervention in new families with antenatal risk factors for postnatal depression. Primary aims are to evaluate the effectiveness of the NBO intervention in:

1. Enhancing the mother-infant relationship at 4 months postpartum
2. Decreasing maternal postnatal depression at infant age 6 weeks and 4 months
3. Decreasing maternal stress at 4 months.

Secondary aims are:

1. To test the acceptability of the NBO intervention among first time parents.
2. To explore whether there is an association between receipt of the NBO intervention and successful adaptation to fatherhood at infant age 4 months.
3. To examine whether low scores on a brief, validated antenatal psychosocial assessment predict lower levels of distress among first time mothers and fathers in early parenthood.

Australian randomised effectiveness trial in a population of new families where mothers have antenatal risk factors for postnatal depression. Mothers with current depression or anxiety symptoms or a past history of depression requiring treatment will be randomised into two groups: usual care (including mental health support) or usual care plus three serial NBO sessions coinciding with routine Maternal and Child Health visits at age <1 week, 2 and 4 weeks. Early results regarding NBo impact on parental distress and parent-infant interaction quality will be presented. Preliminary conclusions will be drawn and implications for future research and for infant mental health practice will be discussed.

P03.6

### **WELCOMING A BABY BORN OF EGG DONATION: WHAT SUPPORT FOR PARENT DURING AND AFTER PREGNANCY?**

**Noël R.\*, Allard M., Mégan T.**

*Université du Québec à Montréal ~ Montréal ~ Canada*

The assisted reproductive technologies and the use of a procreative third party favored the emergence of new family models distinguishing procreators and parents. What about the emotional

experience of parents who use egg donation? How to become a parent without having a genetic link to his child? This exploratory research focuses on the impact of the use of egg donation on parenthood and the feeling of filiation. Eight couples who used a directed or anonymous egg donation to conceive their child were met in semi-directed interviews. In order to offer a projective space and to support the discourse on the question of filiation, the use of the free genogram was proposed. A qualitative methodology with an inductive and iterative logic was favored. Grounded theory supported the comprehensive analysis carried out during the interviews. The preliminary results show that the experience of becoming a parent in this context is associated with specific psychological issues to be elaborated: trauma of infertility, mourning of the biological filiation, negotiation of the fantasmatic representations of the donor and psychic appropriation of the baby imaginary and real. These intrapsychic movements, present during pregnancy, resurface in the after-effects of the birth and influence the construction of the parental identity and the establishment of the parent-baby bond. Although these parents have to adapt the classical stakes of becoming a parent, the reception of the real baby gives rise to a feeling of additional strangeness to be treated under the stress of the anguish of not recognizing oneself in the child. Such results give the opportunity to raise the specific stakes of couples who have become parents through a procreative third party and highlight the importance of offering special support to parents and babies during the assisted reproductive consultation, the pregnancy and in the postnatal period.

P03.7

#### **ASSOCIATIONS BETWEEN MATERNAL MENTAL HEALTH, NUTRITION, AND NEONATAL OUTCOMES IN JAPANESE BIRTH COHORT**

**Okamitsu M.**<sup>[3]</sup>, **Takimoto H.**<sup>[1]</sup>, **Sato N.**<sup>[2]</sup>, **Yago S.**<sup>[3]</sup>, **Imai C.**<sup>[2]</sup>, **Tay Z.K.**<sup>[2]</sup>, **Nay C.H.**<sup>[1]</sup>, **Aoyama T.**<sup>[1]</sup>, **Fudono A.**<sup>[4]</sup>, **Miyasaka N.**<sup>[5]</sup>

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Perinatal depression has been shown to negatively affect fetal development and neonatal outcomes. This study is part of the ongoing Birth Cohort-Gene and ENvironment Interaction Study of TMDU (BC-GENIST). The objective of this study was to examine associations between maternal mental health, nutrition, and neonatal outcomes. The BC-GENIST study has been in progress at a university hospital in Tokyo since Nov 2015. Pregnant women at 8-24 weeks of gestation were recruited and followed. Maternal depression, adverse childhood experiences (ACE), diet, and anthropometry, neonate health status, and other data were collected. The Center for Epidemiologic Studies Depression Scale (CES-D) and the Edinburgh Postnatal Depression Scale (EPDS) were used to assess maternal depression during the pre- and postnatal period. The study was approved by the ethics committees of the author's institution. Eighty-six women were recruited by June 2017, and 51 women completed the questionnaires as well as a 3-days dietary record. The mean CES-D scores were 7.26, 6.60, and 4.98, and the mean EPDS scores were 2.57, 2.24, and 3.04 in the first-second trimester, the third trimester, and one month postpartum, respectively. The CES-D score decreased significantly from first-second trimester to one month postpartum ( $p < .05$ ) and there was a positive correlation between the two scores ( $r = .34$ ,  $p < .05$ ). No significant associations were found between maternal depression and ACE. The intake of sweets and snacks during pregnancy showed a negative correlation with birth-weight ( $r = -.43$ ,  $p < .01$ ). The results suggest a significant correlation between

antenatal and postnatal depression. Associations between particular diet and neonatal outcomes were also found. The manner in which maternal mental health, and dietary status influence infant development, including behavioral outcomes will be further explored.

P03.8

### **DEPRESSION AND PATERNAL ADJUSTMENT AND ATTITUDES DURING THE TRANSITION TO PARENTHOOD**

**Pinto T.M.\*, Figueiredo B.**

*University of Minho ~ Braga ~ Portugal*

Depression symptoms may negatively affect the achievement of developmental tasks within the transition to parenthood, increasing paternal adjustment problems and negative paternal attitudes. This study aimed to analyze the effect of men's depression symptoms (1) on paternal adjustment and paternal attitudes at the second trimester of pregnancy, and (2) on paternal adjustment and paternal attitudes trajectories, from the second trimester of pregnancy to six months postpartum. A sample of 127 men completed measures of depression symptoms and paternal adjustment and paternal attitudes at the second trimester of pregnancy and at six months postpartum. At the second trimester of pregnancy, men with more depression symptoms revealed less positive attitudes toward sex, lower marital relationship satisfaction, and less positive attitudes toward pregnancy and the baby. From the second trimester of pregnancy to six months postpartum, men with more depression symptoms revealed a decrease on positive attitudes toward sex (while men with less depression symptoms revealed an increase), a steeper decrease on satisfaction with marital relationship (than men with less depression symptoms), and a decrease on positive attitudes toward pregnancy and baby (while men with less depression symptoms revealed an increase). Depression symptoms early in pregnancy may represent a risk factor to the increase of paternal adjustment problems and negative paternal attitudes during the transition to parenthood.

P03.9

### **GRANDPARENTS' EXPERIENCE OF THE BIRTH OF A GRAND-CHILD**

**De Montigny Gauthier P.\*<sup>[2]</sup>, Demontigny F.<sup>[1]</sup>, Bender C.<sup>[2]</sup>, Mellier D.<sup>[3]</sup>**

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The arrival of a baby brings significant physiological and psychological upheavals for the new parents. Depending on their personal, familial, and cultural context, parents will call on people around them who serve as grandparental figures, providing emotional and material support. Despite the growing importance of the role of these grandparental figures, few studies have focused on their experience. Describe and explain how relationships and emotional support evolve for grandparents, in order to adjust modalities of perinatal accompaniment. A qualitative study will be conducted using a semi-structured interview guide. The themes explored include: grandparents' experience of the pregnancy; family transmission; relationships with the grandchild, their child, and his/her partner; as well as the needs, support, and resources of the grandparents. The interview guide will be presented, to encourage international researchers to replicate this study in different cultural contexts. Since grandparental figures provide important support for parents and can contribute to infants' development, it is essential to better understand their experiences, needs, and resources in order to support them adequately.

P03.10

### **INDIVIDUAL DIFFERENCES IN FETAL DEVELOPMENT AND STIMULUS DRIVEN NEUROBEHAVIORAL RESPONSES**

**Ginalis C.\*, Gershon L., Emory E.**

*Emory University ~ Atlanta ~ Greece*

We propose a maternal-fetal model of homeostasis that can be used for assessment and intervention in a prenatal population. From this model we can extrapolate individual differences in terms of response to stimuli and we will discuss implications for the 'nature' component of fetal development. Furthermore, the proposed intervention is aimed at increased homeostasis in the mother thereby creating the optimal intrauterine environment for fetal development. These results will be used to discuss the 'nurture' component of fetal development. Maternal biofeedback will be used to demonstrate both an assessment of fetal neurobehavioral responding and an intervention on maternal physiological functioning to improving fetal development. Fetal neurobehavioral development (movement), maternal psychological (self-reported), maternal HPA axis (cortisol), and maternal ANS (HRV) indices are analyzed pre, during, and post biofeedback intervention. Sample size included 45 participants. There was a significant decrease of salivary cortisol level from pre-biofeedback compared to post-biofeedback,  $F(1,11) = 13.168, p = .004$ . There was a statistically significant increase in maternal HRV from baseline to biofeedback,  $F(1.637, 54.008) = 29.546, p = .000, \eta^2 = .472$ . There was a statistically significant increase of fetal inhibition of movement from baseline compared to during biofeedback,  $F(2, 70) = 3.598, p = .033, \eta^2 = .093$ . There was a statistically significant decrease in fetal movement amplitude from baseline to biofeedback,  $F(2, 70) = 5.497, p = .007, \eta^2 = .134$ . Maternal Biofeedback has effects on maternal ANS and endocrine functioning. Furthermore, maternal biofeedback was also shown to effect fetal movement. The implications for these findings in the postnatal period will be discussed.

P03.11

### **LITERATURE REVIEW REGARDING ANTENATAL BREASTFEEDING EDUCATION DESIGNED TO ALLEVIATE DIFFICULTIES IN BREASTFEEDING**

**Hamada M.\***

*The Jikei University ~ Tokyo ~ Japan*

It has been pointed out that breastfeeding mothers in advanced countries may face physical and mental challenges, or unwanted social pressure to breastfeed; it is also reported that Japanese mothers have had similar experiences. PubMed and CINAHL were used to search for research papers discussing the provision of information and education methods on breastfeeding for healthy pregnant women mainly in advanced countries. I reviewed the papers selected and examined what educational forms are suggested to be effective in alleviating breastfeeding mothers' difficulties. Eleven research papers were reviewed. Insufficient evidence was found in the Cochrane Database of Systematic Reviews (2012, 2016, 2017) to be able to recommend any specific form of antenatal breastfeeding education for lessening any difficulties that breastfeeding mothers might experience. Certain forms were, however, commonly seen in interventions that had proved to provide significant encouragement, at different research levels, for mothers to continue breastfeeding. These were peer counseling, sessions by lactation consultants, and face-to-face involvements. Although there are a number of studies on antenatal breastfeeding education conducted with difficulties in breastfeeding in mind, their evaluation indices were mainly the rate of initiation and the duration up to six months. No evaluation was found concerning duration for over six months, negative effects from such education, or mothers' satisfaction levels. To be able to carry out a trial targeting various difficulties that postpartum mothers may face, it will be necessary to develop

education programs based on peer counseling, lactation consultation, and face-to-face styles, as well as to formulate appropriate evaluation indices.

P03.12

### **MENTAL HEALTH SCREENING FOR MOTHERS AND FATHERS OF MEDICALLY COMPLEX INFANTS IN THE U.S.**

**Hoffman--Craven C., Patterson C., Njoroge W.\***

*Children's Hospital of Philadelphia ~ Philadelphia ~ United States of America*

While Postpartum Depression (PPD) impacts between 10-40% of women, it is not the only condition that affects pregnant women, others include anxiety (8.5%), OCD (5-11%), Panic (11%) and PTSD (9%), making the term PMAD --Perinatal Mood Anxiety Disorders more applicable. PMAD's can vary from 26% before pregnancy, 33% pregnancy onset, & 40% postpartum onset. U.S. women identified most at risk include, young (age <20), women of color (African-American and Latina), low education (not completing high school), and lack of partner support. Parent of infants born in the neonatal intensive care unit (NICU) are particularly vulnerable to PMAD's, and though decreasing 1 in 10 infants born each year in the United States are treated in NICU (March of Dimes, 2007). 100 parents in a NICU in the East Coast of the US were given 2 screeners including, Center for Epidemiologic Studies Depression Scale (CES-D): a 20-item self-report scale, and the Impact of Events Scale-Revised (IES-R) a 22- item self-report scale, after day 5 of hospitalization. This poster describes the Children's Hospital of Philadelphia NICU Screening Project and its findings. The majority of parents in the NICU met criteria for PMAD's based on the screeners. Preliminary findings suggest mothers have higher rates of Depression compared to fathers, but fathers have higher rates of PTSD. Unidentified PMAD's may have significant impact on infant development ,including poorer caregiver-infant bonding, poor infant neurosynaptic development, early termination of breastfeeding, and disruption of feeding/sleeping. The NICU experience may increase rates of parental PMAD, making screening for such symptoms in both mothers and fathers of NICU infants critical.

P03.13

### **PARENTAL EXPERIENCES WITH PRENATAL COUNSELING FOLLOWING A DIAGNOSES OF SPINA BIFIDA**

**Sawin K.\*, McCabe A., Bartelt T.**

*Children's Hospital of Wisconsin ~ Milwaukee ~ United States of America*

After a prenatal diagnoses of fetal spina bifida families often are referred for prenatal counseling but little is known about their experience with this counseling. This descriptive qualitative study took place in an outpatient specialty clinic at a large Midwestern hospital in the United States. A convenience sample of eleven parents of a living child with SB who had a prenatal visit in the last 3 years was interviewed in person or by telephone using a semi-structured guide. Five parents were interviewed individually and six were interviewed as a mother/father pair. All interviews were audio-taped, transcribed verbatim, and analyzed using data reduction, display, and verification by two investigators. Three main themes emerged. Together these themes provide an overall positive response to the prenatal counseling sessions. Parents characterized the prenatal visit as 1) instilling hope and normalcy; 2) useful interactions with Health Care Providers; and 3) addressing uncertainty. A crossing cutting thread in these themes was social support. In contrast, all parents reported that providers of prenatal care in their communities referring them for prenatal counseling conveyed an extremely negative prognosis for their fetus with SB and their future family life. The perspectives of families who did not continue with their pregnancy after prenatal counseling may have been different than the families who participated in this study. The results of this study provide direction

for both providers and programs evaluating prenatal services. In addition, data would indicate that providers who provide care to children with SB and their families need to provide continuing education to providers of prenatal care in the community. Education needs to focus on current evidence regarding treatment, prognosis and quality of life for individuals with SB and their families.

P03.14

#### **PARENTHOOD SUPPORT AND EARLY INTERVENTION FOR AT-RISK PREGNANCY**

**Franquillo A.C.<sup>[1]</sup>, Cantiano A.<sup>[1]</sup>, Veneziani E.<sup>[1]</sup>, Boza M.<sup>[2]</sup>, Trincia V.<sup>[2]</sup>, Terrone G.\*<sup>[3]</sup>**

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In the last years the importance of preventive interventions to reduce the risk of mental health problems experienced after pregnancy has been observed. These include promotion of health and the improvement of parenting abilities in order to reduce risk factors and increase protection factors. The best efficacy seems to be granted by supporting the parent-child relationship. The aims of this study was to identify risk factors for such psychopathology so that interventions can be implemented preventively. In the present study 50 couples were selected, in which either the mothers showed signs of being at risk for depression, or the fathers presented a psychopathological symptomatology (addiction, depression, anxiety, somatization), in addition 50 couples with no signs of risk for depression or psychopathology were used as a control-group (Fathers'age range = 27-58; ds = 6,14, Mothers'age range 23-49; ds = 5,03). The following tests were administered: PAPA (Perinatal Assessment of Paternal Affectivity) and PAMA (Perinatal Assessment of Maternal Affectivity), PSS (Assessment of stress perception), SCL-90\_R, EPDS (Edinburgh Postnatal Depression Scale). In addition to the tests already presented, this study utilized home-visiting during which feeding interactions between caregivers and child were filmed using a video camera. This was done in order to explore dyadic interaction. Participants were recruited jointly by ASL-RM1 (Rome). The analysis of variance showed significant differences with higher levels of dyadic dysfunctionality in the clinical group than in the control group ( $p < 0,01$ ); while there did not emerge significant differences between the mothers and the fathers belonging to the clinical group. The non significant difference indicate that both maternal and paternal psychopathology affect the healthy development of the dyadic relationship between parent and child. The main importance is in the early recognition of the caregivers' psychological symptomatology independent of gender so that preventive interventions can be initiated.

P03.15

#### **PROFESSIONALS HANDLING CAPABILITIES NECESSARY FOR MIDWIVES INVOLVED IN COORDINATING THE TRANSFER OF PREGNANT WOMEN WITHOUT PRENATAL CARE**

**Nakano M.\***

*The Jikei University ~ Tokyo ~ Japan*

The annual figures for pregnant women without prenatal care (defined as “women who undergo less than three prenatal examinations over the entire course of their pregnancy” or “those who have not undergone prenatal examination for over three months”) are estimated to be between 2000 and 5000. The purpose of the current research was to elucidate the capabilities considered necessary for midwives involved in coordinating the transfer of pregnant women without prenatal care. Semi-structured interviews were conducted with 12 midwives involved in coordinating the transfer of pregnant women without prenatal care (during January - February 2015), focusing on difficulties and successes experienced during coordination, contributing factors, and the skills and knowledge considered to be necessary to ensure smooth transfer coordination. An inductive

approach for qualitative data was utilized in analyzing interview data. This research was conducted after receiving approval from the ethical review committee of University of X (26-080). Three categories of results were found: "Ability to infer nursing diagnosis from the available information," "Ability to communicate effectively with professionals," and "Ability to continue to autonomously learn from experience." Pregnant women without prenatal care are said to have more obstetric, labor, and delivery complications, while their newborns are more prone to low-birth weights and premature births. Increasing the three capabilities found in this research will lead to better outcomes, in terms of better choice of hospital, reduced time for selecting a hospital, efficient transfer of pregnant women without prenatal care, and thereby save the lives of mothers and children. Currently, evaluation and improvement in these three areas is left to the individual. Therefore, it is suggested that learning programs covering the capabilities identified above need to be considered and needed of classes to enhance coordination skills to improve the coordination capabilities of midwives.

P03.16

**PSYCHOLOGICAL APPROACH TO PRENATAL DIAGNOSIS: DESCRIPTION OF THE MODEL OF THE CLINICAL PSYCHOLOGY UNIT (UOSD) OF THE BAMBINO GESÙ CHILDREN'S HOSPITAL**

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Communication of diagnosis of a fetal anomaly can be a traumatic event leading to maternal posttraumatic stress symptoms, depression, and anxiety that may alter the early relationship between mother and fetus/baby. From the beginning of the year, about 200 couples received a prenatal diagnosis in our clinic. Diagnosis included: brain malformations (Ventriculomegaly, Corpus Callosum Agenesis, Cerebellar Malformations, Holoprosencefaly), congenital heart diseases (Hypoplastic Left Heart Syndrome, Transposition of the Great Arterie, Tetralogy of Fallot, and other major congenital cardiopathies) and other fetus malformations (Esophageal atresia, Diaphragmatic hernia, Omphalocele...). Prenatal counselling was done in a multidisciplinary manner, with the joint presence of obstetrician/sonologist, cardiologist, pediatric surgeon, and psychologist. After the diagnosis communication, couples meet the multidisciplinary equipe every 3/4 weeks until the end of gestation. The psychologist had a dedicated session with couple at each appointment, after the medical consultation. Such intervention was created in collaboration with the Department of Clinical Psychology and Department of Medical and Surgical Neonatology. Couples took full advantage of psychological support sessions during pregnancy and express the importance of continuing to be supported during newborn recovery just after the birth. The possibility to have a psychological support integrated with prenatal counseling in the hospital let couples experience therapeutic containment as a part of a wider institutional meta-containment. The psychologist's work aimed primarily to accommodate parents' emotions by favoring their identification and expression in order to facilitate an initial adaptation to the diagnosis. The possibility to process the emotions triggered by the communication of diagnosis increases the ability of the parents to face the difficult situation and to "solve" problems that could over time be a factor of additional criticality to the child's own pathology.

P03.17

**SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRI) EXPOSURE DURING PREGNANCY: IMPACT ON MOTHER'S MENTAL HEALTH AND MOTHER-INFANT INTERACTIONS AT 6 MONTHS**

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Mood disturbances symptoms are common during pregnancy (prevalence rate: 7%-20%) as well as during postpartum (i.e., 10–15%). Maternal depression and anxiety during the perinatal period is known to have deleterious impact on the quality of mother-infant interactions and on infant outcomes. Selective serotonin reuptake inhibitors (SSRI) have shown good efficacy on maternal symptoms, but the effect on mother-infant interactions has been scarcely studied. Twenty-one mothers treated with SSRI during their pregnancy (SSRI group) and 24 mothers without SSRI during pregnancy (control group) participated in the study. Depression (measured by Edinburgh Postnatal Depression Scale) and anxiety (measured by State-Trait Anxiety Inventory) symptoms were assessed by self-report questionnaires completed by mothers at birth and at 6 months. At 6 months, the quality of the mother-infant relationship was characterized during a mother–infant standardized object-play interactional situation, coded according to the third revision of the Care Index. The mother's mental health did not differ between the two groups (SSRI vs control) at birth and at 6 months follow-up. No differences were observed in terms of the quality of the mother-infant interaction at 6 months follow-up between the two groups. Contrasting with the deleterious effect of depression and anxiety on maternal mental health as well as on mother-infant interactions, we observed, in the current study, that SSRI during pregnancy seem to decrease the depression and anxiety symptoms to the level of general population. Moreover, SSRI might help mothers who present mood disturbances to have appropriate mother-infant interactions indicating that SSRI reduce the negative impacts of mood disturbance symptoms during pregnancy and early infant development.

P03.18

**THE EFFECTS OF PRENATAL ATTACHMENT TRAINING ON MATERNAL-FETAL ATTACHMENT AND THE WOMEN'S MARITAL SATISFACTION**

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This study focuses on Attachment Training to establish an appropriate relationship between mother and fetus as well as improving marital satisfaction in pregnant women. Motherhood attachment Training requires knowledge of fetus characteristics, attachment emerging techniques, methods of coping with stress, anxiety and depression during pregnancy as well as parenting methods. This study aimed to investigate the effects of antenatal attachment techniques on increasing mother-to-child attachment and enhance the marital satisfaction of pregnant women. Methods and tools are used in the present study are the semi-empirical and pre-test, post-test with the control group. Research has shown that interventions based on concepts such as mother-fetus attachment techniques, affect mother-to-child attachment and mental health of pregnant women. The experimental and control groups – each consisting of 15 pregnant women who were admitted to SAREM Hospital, completed the Mother-to-child attachment and Marital Satisfaction questionnaire. Group members participated in 10 workshops of 60 minutes sessions, focusing on attachment techniques. Finally, members of both groups completed the aforementioned tests again. The results

showed that prenatal attachment training techniques have a positive effect on mother-child attachment and marital satisfaction. In addition, it showed that this training potentially increases mother-fetus attachment as well as marital satisfaction in pregnant women during stressful pregnancy periods. This study recommends for pregnant women and their partners the intervention and the mentioned training in public hospitals.

P03.19

### **THE EXPERIENCE OF PARENTS ON THE SOLIHULL APPROACH ANTENATAL GROUP**

**Johnson R., Cardin--Stewart S., Rheeston M., Douglas H., Thelwell E.\***

*Solihull Approach ~ Birmingham ~ United Kingdom*

The Solihull Approach Antenatal Group 'Understanding pregnancy, labour, birth and your baby' integrates traditional information about labour and birth with a focus on beginning the relationship with the baby. The group consists of 5 two hour sessions (with an optional sixth session). Parents complete a feedback form after each session. The aim of this study was to examine the experiences of parents attending the Solihull Approach Antenatal Group. This was a quantitative and qualitative study. A minimum of 470 parents' feedback forms were analysed. The quantitative results are showing some clear trends. By the end of Session 1 47% of parents felt that the group had helped them feel ready for the birth. By the final session this had increased to 90%. By the end of Session 1 50% felt that the course had helped them get to know their baby. By the final session this had increased to 91%. However, there was no great contrast in answers to the question about how helpful the group was in helping participants relax and share experiences, with the beginning and the end of the group at 85% and 86% respectively. Some of the themes which emerged in answer to the question 'What do you feel has changed as a result of being in this group?' were about feeling more confident, calmer, with new skills and knowledge, more prepared and with more understanding about their baby. Previous research suggests that the Solihull Approach Antenatal Group is effective on several points. This research indicates that it is also acceptable to parents. This is important, as effectiveness data on its own does not indicate whether a parenting course is engaging for parents.

P03.20

### **THE NICU AND MATERNAL MENTAL HEALTH**

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Admittance of newborns into a Neonatal Intensive Care Unit (NICU) is a common, though often unexpected, occurrence that is associated with adverse psychological outcomes for parents such as higher anxiety and uncertainty. Because prior research on the parental psychological impacts of a NICU admittance typically includes a hospital sample of parents following birth, the causality of NICU admittance and maternal depressive symptomatology is unclear. The current study draws upon a longitudinal data set of pregnant women that includes depressive symptomatology assessed before and after childbirth. Due to the longitudinal nature of the data, we are able to determine whether the higher postpartum depression rate of new mothers who have a baby admitted to the NICU occurs before or after childbirth. Determining causality of this relationship provides a target for intervention. 127 women across 38 counties in a South Central U.S. state participated in online surveys in their 3rd trimester and approximately six weeks post birth conducted in 2016. Both the pre- and post-birth assessments of depression were measured with the Center for Epidemiologic Studies Depression Scale (CES-D). NICU admittance was asked in the post-birth survey. ANOVA and multivariate regression analyses were used to determine predictors of NICU admittance and

postnatal depressive symptomatology. Findings indicate that prenatal depression does not increase risk for newborn admission to a NICU, but rather that admission of a newborn to a NICU is a significant predictor of postpartum depressive symptomatology. Having a newborn admitted to the NICU is a risk factor for maternal postpartum depression. These findings have implications for practice; screening these mothers for depression as a target for intervention is expected to not only lead to improved maternal well-being, but also maternal-child attachment and subsequent infant developmental outcomes.

P03.21

#### **TRANSITION TO FATHERHOOD: PROCESS AND CO-CONSTRUCTION**

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The role of the father in child development and the positive influence of his involvement on mother and the whole family are now well established. Although developed since the 1980s, studies on the transition to fatherhood are still too few and fail to reveal the psychological processes of becoming a father. Understanding the specific issues of today's men expecting a baby for the first time in order to identify a theory of the transition to fatherhood. A concern for the pre and postnatal period is granted as well as for the dimensions of process and co-construction with the spouse. In a longitudinal perspective, semi-directive interviews (24) were conducted with 6 future fathers each quarter of the pregnancy and 1 month after the baby's birth. At each of these measurement times, short interviews with the expectant mother were also conducted. A qualitative methodology based on Grounded theory supported a comprehensive analysis carried out during the interviews. Transition to fatherhood is a process made of a series of psychic stakes that take their meaning in the postnatal period. These can be expressed at different times of pregnancy according to the fathers and are based on different events whose concreteness is paramount: announcement, ultrasound, choice of first name, perception of the first fetal movements. The encounter with the actual baby during pregnancy is at the center of the fathers' experience: desire and search for a primary bond with the fetus, while providing a protective role for the mother-child unit. Many fathers define pregnancy as a "great adventure" since the gratifications and intense joys allow to overcome challenges, uncertainties and anxieties. The possibility for a specific listening space at different points in the pregnancy seems to allow a subjective appropriation of experience. Intervention guidelines for accompanying fathers and couples are derived from these results

P03.22

#### **TRIADIC FUNCTIONING OF A FAMILY AFTER A PRENATAL LOSS, RESULTS OF A LTP SETTING WITH THE SUBSEQUENT BABY**

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In scientific literature about prenatal grief, the impact of the loss on the family functioning with a subsequent child was never studied. We wondered if with children born after a Termination Of Pregnancy (TOP) for foetal abnormality, the triadic functioning would show common specificities and what would be the consequences of the rituals surrounding the previous baby's death on the family. After interviewing 24 women pregnant after a TOP at 17 weeks gestation (GW), 27 GW and 37 GW, we met the 3 months old newborn with both parents. We proceed to a LTP setting and semi-structured interviews. The LTP will be assess thanks to Family Alliance Assessment Scale and content of the semi structured will be analysed. Our study is still in process, but preliminary results show

that one-third of the 6 family who yet performed the LTP had conflictual alliance. We will provide qualitative analysis of the interview to understand in which way the ability for a couple to go through the grieving process is correlate to the family alliance. The pregnancy and the birth of the subsequent child following a TOP is another period of adjustment for the couples and psychological counseling should be offered.

P03.23

### **USING DRAWINGS OF MATERNAL REPRESENTATIONS DURING PREGNANCY IN PSYCHOTHERAPEUTIC PROCESS**

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Prenatal representations are important because they activate a mother's representations of herself as parent, and of the unborn child, and of the care giving system. They provide understanding of the mother's prenatal psychological process. Pregnancy activates representations of the care that prospective mothers themselves have received from their parents. Prenatal representations predict the quality of postnatal mother-infant relationship and attachment patterns of children. 71 % of the patients referred to our infant psychiatric unit are pregnant women and most of the referrals concern worries of psychological problems of the mothers-to-be and the possible effects those psychological problems have on the mother-infant relationship. The aim of the work is to demonstrate that pictures can be part of the psychotherapeutic process of pregnancy. We present some cases where drawings have been used in order to help the psychological process of pregnancy, to promote, express and verbalize affects and support the mother's attachment to the baby. Mothers are asked to draw a picture of herself and her baby or a picture of mother's feelings of being pregnant during the early phase of pregnancy. By means of images mothers can express the experiences and emotions of ongoing pregnancy and their relationship to the womb baby which might be sometimes difficult to put on to words in discussions. The pictures can evoke emotions and help mothers to self reflection. They can also increase reflective capacity of the mothers. Drawings activate mothers' s representations of themselves as mothers-to-be, and sometimes of other relationships mothers have.

P03.24

### **AN ANALYSIS OF N IRELAND FACILITATORS' REFLECTIONS ON DELIVERING THE SOLIHULL APPROACH ANTENATAL GROUP**

**Johnson R., Naqvi D.F., Rheeston M., Douglas H., Thelwell E.\***

*Solihull Approach ~ Birmingham ~ United Kingdom*

The Solihull Approach Antenatal Group 'Understanding pregnancy, labour, birth and your baby' is usually delivered by 2 facilitators. At least one is a midwife. The course in N Ireland consists of 6 two hour sessions and after each session facilitators are encouraged to reflect on the session by considering nine questions. The aim of this study was to examine the experiences of practitioners facilitating the Solihull Approach Antenatal Group in N Ireland. There are nine questions on the Facilitators Reflection sheet. Responses from 20 different facilitators delivering a total of 84 antenatal groups in N Ireland were analysed. The most common types of responses to the nine questions:

Q1: What worked particularly well during the session? The parents were interactive.

Q2: What did not work well during the session and why? No issues.

Q3: Did you feel you were adequately prepared by the resources? Facilitators felt prepared.

Q4: What issues were raised by parents? Top 5 issues in descending order were labour, childbirth, baby care, breastfeeding and the hospital.

Q5: Were you prepared to deal with these issues? Most felt prepared.

Q6: If you were running this session again what would you do differently? Most would run it the same.

Q7: Is there any action required before your next session? Follow up medical issues.

Q8: What do you particularly need to remember or take account of in your next session? Some individual issues.

Q9: How did you feel after the session? Most reflections related to happiness.

The overall success of a course is not just related to effectiveness. It has to be popular with both parents and facilitators. These results indicate that this course is acceptable to facilitators.

P03.25

### **CAN THE MATCHING OF THE ADULT ATTACHMENT STYLE HAVE AN EFFECT ON BOTH THE MOTHERS' AND THE FATHERS' INDIVIDUAL AND RELATIONAL VARIABLES IN THE TRANSITION TO PARENTHOOD?**

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Research showed that secure states of mind with respect to attachment represent an asset for adults in dyadic relationships with partners and children. With respect to the quality of couple relationship during the transition to parenthood, the Secure attachment seems to predict a better couple relationship while the Insecure attachment a worst couple relationship (Paley et al., 2002). The current study aimed to assess the mutual effect of both the mothers' and fathers' adult attachment on the individual and the relational variables in the transition to parenthood. The participants at the study were 18 pregnant couples attending a prenatal education classes. The study consisted in 3 separate steps. In the first step (T1, 3rd trimester of pregnancy), we administered the questionnaire on sociodemographic characteristics, the Ces-D (Radloff, 1977); the DAS (Spanier, 1976); the MSPSS (Zimet et al, 1988), and the AAI (George et al, 1996). In the second step (T2, 3 months after childbirth) and in the third step (T3, 18 months after childbirth) we administered the Ces-D, the DAS and the MSPSS. We found 27/36 securely attached parents while 9/36 insecurely attached. Regarding the matching we found 9 securely attached couples (secure mothers/secure fathers) and 9 mixed couple (4 insecure mothers/secure fathers; 5 secure mothers/insecure fathers). Test di Wilcoxon (T1vsT2; T1vsT3; T2vsT3). Ces-D: Secure couples: ns; Mixed couples: T1> T2 (0.029); T2 < T3 (0.036). DAS: Secure couples: T1> T3 (0.008); T2 >T3 (0.009).; Mixed couples: ns. MSPSS: Secure couples: ns; Mixed couples: ns. Each of these configurations (secure/secure; secure/insecure) showed different effects on psychological well-being and the quality of couple relationship during the transition to parenthood. These findings point out the protective effects of the Secure attachment and have interesting implications for understanding the process of transition to parenthood.

P03.26

### **EXPLORING THE SYNCHRONY BETWEEN PARENT AND BABY THROUGH A NEUROPHYSIOLOGICAL EXPERIMENTAL PARADIGM OF FACE-TO-FACE INTERACTION**

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*APHP Bichat Claude-Bernard - Paris Diderot University ~ Paris ~ France*

The inter-individual synchrony between mother and baby has been largely documented for decades for its behavioral part (Viaux-Savelon, 2016). Moreover, studies showed evidence of a strong correlation between the quality of parent-child relationships on children's multimodal development (Feldman, 2007). The dyad's interaction is considered as a sequence of matched and mismatched states of synchrony (Tronick & Cohn, 1989). A new theory of the interaction has grown within neuroscience for a decade and is based on the interbrain synchronization during a social interaction experiment but concerns only adults (Dumas, 2010). It is permitted by the technique of hyperscanning ; a dual-EEG recording at the same time. To our knowledge, no study has explored the neurophysiological synchrony between parent and baby during a face-to-face paradigm. The main aim of this study is to explore the correlation between behavioral and neurophysiological parameters during the dyad's matched and mismatched states of behavioral synchrony experiment. Second aims are explore and identify some specific neurophysiological markers of synchrony in the baby and open to the application of parent or baby disorders. To explore this issue, we will have to recruit statically around 100 dyads in several maternity wards in Paris. Participants paired will be recorded with dual-video and dual-EEG setups while they will be engaged in a face-to-face paradigm. We will use the first part of still face experiment before movements of the baby (Cohn et Tronick, 1989). We will use the CIB (Coding Interactive Behavior) and the ADBB (Alarm Distress Baby Scale) which have validity to check the behavioral synchrony quality in french ((Guedeney, 2013 ; Viaux-Savelon, 2014). We hope to discover by the use of nonlinear techniques and machine learning programming that states of interactional synchrony correlate with the emergence of an interbrain synchronizing network.

P03.27

### **INAPPROPRIATE ATTITUDES REGARDING EATING, WEIGHT AND SHAPE AND DYSFUNCTIONAL EATING IN PREGNANCY: AN EXPLORATORY STUDY**

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Maternity involves important psychic and physiological changes. Pregnancy is associated with major body transformations making it a context in which concerns about diet, body weight, body image is likely to become foregrounded, and where inadequate dietary behaviors may be particularly likely to become a problem (Siega-Riz et al. 2009 ; Symons Down, DiNallo, & Kirner, 2008). For women suffering from eating disorders (ED), maternity is a critical period, as they are at increased risk for many medical complications (Anderson, Fleming, & Steiner, 1994, Siega-Riz et al. 2009), mental health disorders (Micali, Simonoff, & Treasure, 2011), and also for transmission of an ED to their child (Little & Lowkes, 2000). The prevalence of ED in pregnant women is estimated to be up to 4.8% (Bulik et al., 2007). Given that pregnant women's attitudes and eating behaviors appear to be influenced by their pregnancy and life history (Gonçalves, Freitas, Freitas-Rosa, & Machado, 2016), it is important to examine these issues. The Eating Disorder Examination Questionnaire (EDE-Q5; Fairburn & Beglin, 2008) and a sociodemographic questionnaire were administrated to 50 pregnant women. No women reported ED, but some reported IAEB (concerns about weight and shape), suggestive of ED and associated with specific difficulties during their pregnancy such as poor sleep quality as well as a history of ED. It is important to educate professionals within the perinatal network regarding the importance of exploring pregnant women's concerns about their weight and diet in order to identify those at risk of developing ED related difficulties. Recommendations are made to detect IAEB and ED symptoms in early pregnancy.

P03.28

**LOTUS BIRTH AND MENTAL HEALTH**

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Lotus birth is left without cutting the umbilical cord at birth. In this case, the umbilical cord remains attached to the placenta and the cord separates spontaneously from 3 to 10 days. This period provides a gentle transition period for the baby to leave her mother. This study was conducted to evaluate whether lotus birth affects mental health. "Lotus birth" and "mental health" can be accessed from online articles about scientific databases were evaluated. The most important benefit of lotus birth in terms of mother is that the physical connection of mother and baby continues through placenta. Lotus birth is reported to bonding the mother with the baby, facilitate the breastfeeding and mothers experiences less of the postpartum sadness. The benefits of lotus birth and infant use have been rarely studied. There is not yet sufficient and strong evidence. The most important advantage of not cutting the cord immediately is that the blood flow to the baby continues through the cord from the placenta in the postpartum period. The blood support needed by the newborn is 100% provided in lotus birth. It is argued that lotus born babies are healthier and more intelligent. It is reported that the growth and development of lotus born babies, especially cognitive, motor and social development, as well as the child's self-confidence formation is faster and the coping skills throughout life are better. As a result, although there is not yet sufficient and strong evidence available, the lotus is important for the anemic protection of the blood supply to the baby at birth and for promoting the mental development of the baby. It is also thought that evidence based research should be increased in lotus birth.

P03.29

**PSYCHOLOGICAL DEVICE OF APPROACH TO PERINATAL PALLIATIVE CARE APPLIED IN AN ARGENTINIAN OBSTETRIC-NEONATAL WARD IN A MATERNITY HOSPITAL**

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In this study a psychological device of approach to palliative care during the perinatal period will be presented as well as its main characteristic which consist of a specific intervention during and within the obstetric-neonatal ward in a maternity hospital from Argentina. When we think about pregnancy, the thought of a process that leads to the birth of a living, healthy child naturally emerges. But it is not always like this: babies who die within few hours or days after birth, as well as pregnancies that do not continue. It is this proximity between birth and death, and reveals itself to us with striking clarity, and that is, one of the distinctive characteristics of this kind of mourning. The slim social conscience regarding this subject is reinforced with an elusive attitude towards pain, often encouraged by their social context. As an attempt to relieve the parent's grief, the assisting staff usually encourages the idea of having a new baby to suppress the pain originated from this situation. However, to disguise this pain can leave considerable sequels on the patients. Thus, in future pregnancies of the same couple, the history of the lost child would reappear due to the unresolved grief process, interfering with the bond with their new child. These situations allow us to see the psychological vulnerability of these families and the importance of developing strategies of intervention that allow emotional scope for this kind of situations.

P03.30

### **SINGLE FAMILY ROOMS FOR PRETERM INFANTS - A SYSTEMATIC REVIEW**

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Preterm infants have an increased risk for neurodevelopmental delay. They encounter many stressors in early life, including parent-infant separation, noise and painful procedures during hospitalisation in the highly technological environment of the modern neonatal ward. Currently, a shift is being noticed in the architectural design of neonatal wards towards single family rooms instead of the common open bay units. The influence of the hospital environment on health and specifically neurodevelopment in this vulnerable patient population remains under discussion. We registered this systematic review with the PROSPERO (International Prospective Register of Systematic Reviews) on 2 November 2016 (registration number: CRD42016050643). The PRISMA-P 2015 (Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols 2015) 17 items checklist was used for the generation of the protocol for this review. The following PICO was formulated: Population: preterm infants with need of hospitalisation in the neonatal ward; Intervention: single family rooms; Comparison: standard neonatal care in open bay units; Outcome: neurodevelopmental outcome of infants from 9 months onwards. If at least two studies, with low or moderate risk of bias, suitable for inclusion are found, a meta-analysis will be performed. If quantitative synthesis is not appropriate the data will be presented descriptively. 427 unique titles and abstracts were identified with the systematic search. Currently this review is in process. First results are expected to be available in the beginning of 2018. With these insights clinical practice could possibly be optimised to ameliorate outcome and specifically neurodevelopment in this vulnerable patient population.

P03.31

### **THE ANALYSIS OF PROTECTIVE AND RISK FACTORS IN PARENTHOOD TRANSITION**

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Research has shown evidence that each person, during his transition to parenthood, faces deep changes and coping mechanisms both as individual and as member of the couple. These modifications can affect the conjugal relationship, the parental bond and the child's attachment (Giardinelli et al., 2011; Underwood et al., 2016). The aim of this study was to investigate the role and the influence of individual, relational and contextual variables in the transition to parenthood. 69 couples during their first pregnancy participated (mothers MAge = 34,23, SD = 5,03, fathers MAge = 37,07, SD = 6,14). Participants were recruited jointly by ASL-RM1 di Rome. The research included two steps: T1 (Seventh month of pregnancy) and T2 (Second month post-partum). In both steps each parent completed a socio-registry schedule and numerous self-report questionnaires: PAPA (Perinatal Assessment of Paternal Affectivity) and PAMA (Perinatal Assessment of Maternal Affectivity) DAS (Assessment of quality of the couple relationship), PSS (assessment of stress perception), SCL-90\_R, CES-D. Regression analyses were conducted to determine the role of individual and relational factors in predicting prenatal and postnatal parental depressive symptoms. Personal history of depression and anxious symptoms were found as significant predictor ( $p < 0.05$ ) both in mothers and in fathers. On the other hand, in the post partum phase fathers show factors as addiction, somatization, stress and dyadic maladjustment as more significant for them ( $p < 0.01$ ). Our results show that the pregnancy period is a complex phase of lifetime for couple in which individual and relational factors take a protective function for parents, differently in times and modalities. As a future direction, it is important to monitor the evolution of these factors and their

positive influence on the co-parenting development. It is recommended to take into account these aspects when services to support parenting competences and transition are planned.

P03.32

### **THE EFFECTS OF PRENATAL ATTACHMENT PROGRAM ON MATERNAL FETAL ATTACHMENT AND MENTAL HEALTH OF PREGNANT WOMEN**

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Finding appropriate trainings for the Pregnancy period in order to better handle this period is of significant importance. This study focuses on attachment trainings to establish an appropriate relationship between mother and fetus as well as improving mental health of pregnant women. Training of motherhood attachment requires a knowledge of fetus characteristics, creating attachment techniques, methods of coping with stress, anxiety and depression during pregnancy as well as parenting methods. This study aimed to investigate the effects of antenatal attachment techniques on increasing mother-child attachment and mental health of pregnant women. Research has shown that interventions based on concepts such as mother-fetus attachment techniques, impacts mother-to-child attachment and mental health of pregnant women. Methods used in the present study was semi-experimental with pretest-posttest and control group. The experimental and control groups – each consisting of 15 pregnant women who were admitted to SAREM hospital, completed the Mother-Child Attachment and Mental Health Questionnaire. Group members participated in 10 workshop sessions of 60 minutes long each, focusing on attachment techniques. At the end, members of both groups completed the aforementioned tests again. The results showed that prenatal attachment training techniques have a positive effect on increasing mother-child attachment and mental health. The results also showed that training of attachment techniques has the potential of increasing mother-fetus attachment as well as mental health of pregnant women during stressful pregnancy periods. The study recommends the intervention in public hospitals and providing education to pregnant women and their partners in order to generalize the results.

P03.33

### **FAMILY INTEGRATED CARE IN THE NEONATAL WARD - THE AMICA STUDY**

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Due to the technological environment of the modern neonatal ward, premature or sick newborns and their parents are commonly separated worldwide, and both physical and emotional closeness is impaired. We have adapted and implemented a Family Integrated Care (FIC) model for use in a level 2 Neonatal Ward with Single Family Rooms (SFRs) in which parents provide most of the care for their infant, while nurses support, teach and counsel parents. The primary endpoint in preterm infants is psychomotor development at 2 years of age and the mother/parent- to child- bonding at hospital discharge in two groups of infants, treated with FIC in a SFR or with standard neonatal care (SNC) in an open bay unit (OBU). Secondary neonatal objectives are growth, breastfeeding rates, length of hospital stay, hospital readmission rates, iron status and sepsis rates. Parental outcome measures will be parental self-efficacy, satisfaction/empowerment and parental stress. In this prospective observational multicenter cohort study we will study preterm infants and parents cared for with FIC in SFR for at least 1 week compared to infants and parents who were provided with SNC in OBU in 2 other hospitals. Up till now, no study has been performed regarding involvement of parents in care for infants from 30 weeks of postnatal age in a Level 2 Neonatal Ward. If we are able to show that this new concept of care in these groups of vulnerable patients is better than standard

care regarding neurodevelopment and parental stress, this concept of care should be considered as a strategy in other neonatal wards.

P03.34

#### **PERINATAL DEPRESSION AND MOTHER-CHILD RELATIONSHIP: A PILOT STUDY**

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Maternal depression is associated with increased risk of neurodevelopmental and psychiatric disorders in the offspring. There are no longitudinal studies focused on mother-child relationship with the goal to point out protective and unfavorable factors for child development. The presented study is the result of a collaboration between the Child and Adolescent Neuropsychiatry unit and the Psychiatry unit of "Sapienza", University of Rome. The purpose of this research is to describe the functioning of mothers affected by Perinatal Depression (PD), the interaction with their children and the effects of PD on dyads relationship. In a sample of 9 dyads of depressed mothers and their children, the latter between 3 and 6 months old at the time of enrollment, the Scale for the Assessment of Feeding Interaction (SVIA) was applied in order to evaluate the dyadic interactive patterns during mealtimes. The mothers also filled EPDS, ECR, ASQ, MPAS, MMPI, A-II, PSI for psychodiagnostic assessment. Bayley Scales was carried out on children, to outline their developmental profile. A follow-up of 30 months was planned. 78% of mothers has high scores at least in two dimensions of insecure attachment. MMPI profiles: defence 33%; obsessive-dependent 22%; borderline 22%; 22% mixed borderline and obsessive-dependent, results confirmed on the axis-II. The bond of the dyad is qualitatively low (MPAS 89%). Children have cognitive skills at the lower limits of the norm; about 1/3 of the children has average scores in motor skills by age, 1/3 below average, 1/3 extremely low. Nearly half of the sample is at risk in the linguistic area. An inverse significant correlation between "Anxiety" and "Avoidance" of ECR and "Language" of Bayley was found ( $r=-.83$   $p=.02$ ). Inverse significant correlation between timorous-worried attachment and score in motor scale of Bayley emerged. Given the effects of depression on child development, the importance of early intervention is confirmed.

P03.35

#### **DELIVERY MEANS AND NEONATAL AUDITORY SCREENING RESULTS IN FULL TERM BABIES BORN IN A PUBLIC HOSPITAL IN SOUTH BRAZIL**

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There is no previous study about the results of neonatal hearing screening according to delivery means in Brazil, although the number of cesarian sections were elevated in the last years. Descriptive, observational and prospective study with a sample of 462 newborns with gestational age equal or above 37 weeks, without risk indicators for hearing loss, assisted in a public maternal-infant hospital in the South of Brazil, from February to October of 2016. NHS was performed as the place's routine in two moments: 24 and 36 hours of baby's life. In case if "failure" in the later test, another immediate test was performed, with a previous facilitating auricular maneuver. The examiner was blind to the baby's delivery means. Statistic analysis were performed through Statistical Package for the Social Sciences Program, version 19.0. From 462 studied newborns, 304 (65,80%) were born through normal birth and 166 (54,6%) were female. Babies' mothers had in general incomplete fundamental education (49,35%), were single (63,63%) and did not plan

pregnancy (56,92%). Statistical significance was found in babies who succeeded in the first 24 hours NHS evaluation ( $p \leq 0,001$  normal birth;  $p = 0,002$  cesarean section), considering this prevalence to be higher according to a longer period of life. There was no significant statistical difference when comparing NHS results considering babies' delivery means and different life times. The full term babies born from cesarean section did not present disadvantage in NHS results, contrary to the study's hypothesis. Furthermore, in order to decrease false negative rates, this evaluation must be performed after the baby complete 24 hours of life.

P03.36

### **DOULA SUPPORT MODERATES ANXIETY-RELATED PRENATAL RISK FOR SYMPTOMS OF POST-TRAUMATIC-STRESS FOLLOWING CHILDBIRTH**

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Childbirth is a complex event that can threaten the life of a mother and her newborn, leading to symptoms of post-traumatic-stress-following-childbirth (PTS-FC). Approximately 25-30% of women experience symptoms of PTS-FC, and 4-15% culminate into full post-traumatic-stress-disorder (in normative and high-risk populations respectively). Studies indicate that PTS-FC impairs functioning, causes significant distress, and negatively impacts the emerging mother-infant relationship. Numerous studies explore prenatal risk factors, such as fear of childbirth or previous psychopathology, in order to identify women who display pre-existing vulnerability that may be targeted in preventive interventions. In addition to prenatal risk factors, research has indicated that both objective and subjective childbirth-experiences predict PTS-FC, and might therefore be a crucial focal point for preventive intervention. Given our potential ability to identify women at risk, and that PTS-FC often relates to childbirth experiences, the present longitudinal study used a moderated mediation model ( $N=143$ ) to examine whether intervention during childbirth may effectively moderate pre-existing vulnerability for PTS-FC. Specifically, we examined whether heightened prenatal trait-anxiety predicted increased acute-stress at 2-days postpartum (AS-FC), which in turn increased risk for PTS-FC at 1-month postpartum. Next, we examined whether presence of a supportive doula during childbirth moderated prenatal risk for AS-FC and consequently decreased risk for PTS-FC. Multiparous women were recruited during the third trimester of pregnancy and self-reported trait-anxiety was assessed. AS-FC and PTS-FC were assessed via self-report questionnaires at 2-days and 1-month postpartum respectively. AS-FC significantly mediated the link between prenatal-anxiety and 1-month PTS-FC. Importantly, presence of a doula during childbirth significantly moderated prenatal-risk for AS-FC thus rendering the indirect relationship between prenatal-anxiety and PTS-FC insignificant. For prenatally anxious women, presence of a doula during childbirth may effectively decrease risk for PTS-FC. Future research may wish to further delineate the moderating mechanisms underlying this preventive effect.

P03.37

### **FAMILY RESILIENCE IN THE FACE OF AN INFANT WITH COMPLEX MEDICAL CARE. AN INTERVENTION MODEL**

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We present a model of mental health intervention within a pediatric setting providing "complex medical care" for infants and young with multiple, chronic and or severe medical conditions, the

mental health professional is integrated to the outpatient clinic and is available for “on site” consultation and psychological/psychiatric interventions in “real time” and in the long term. We illustrate the promotion of family resilience and strategies to foster the resilience in coping with the sick child. With new medical technologies, many babies who previously were non viable, are able to receive “complex medical care”. These young children graduate from intensive care units and are offered long term care in their homes, in which the parents perform functions previously only provided by nurses or physicians (tracheostomy care, total parental nutrition, catheterizations, gastric feedings, etc.). Children with severe and chronic problems pose a major risk to the psychological well being of the family. The concept of burden of care, caregiver fatigue and family stress are illustrated. Some families prove to be very resilience in the face of these situations while others experience marital conflict, divorce, and psychopathology in the parents or siblings. Resilience in the family is a protective factor. It consists of a cohesiveness and emotional support among family members. Open communication about positive and negative feelings, the ability to solve problems, an attachment to the sick child, flexibility and opportunities for “breaks from care”. Many families report that their spiritual beliefs are crucial in coping.

P03.38

### **GETTING READY TO PARENT: PERSPECTIVES FROM EXPECTANT FATHERS AND MOTHERS ON PATERNAL PREPARATION**

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There is increasing evidence of the benefits that accrue to children, mothers, and fathers themselves when fathers are positively involved during pregnancy. As social services increasingly seek to engage fathers and encourage positive involvement, better understanding the distinct experiences and needs of men during pregnancy is necessary to inform the provision of relevant information and support. We aim to illuminate the experiences and needs of fathers during pregnancy, as well as mothers’ perspectives on father involvement and how to best support fathers. We interviewed 25 men expecting the birth of a child and 26 pregnant women immediately after attending a routine prenatal ultrasound. Interviews were transcribed and coded by multiple research team members. Analysis was informed by grounded theory methods. Men’s accounts indicated growing recognition of the need to deemphasize their own personal priorities to meet the physical and emotional needs of their partner and child. Respondents demonstrated interest in discussing these issues, suggesting that pregnancy presents an important opportunity to offer supportive services that can enhance men’s capacity for emotional responsibility. Mothers described prenatal father involvement as both an important act of support for the mother and part of assuming the role of father. Most mothers in this study want fathers to be involved alongside them in prenatal care to learn how to support a healthy pregnancy and be a positive partner and parent. However, as evidenced by the account of a mother who had separated from an abusive partner, father involvement is not always advisable. The perinatal period provides an important opportunity to engage fathers. It is a time when many men are available and receptive, present in healthcare services alongside their partner and open to considering behavior changes in preparation for parenthood. Many mothers wish for fathers to be actively involved and supported at this time.

P03.39

### **HEALTHCARE AT YOUR FINGERTIPS: A PREGNANCY/BABY HEALTH APP**

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Mobile applications create the opportunity for expectant mothers and their partners to engage digitally with health information, making them collaborative partners in their own health care alongside their health professionals. Women are increasingly using mobile applications and other technologies during their pregnancy, and so a new mobile application (app) 'My South West Sydney Baby Pregnancy Journey' has been developed for mothers and partners in South West Sydney Local Health District. The app provides weekly information on the developing baby, mother's physical and mental health, and health information for their partner. There is information on each maternity service in the health district and a contacts section for other services. It can store appointments and send reminders, and can take photos to make photographic memory boards to be shared with friends and social media. The aim of this study was to perform a qualitative evaluation of the app, by surveying expectant mothers, their partners, and antenatal health staff. Traditionally star ratings have been used to evaluate the quality of apps, but these are subjective and not reliable. Recently a peer-reviewed qualitative tool was developed called the Mobile Application Rating Scale (MARS). Expectant mothers were invited to complete the MARS survey by healthcare staff when they presented for their antenatal clinic appointment, as were their partners. Qualitative evaluation revealed that mothers, their partners and staff find the app worked and looked good, had useful information and was engaging. The app scored well on the MARS surveys. This was the first pregnancy health app developed by a Local Health District in Australia, and given the preference for digital access to health information and the positive ratings in this qualitative assessment, it could be used as a model for other health districts to develop their own integrated portal of antenatal health.

P03.40

#### **LONGITUDINAL STUDY OF POSTPARTUM BONDING DISORDER AND ITS PERINATAL CORRELATES IN JAPANESE MOTHERS**

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Maternal emotional involvement with the baby in the perinatal period has been recognized and named "bonding" and has been mainly discussed in relation to postnatal depression. In recent years, postpartum bonding disorder itself is increasingly focused as an important clinical problem in perinatal and infant mental health. Association between mother-to-infant bonding disorder and contextual factors (e.g. marital relationship, social support and parental psychopathology) need to be studied for clinical intervention and prevention. Main aim of the present study is to investigate whether maternal bonding failure is dimensional or categorical phenomenon with clinically significant psychosocial dysfunction. We also investigated to identify the degree of contribution of psychosocial and contextual factors during pregnancy and maternal psychopathology on the development of postnatal maternal bonding disorder. A total of 554 pregnant women were followed from late pregnancy to 4 months after childbirth. Three questionnaires that assess psychosocial characteristics (i.e. Social Support Questionnaire (SSQ; Sarason 1987), Intimate Bond Measure (IBM; Wilhelm & Parker, 1988) and Relationship Questionnaire (RQ; Bartholomew, 1991)) were administered during pregnancy 32-36 gestational weeks. The women were assessed at 5 days, 1 month and 4 months after childbirth in terms of bonding disorder (the Mother-to-Infant Bonding Scale; MIBS; Yoshida 2012) and Maternal psychopathology (Edinburgh Postnatal Depression Scale EPDS; Cox, 1987). Two step cluster analysis was conducted to find out the subgroups with clinically significant pathological bonding problems. Perinatal correlates of the group of mothers with pathological bonding problems were also investigated. A 3-cluster structure appeared: "normal" (n=434), "Prolonged lack of affection" (n=66) and "Pathological anger with depressive symptoms"

(n=54). “Pathological anger with depression” group were significantly associated with insecure attachment style by RQ and negative relationship with partner by IBM (low care and high control). There was a group of mothers with high MIBS (Anger and Rejection) scores discretely different from those with low MIBS scores. MIBS may be a useful tool to identify mothers with a severe bonding disorder that needs clinical intervention in terms of both maternal psychopathology and relationship disorder with their offsprings.

P03.41

#### **MATERNAL DEPRESSION AND ANXIETY AND FETAL-NEONATAL GROWTH**

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Maternal depression and anxiety have been found to negatively affect fetal and neonatal growth. However, the independent effects of maternal depression and anxiety on fetal-neonatal growth outcomes and trajectories remain unclear. This study aimed to analyze simultaneously the effects of maternal prenatal depression and anxiety on (1) neonatal growth outcomes, and (2), on fetal-neonatal growth trajectories, from the 2nd trimester of pregnancy to childbirth. A sample of 172 women was recruited and completed self-reported measures of depression and anxiety during the 2nd and 3rd trimesters of pregnancy, and at childbirth. Fetal and neonatal biometrical data were collected from clinical reports at the same assessment moments. Neonates of prenatally anxious mothers showed lower weight, length, and ponderal index at birth than neonates of prenatally non-anxious mothers. Moreover, fetuses-neonates of high-anxiety mothers showed a lower increase of weight from the 2nd trimester of pregnancy to childbirth than fetuses-neonates of low-anxiety mothers. Considering maternal depression and anxiety simultaneously, only the effect of maternal anxiety was found on these markers of fetal-neonatal growth outcomes and trajectories. This study demonstrates the independent longitudinal effect of maternal anxiety on major markers of fetal-neonatal growth outcomes and trajectories, simultaneously considering the effect of maternal depression and anxiety.

P03.42

#### **MATERNAL POSTPARTUM DEPRESSION AND INFANT PSYCHOMOTOR DEVELOPMENT: DESCRIPTIVE STUDY OF A POPULATION HOSPITALIZED IN THE MOTHER AND BABY UNIT**

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Little evaluation has been done on the psychomotor development of babies in cases of maternal psychiatric pathology in the first year. The Mother and Baby Unit (MBU) is a psychiatric hospital healthcare system available to infants and their mothers during the postpartum period. Using the Brunet-Lézine scale, we studied six-month-old infants whose mothers were hospitalized. The study population consisted of 14 infants. We found no global psychomotor development delay. That aside, posture was the subscore area where we observed the most difficulties. It is possible that the tonic dialogue between mother and infant is disrupted by maternal depression, both on an emotional level and through maternal psychomotor retardation. We would like to draw attention to the advantages of a more objective development metric than daily observations of babies' behavior

P03.43

**MATERNAL-FETAL REACTIONS TO ACUTE EMOTIONAL STRESS IN PRENATAL DEPRESSED MOTHERS: CORRELATIONS WITH FETAL BIOMAGNETOMETRY MEASURES**

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Stress during pregnancy affects neurodevelopment of the fetus, which may be the origins or precursors of neuropsychiatric problems. Fetal biomagnetometry is a non-invasive imaging technology that allows for the longitudinal investigation of stress induced neurobiological changes in the maternal-fetal pair. This investigation should increase our understanding of the neurobiological mechanisms behind how these changes occur, and will ultimately determine if there are critical windows for intervention. Our working hypothesis is that maternal autonomic arousal, i.e., a hypersympathetic state in response to stress, will induce a similar response in the fetus. To test this hypothesis, we obtain recordings in pregnant women who passively view standardized pictures with different emotional valence and during a resting state condition (no stimuli). Thirty pregnant mothers of ages 18-40, diagnosed with prenatal Depression undergo biomagnetometry imaging for two sessions at 32 and at 36 weeks. We first record 6 minutes of maternal-fetal resting state data (no visual stimuli) and then show a category of pictures in 1 of 4 randomly ordered blocks (pleasant, unpleasant, threat, neutral) and then 3 minute rest period with no visual stimuli before the next randomly ordered block begins. The total test time is 30 minutes; (6 minutes resting, plus 4 blocks of 3 min stimulus/3 min rest). This is an ongoing study and the results will be available for presentation at the congress. We anticipate that unpleasant and threatening photographs will induce a maternal stress response; a hypersympathetic state with increased HR and respiratory rate, and decreased HR variability. In contrast, neutral and pleasant pictures would induce a balanced or increased parasympathetic state (return to baseline HR and RR, increased vagal power during viewing). Research is sparse regarding how prenatal maternal depression and stress affects fetal neurodevelopment and future neuropsychiatric problems for the offspring. The information gained from the proposed study may provide critical preliminary evidence to support early intervention during pregnancy.

P03.44

**MATERNITY IN POVERTY CONTEXTS: DETECTION OF PSYCHO-SOCIAL RISK SITUATIONS DURING THE PERINATAL PERIOD**

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Perinatal Psychology is a specific area of psychology that works with the beginning of life and its related problematic situations. The article presents a research regarding the detection of risk situations in perinatal mental health and the specific characteristics of these situations in populations at risk due to poverty. The objective of the study is to detect psycho-social risk situations that would allow preventive interventions during the perinatal period. In order to assess the psycho social variables related to birth, the Perinatal Psychological Interview (PPI) was administrated (during the years 2015 and 2017). The sample is composed by 2160 mother-baby dyads: from the maternity department (791 dyads) and the Neonatal Intensive Care Unit (1279 dyads) of the hospital "Mi pueblo" in F. Varela, Buenos Aires, Argentina. The 36,5% of the sample was detected as at psycho-social perinatal risk. Also, we could discriminate 9 types of psycho-social perinatal risk, in which the main types of risk were "social-family risk" and in second place "risk

related to non-nesting". The possibility of early detection of psycho-social risk situations during the perinatal period allows the development of effective preventive interventions that aim to enhance perinatal health.

P03.45

### **NEWBORN BEHAVIORAL OBSERVATION (NBO) IN POST PARTUM CARE IN ICELAND**

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Introduction and aim of study: To investigate the effects of the Newborn Behavioral Observations (NBO) system on reducing postnatal natal depression and parental stress in parenthood in high risk pregnancy in one primary healthcare station in Iceland. Comparing with service as usual. A total of 60 mothers visiting pregnancy clinic in the primary care answered the EPDS scale. They that scored  $\geq 9$  in second or third trimester or had a history of anxiety, depression or trauma before in life accepted participation in the research. They were randomized into intervention (30) and control (30) groups. Intervention group mothers and fathers participated in a post partum home visit and NBO at 1., 2. and 3. week after birth. The NBO, an interactive observation system, made up of 18 neurobehavioral observations, was designed to sensitize the parents to their newborn infant's capacities and individuality and to promote positive interactions between parents and their infants. Control group parents received the routine postnatal care. All participants, both control and intervention group, got a home visit at fourth month where there were taken 20 minutes video of daily routine interaction between mother and infant. The depression status is assessed through the Edinburgh Postnatal Depression Scale (EPDS). The parental stress through Parents-stress index and the mother-infant relationship at four month is evaluated through Emotional-availability-scale (EAS). The research is ongoing, data collection will finish in January 2018. The results will be introduced in the poster.

P03.46

### **PARENTAL STRESS AT 6-MONTHS FULLY MEDIATES THE ASSOCIATION BETWEEN PRENATALLY MEASURED ATTACHED REPRESENTATIONS AND PARENTAL MENTALIZING AT 18 MONTHS**

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Although there seems to be a clinical and scholarly agreement that parental mentalizing, attachment, and stress are interrelated, the precise mechanisms and the nature of associations between these important constructs are yet to be examined empirically. This longitudinal study aimed to investigate was the nature and direction of association between parental attachment, parental stress, and parental mentalizing. Specifically, to test (a) the role that parental attachment representations have in shaping experiences of parental stress and parental mentalizing capacities at 6 and 18 months; and (2) the possible mediating roles of parental mentalizing and parental stress in the relation between parental attachment and parental mentalizing at 18 months. The sample of this longitudinal study consisted of 105 community-based expectant co-living fathers and mothers. Data was collected parentally, at 6 and 18 months in home and lab visits. Parental attachment representations were assessed prenatally using the Experiences in Close Relationships (ECR; Hazan, & Shaver, 1987). Parental mentalizing at 6 and 18 months was measured using the Parental Reflective Functioning Questionnaire (PRFQ; Luyten, Myes, Nijssens, & Fonagy, 2017) and the parental stress index (PSI; Abidin, 1990) was administered at 6 and 18 months to assess parental stress. A mediation analysis reveals that, for both men and women, attachment anxiety predicted

higher parental stress and lower rates of mentalizing at 6 months. Moreover, 6-months parental stress fully mediated the association between parental anxiety and parental mentalizing at 18 months, even when controlling for parental mentalizing at 6 months. These findings show that the impact of attachment representations on parental mentalizing is fully mediated by parental stress, suggesting that it is crucial to reduce parental stress in order to allow for the parent to hold his or her baby in mind and facilitate the infant's optimal development over time.

P03.47

**PERINATAL LOSS. THE INFLUENCE OF CHILDHOOD EXPERIENCES ON THE PROCESSING OF GRIEF AND SORROW AND OPPORTUNITIES FOR RESILIENCE**

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We present the main scenarios encountered when the baby dies in utero or is a still born. These range from treating it as a "non event", which is never discussed further, but which may impact the mother, father, siblings and future children of the couple. There is the process of "normal grief" and "pathological grief" I.E. an unresolved loss which has negative effects on the mother, her partner and may alter the parent child relationship with the surviving siblings or future children. A number of clinical scenarios describe negative and resilient reactions to perinatal loss. Parents may "never talk about it" and consider it as totally natural, but suffer the effects of unprocessed grief. There is the normal process of mourning, which is aided by the attitudes of the medical and nursing staff, providing photographs and memorabilia to the grieving parents, afford in the opportunity to hold the baby, and having choices on autopsy and funeral arrangements. There are also cases of complicated grief in which the process is influenced by previous traumatic experiences, abandonment, fantasies about the role of the mother, guilt, and anger, which may have an impact on future pregnancies or surviving siblings. Feelings of anger at other couples who have children, fantasies of reincarnation of the dead child and a "second pregnancy" with the spirit of the lost child are other scenarios. We address strategies for clinical intervention, including long term follow up and "celebration of life" parental groups to help in the mourning process

P03.48

**PRENATAL DIAGNOSIS OF A SEVERE MEDICAL CONDITION OR MALFORMATION IN THE BABY . ISSUES FOR THE PARENTS, THE BABY AND THE PARENT INFANT RELATIONSHIP . RESILIENCE AND RISK**

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New technologies in prenatal imaging, genetics and laboratory permit the early detection of severe medical conditions or major malformations, This represents a major challenge for the parents to be and extended family . We explore the most common psychological scenarios, risk factors and promising intervention strategies to help parents deal with a devastating diagnosis. The announcement of such conditions produces short term and long term reactions. There are varied and depend on multiple factors, primarily the severity and prognosis of the condition in the baby, the possibility of successful treatments or rehabilitation, and the determinants of this condition. Among the main risk factors are issues of guilt, unresolved feelings of mourning, and the perception of the child's physical problems and needs of care. Culture plays an important role in attributing causality to the disease and on the feelings of blame. Traditional societies tend to attribute the problem to external factors (eclipses, witchcraft, reincarnation of spirits, demons, etc.) and in Modern societies more genetic and toxic factors are invoked. Parents will need to mourn the 'ideal

baby “ and make psychological room to accept the “new baby “ which may have important difficulties and require constant care and medical visits. Parents at times face the choice of termination of the pregnancy, upon which lie multiple expectations and prohibitions from society and culture. At the same time, it is an opportunity for coping in a resilient way and accept the child and advocate for his or her treatment.

P03.49

**PROMOTING ENHANCED MATERNAL CHILD HOME VISITING THROUGH DEVELOPMENT AND USE OF RESOURCE MODULES**

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In Eastern Europe and Central Asia home visiting services for families of young children and pregnant women are available in most countries through the health system. However, home visits are narrowly focused on health, so that other issues for development and wellbeing, such as responsive and nurturing care and early detection of risk and vulnerability are not addressed adequately. UNICEF and International Step by Step Association (ISSA) developed a set of 16 Resource Modules for Home Visitors. The modules enhance a home visitor’s role with essential skills to support and engage families of young children. They use a strengths-based approach that promotes nurturing caregiver-child relationships and supporting families in developmental care. The modules were prepared in consultation with international and regional experts, national trainers and home visiting professionals. They can be adapted for the training of other service providers. They are available free of charge and are internet-accessible. They have been piloted in nine countries using an interactive, multi-sectoral training approach. Module examples will be provided. Feedback suggests modules enable home visitors to feel more confident in their child development knowledge and developing positive, respectful and sensitive relationships with parents. Ultimately these tools promote a vision of integrated and progressive support to families of young children.

P03.50

**THE PERINATAL STAGE AT RISK PRE AND POST PARTUM. COMPLEX MEDICAL CONDITIONS IN THE CHILD, PERINATAL LOSS AND FAMILY RESILIENCE**

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This symposium focuses on very common clinical scenarios in modern societies, in which the perinatal care is strongly impacted by new medical technology, genetic studies and sophisticated imaging. This affords the early diagnosis of serious medical conditions in the baby, which may require in utero interventions or postpartum treatment. At times there is fetal demise or stillbirth, and when the baby survives, he or she may have a complex medical condition requiring enormous amounts of care by parents who may experience chronic distress and family dysfunction, or implement strategies to promote resilience and adequate coping. The first presentation addresses issues of prenatal diagnosis of severe medical conditions, genetic disorders and malformations. These may affect vital organs and require a surgical intervention while the baby is still in utero. It describes the multiple reactions of parents to such news, from disbelief, to anger to mourning and sadness and chronic anxiety during the pregnancy about the state of the baby. It describes intervention strategies to provide emotional support, a liaison with the medical professionals and a forum to explore positive and negative feelings about the baby and the situation. The second presentation addresses the issue of perinatal loss, primarily death of the baby in utero and then the corresponding delivery of a dead baby. It illustrates the common reactions of parents, some

pathological reactions and the need for mental health intervention in detecting these problems and in treating them. It emphasizes a number of cultural rituals aimed to help with mourning. The third presentation addresses the severe and chronic health status of children who have severe malformations and chronic illness. The concept of family resilience is reviewed and the model of a psychiatric health professional attached to the complex pediatric care clinic is provided with issues and prospects about such interventions.

P03.51

**THEM BELLY FULL: AN EXPLORATION OF PRENATAL CARE, A MINIMUM ACCEPTABLE DIET, AND SCHOOL PERFORMANCE IN MALI**

**Nadiv S.\*, Safarha E.**

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The importance of prenatal care is widely understood, but in some developing countries women may still not know the role it plays in promoting a healthy pregnancy for mom and baby, lasting into infancy and childhood. Prenatal visits are key for parents to learn about preventative health care practices like the importance of a healthy diet. Students in grades 1-4 from 54 primary schools and their parents/caregivers were surveyed to collect measures of health prevention activities (including prenatal care), food security, dietary diversity, and nutrition. 586 paired caregivers and first graders were included in the analysis with a near equal number of boys (49%) and girls (51%). Ordinary least square regression analysis was used to study the relationship between prenatal care and Minimum Acceptable Diet (MAD), defined as dietary diversity and meal frequency. 33% of the students and 36% of their parents reported receiving a MAD. First grade students that received prenatal care are more likely to report having a MAD by 25 percentage points significant at any conventional level, which were confirmed by mother report. Parents that are aware of the importance of prenatal care may also be aware of the importance of other preventative health activities, including providing a MAD for their child. Having a MAD is critical for the healthy development of infants, which may continue into primary school. Future research can expand the role diet may play in decreasing hunger, increasing attentiveness, and improving school performance.

P03.52

**THINKING ABOUT YOUR BABY: EVALUATING AN ANTENATAL SESSION BASED ON THE BRAZELTON APPROACH WITH YOUNG PARENTS**

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Romsey Mill Young Parents Programme based at Romsey Mill Centre in Cambridge delivers an antenatal course for young fathers and mothers, covering aspects related to pregnancy and birth. In order to also promote awareness of baby behaviour, the Brazelton Centre UK is working in collaboration with them and facilitating one session with new groups. This survey aims to identify if there are benefits for parents attending the session, namely regarding: knowledge about baby's communication and behaviour, understanding baby behaviour and how to respond to it, and parenting confidence. The strategies used to deliver the session will also be assessed. Each two-hour session on baby behaviour was planned adapting an antenatal programme created by Jeannette Appleton, based on the Brazelton approach. It includes diverse methods including videos, group activities, presentations and discussions to work on the following themes: baby behaviour and skills, baby states and consoling strategies. Questionnaires are used before and after the sessions with young parents, in order to observe if there are any improvements. Preliminary results showed that participants (n=6) found the session positive (good, really good or brilliant). There were

general improvements on: knowledge of baby communication, knowledge on how to respond to the baby, knowledge about crying and consoling, and confidence as a parent. The preferred strategies used in the session were the group activities. Future sessions will add up more data for this analysis. In the piloting sessions knowledge of baby communication seems to have had the highest increase in mean values, probably related to the activities on baby states and cues. In fact, the group activities were the preferred aspects of the session and we noticed that young parents usually require diverse strategies and dynamics for better motivation, engagement and learning. Overall, the session was well received. In the future, more dynamic activities will be implemented (e.g. icebreakers, games) and further conclusions will be drawn.

P03.166

### **FIRST TRIMESTER ANTENATAL DEPRESSION AND ANXIETY: PREVALENCE AND ASSOCIATED FACTORS IN AN URBAN POPULATION IN SOWETO, SOUTH AFRICA**

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Depression and anxiety in the antenatal period are of public health concern given potential adverse effects for both mother and infant. Both are under-researched in the first trimester of pregnancy, especially in Africa. We examine the prevalence of first trimester antenatal depression and anxiety in a cohort of South African women and investigate associated risk factors. Data were collected from 946 women (2014–2016) in the Soweto First 1000 Days Cohort, a prospective pregnancy cohort in Soweto, South Africa. Antenatal depression was assessed using the Edinburgh Postnatal Depression Scale with a score of  $\geq 13$  indicating probable depression. Anxiety was assessed using the short form of the State-Trait Anxiety Index with a score  $\geq 12$  indicating probable anxiety. Prevalence of antenatal depression was 27% [95% confidence interval (CI) 24.2–29.8] and anxiety 15.2% (95% CI 12.9–17.5). Factors associated with antenatal depression and anxiety were predominantly relationship- and family centred. Women who perceived that their partner made life harder for them had three-fold increased odds for depression [(odds ratio (OR) 3.33 [2.28–4.85]  $P < 0.001$ ), whereas those with family stressors had almost double the odds for depression (OR 1.78 [1.22–2.59]  $P = 0.003$ ) and anxiety (OR 1.75 [1.44–2.69]  $P = 0.0011$ ). Antenatal depression and anxiety are common in the first trimester of pregnancy, and partner and family relationship stressors are central. Longitudinal analysis is needed to determine if this is a phase of adjustment to pregnancy or onset of persistent symptomology. Early intervention may have secondary preventative effects and should involve the partner and family.

### **Parent-infant interaction and early relationship development**

P03.53

### **"I SEE YOU, MY LITTLE ANGEL" – A WATCH, WAIT & WONDER INTERVENTION PROGRAM FOR PROMOTING THE RELATIONSHIP BETWEEN MOTHERS AND THEIR EXTREMELY PREMATURE INFANTS**

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The birth of a premature infant, especially extreme prematurity (birth prior to 28 weeks gestation), entails significant developmental challenges for the infant, including his social-emotional development. Mothers of such vulnerable infants are also at risk of developing psychological symptoms such as depression and anxiety. Taken-together, these challenges may have negative effects on establishing a positive mother-infant relationship, hence impairing their emotional availability. Emotional availability (EA) refers to the ability of the parent and the child to read each other's emotional signals and to respond to them, and was found to contribute to the cognitive and social-emotional development of the infant. A key element of EA is maternal sensitivity. The Watch, Wonder & Wonder (WWW) method is an evidenced based intervention which promotes sensitive parental behavior. Yet, the effectiveness of the WWW intervention on dyads of mothers and their premature infants has not been researched. In addition, existing intervention programs have focused on the first few months after birth, with no specific interest in extreme prematurity. The aim of this pilot study was to examine whether a WWW based intervention program would improve the quality of interaction between mothers and their extremely premature infants, hence promoting a positive relationship. The study included four infants, aged 7-23 months and their mothers. The intervention consisted of four weekly sessions. The quality of the interaction was assessed based on two video-taped free-play sessions, before and after the intervention, and were coded with the Emotional Availability Scales (Biringen, Robinson & Emde, 1998). The results showed an increase in the emotional availability of the dyads in all six scales after the intervention. Conclusions: Implementation of intervention programs aimed at promoting the relationship of extremely premature infants and their mothers may create an important protective factor in the challenging development of these infants.

P03.54

### **ASSOCIATIONS BETWEEN MATERNAL EARLY EXPERIENCES AND DYADIC INTERACTIONS WITH THEIR YOUNG INFANTS**

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It is imperative to examine infants' caregiving relationships when seeking to understand their development. Current research demonstrates that when mothers experience early adversity, it may negatively impact the interactions they have with their own infants. This is especially true in mothers who have unresolved histories of abuse and neglect (Vaillancourt, Pawlby, and Fearon, 2017). These early negative experiences may inhibit their ability to be synchronous and responsive to their own babies, likely because of their own internal activations. The following research examines how early adverse and protective experiences may predict how mothers interact with their infants who are younger than six months of age. Using the Adverse Childhood Experiences Scale (ACES; Feletti et al., 1998) and the Protective and Compensatory Experiences Scale (PACES; Morris et al., 2015), researchers measured mothers' adverse and protective experiences before the age of 18 and used regression models to determine if they predicted synchronous and intrusive behaviors during a 10-minute free play activity between the mothers and their infants (n=45). Although preliminary, results indicate that for every unit increase in maternal self-reported ACES, there is a 61% increase in the odds of that mother being intrusive during the observed play interaction. Additionally, ACES significantly and negatively predicted mother-infant synchrony ( $\beta = -.39$ ,  $p < .05$ ). These findings suggest the possibility of a direct link between maternal ACEs and their future interactions with their infants. PACES were not a significant predictor of intrusiveness or synchrony, suggesting that adverse experiences may be more impactful than protective ones in regards to parent-child dyadic relationships. Discussion includes why ACES may eclipse PACES in impact, the long-term sequelae

of intrusiveness and synchrony for infants, and implications for how clinicians might use this information to inform treatment recommendations for families.

P03.55

**JOINT ATTENTION AT 14 MONTHS: PREDICTING ACADEMIC OUTCOMES IN 2ND AND 8TH GRADES**  
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Maternal responsiveness to infant needs and interests is key to mother-infant relationships (Ainsworth, 1971). Maternal responsiveness to infant attention initiates joint attention, which has predicted language development at 18 months (Morales, et al., 2000) and school readiness at age 5 (Martoccio, Brophy-Herb, & Onaga, 2014). This study aims to examine whether joint attention in infancy predicts long-term academic achievement. This study tests joint attention from a 10-minute observation at 14 months in relation to reading and math scores in 2nd and 8th grades. Independent trained observers coded the direction, duration, and sequence of mother and infant attention from video-recorded interactions of mother-child dyads (N = 90; 51% females). Joint attention was defined as overlapping mother and infant attention. Mother-initiated joint attention was defined as the proportion of joint attention resulting from mother responding to infant attention. Children's academic outcomes were tested in 2nd (n = 90) and 8th grades (n = 83), with Woodcock-Johnson reading and math subscales (Woodcock & Johnson, 1989). Significant correlations were found for maternal responsiveness to attention at 14 months with reading scores at 2nd (r = .31\*\*) and 8th grade (r = .37\*\*) and math scores at 8th grade (r = .24\*). When effects were examined separately by gender, female infants had significantly different outcomes than males. For males, joint attention predicted 8th grade reading (r = .39\*). For females, joint attention predicted 2nd grade reading (r = .55\*\*\*), 8th grade reading (r = .34\*), and 8th grade math (r = .39\*). This moderation effect by gender was verified by testing an interaction term in multiple regression. Maternally responsive joint attention in infancy is a powerful early predictor of a child's later academic skills, especially for girls. Differences in outcomes by gender have important implications for parenting and education.

P03.56

**MALEFICENT, THE OGRE AND GLOBAL DOMINATION: WORKING WITH PROJECTIONS IN THE PERINATAL PERIOD**

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This workshop presents some of the varied and disturbing projections that can arise in parents during the perinatal period. Through case vignettes, the Enfield Parent Infant Partnership (EPIP) demonstrate how projections have been explored, understood and safely reintegrated, easing distress in anguished parents and enabling them to begin the process of relating to their babies with mental ease. Vignette 1: A 36 year old first time mum experiences hostility and aggressive thoughts towards her baby, who she perceives as selfish and demanding. She blames her baby for making her feel inadequate a woman, mother and partner. Understanding the roots of these projections has a positive impact on this parent's capacity to relate to her infant. Vignette 2: A gay couple who become parents through surrogacy and a main carer who imagined his role as a parent would be like Mary Poppins. Premature birth and prolonged hospitalisation, results in the main carer feeling more like Shrek. Fantasies and metaphors in adjustment to the unexpected challenges of parenthood are considered. Vignette 3: A mother who has fled domestic abuse together with her baby son, is convinced she has given birth to the reincarnation of an evil dictator. She perceives

her baby's exploratory play as holding the seeds of an evil force. Therapeutic exploration and the concomitant release from the projection will be described. Through story-telling and therapeutic thinking the EPIP team shine a clinical light on these perturbing projections. Early intervention with such disturbances can support the development of healthier parent-infant relationships.

P03.57

**"... HE IS NOT LOOKING AT ME... ...WHERE IS HE AT? -GAZE AVOIDANCE-**

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Introduction – Aims: What we know from clinical experience and theoretical research is that gaze aversion and avoidance of eye contact are fundamental signifiers for developmental disorders and are predominant in autistic behaviour. Our research is inspired by the psychoanalytical approach and technique (method of treatment) and it is linked to Salomonsson's discussion about Infantile defenses in parent-infant psychotherapy and Winnicott's article Fear of breakdown. The following presentation tries to give meaning to gaze avoidance in young children and link it to issues that parents may have. Method: In order to better understand the situation parents were facing and offer the appropriate consultation and treatment apart from recording the developmental history of the child we assessed the interaction between parent and child (CARE Index, Crittenden 2010) and the ability of metallisation parents possessed. Results: Our work with the parents draws inspiration from the psychoanalytical approach and technique and is shown on slides from the sessions between children and their mothers. From the evaluation of the sessions we can conclude that gaze avoidance is closely linked to traumatic events in the history of the family, which are experienced now for the very first time. Liquidating the trauma resulted in decreasing the symptoms and improving the relationship between mother and child. This form of therapy seemed to have helped substantially to reverse the whole atmosphere of despair and create anew the suitable conditions for parents and children to live in harmony.

P03.58

**PILOT STUDY: PARENTS OF CHILDREN BORN WITH AI (ARTIFICIAL INSEMINATION) IN A CLINICAL GROUP**

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The objective of this study is to understand if, in a clinical group who had access to "Servizio Cerco Asilo" of the institute Stella (Maris of Pisa), there are differences between parents with AI and parents non AI in how they perceive their children in the moment that the symptomatology manifests. We selected subjects from the families who underwent an evaluation at "Servizio Cerco Asilo": subjects from the AI group (parents of 24 children) and subjects from the CONTROL group (parents of 25 children). We extracted points obtained from the questionnaires Parenting Stress Index (PSI, Abidin 1995) and Child Behaviour Checklist for age 1 ½ – 5 (CBCL, Achenbach e Rescorla 2000) compiled by both parents. In relation to the CONTROL group PSI, in the AI group it is shown that the mothers perceive an inferior level of stress in their relationship with their children, despite the symptomatology that they experience. The fathers of the PMA group demonstrate elevated clinical points on the scale of attachment (AT) in relation to the mothers of the AI group. Lastly, in both the groups elevated occurrences of clinical points of the CBCL scale aren't shown. Considering that the sample group is small, it isn't possible to generalize the tendencies revealed without first obtaining other data. It will be interesting to understand, from further studies, why the mothers of

the AI group feel less stressed in their relationship with their children in comparison to the mothers in the CONTROL group. The mothers in the CONTROL group perceived the behaviour of their children mostly as difficult to manage, consequently feeling less competent in their parental abilities (CO) and (RE). Further research could clarify why the fathers of the AI group, revert to a reduced “feeling of closeness” to their children (AT).

P03.59

### **THE ROLE OF THE FATHER-CHILD INTERACTIONS IN CHILDREN’S EMOTIONAL COMPETENCE**

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Attachment theory suggest that children’s emotional development is built through daily exchanges with their parents (Thompson et al, 2005). Indeed, mother-child interaction quality is positively associated with children’s emotion understanding (Moris, 2017; Raikes & Thompson, 2006). Although these studies support the importance of considering mother-child interactions when assessing children’s emotional development, the role of father-child interactions remains under-investigated (Barnett, 2008; Chabot et al., 2015). However, father-child interaction is an important predictor of child competence (Allen & Daly, 2017; Kim, & Kim, 2017). In this study, we explored within a low-income sample the concurrent association between quality of father-child interactions and preschoolers’ emotional understanding, beyond children’s age and IQ. Participants in this study are 56 two-parent families receiving social security benefits in the province of Quebec, Canada. Children (55% girls) were between 3 and 5 years of age (M=4.25, SD=.68). Fifty-nine percent of families earned under 15,000\$ yearly. Quality of family father-child interactions was coded from an 8-minute videotaped free play (Moss et al., 1998) and children’s emotional understanding was assessed using the Affect Knowledge Test (Denham, 1998). Children also completed the Peabody Picture Vocabulary Test-4th edition (Dunn & Dunn, 2007). Preliminary analyses revealed that children’s age and IQ were related to children’s emotion understanding indices (*rs* between .30 and .56). These variables were aggregated and included as covariates in further analyses. Results of hierarchical multiple regressions analyses showed that, beyond child age and IQ, quality of father-child interactions was significantly associated with children’s emotion understanding evaluated receptively ( $R^2=.43$ ,  $t=2.47$ ,  $p=.017$ ) and in non-stereotypical situations ( $R^2=.32$ ,  $t=2.10$ ,  $p=.04$ ). However, emotion understanding related to expressive and stereotypical situations was not significantly associated with quality of family interactions. The discussion will focus on fathers’ role in contributing to the acquisition of specific emotional skills in early childhood.

P03.60

### **THE USE OF MENTAL-STATE TALK AMONG MOTHERS OF PRETERM INFANTS: THE INTERACTIVE EFFECT OF MATERNAL DEPRESSION AND POVERTY**

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The negative impact of maternal depression and poverty on mother’s ability for sensitive caregiving is well documented (Goodman et al., 2011; Finegood et al., 2016). Less is known, however, about

the impact of such risk conditions on the quality of maternal discourse when in interaction with the child. Thus, this study aims to explore the interactive effect of maternal depression and poverty on maternal use of mental-state terms to their one-year-olds born preterm. The sample included 112 preterm infants ( $M = 32.85$  weeks of gestation,  $SD = 2.89$ ), and their mothers. At time of assessment, 30.4% of the dyads were living with incomes below the national poverty line. Maternal discourse was assessed considering the use of mental-state words, during a videotaped free-play situation with the child, according to three categories—desires (e.g., like), cognitions (e.g., think), and emotions (e.g., happy) (Meins et al., 2002). Mothers reported on depressive symptoms. Results revealed that both maternal depression and poverty contributed to the explained variance in maternal mental-state talk (i.e., cognitions),  $\beta = -.28$ ,  $p = .021$ , and  $\beta = -.25$ ,  $p = .020$ . The interaction involving maternal depression and poverty also proved significant,  $\beta = .36$ ,  $p = .048$ . Regions of significance test (Hayes & Matthes, 2009) revealed that, at the lower levels of depressive symptoms, mothers who were not exposed to poverty used significantly more cognition terms, than mothers living in a context of socioeconomic disadvantage. Among mothers with more depressive symptoms, no significant differences emerged between mothers exposed and not exposed to poverty in terms of the use of mental-state terms, with both groups showing a low rate of mental-state talk. We will discuss the importance of early intervention programs for mothers of preterm infants facing depression, especially when exposed to poverty, aiming to promote the quality of mother-infant verbal interactions.

P03.61

#### **CAREGIVER-CHILDREN FEEDING INTERACTION IN A SAMPLE OF CHILDREN FROM 20 TO 44 MONTHS WITH AUTISM SPECTRUM DISORDER**

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Feeding problems occur more frequently among children with Autism Spectrum Disorder (ASD) than in typically developing children or in other disabilities. There are no studies about feeding relationship in children suffering of ASD, whereas the feeding of ASD was mainly investigated by indirect observations. The aim of the current study is to evaluate the relationships between feeding difficulties, early social interactions and adaptive behaviors in ASD. In a sample of 41 dyads of mothers and ASD or high risk for ASD preschool children, the Scale for the Assessment of Feeding Interaction (SVIA) was applied in order to evaluate the social interactive patterns during mealtime. The mothers also filled the Brief Autism Mealtime Behavior Inventory (BAMBI). Data on Vineland Adaptive Behavior Scale were derived from the standardized diagnostic assessment for ADS. A significant correlation between BAMBI feeding problems and SVIA Food Refusal subscale emerged ( $r = .35$ ;  $p = .02$ ). An inverse significant correlation between the SVIA Affective state of the mother subscale and the Vineland Communication area was found ( $r = -.36$ ;  $p = .02$ ). Moreover, the SVIA Affective state of the dyad subscale was inversely related to the Vineland Communication area ( $r = -.33$ ;  $p = .04$ ). ANOVA between children with or without language on the SVIA subscales revealed a significant higher score on Affective state of dyad subscale in children without language ( $m = 3.88$ ;  $sd = 1.97$ ), than in children with language ( $m = 2.60$ ;  $sd = 1.75$ ;  $F = 4.72$ ;  $p = .04$ ). Direct observation of feeding patterns was in line with literature about the presence of eating refusals in ASD children. Atypical verbal and non-verbal communication of autism appeared related to caregiver's ability to interpret child's signals and to facilitate reciprocal and empathic exchanges. Atypical communication was also correlated to difficulties of sharing emotion-engagement states between

mother and child. Early interventions focused on feeding interaction may promote social learning opportunities and build better regulated food patterns in ASD children.

P03.62

### **EPIDEMIOLOGY OF FORCED FEEDING IN A CLINICAL POPULATION OF CHILD AND ADOLESCENT PSYCHIATRY**

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Alimentation is a central part of the early interactions. Literature have found that parental feeding practices could be a risk factor for feeding disorders among children and teenagers, but few studies have focused on forced feeding. The aim of this study was to assess the characteristic of forced feeding among a specific population: the consultants of Child and Adolescent Psychiatry Department in Tunisia. This study has been conducted in the Child and Adolescent Psychiatry Department in Razi hospital. It included 110 patients that consulted our department between July and September 2017. Parents' patients were questioned about their children's feeding habits especially forced feeding. Demographic and clinical data were recorded. In our sample, 60.9% reported forced feeding. Their average age was 6.74 years, ranging from 2 to 14 years old with a majority of male (sex ratio: 2.9). Severe forced feeding was identified in 62.2% of cases. We identified 53.8% patients who were exposed to corporal punishment and 56.3% to physical restraint. The main diagnosis were Autism Spectrum Disorder (25.6% ), Depressive Disorder (11.6%), Oppositional Defiant Disorder(14%) , Attention Deficit Hyperactivity Disorder (7%) and Specific Learning Disability (4.7%) . A mental deficiency was objected in 29.1% of the forced feeding children. Forced feeding have been found to be frequent among our population. We will discuss the different determinants of this practice, is it reactional or no and the possible implication of cultural factors.

P03.63

### **LEARNING TO BECOME A FATHER : THE EXPERIENCE OF AFRO AMERICAN FATHERS**

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Fathers learn how to become fathers by interacting with identified role models in their life and by observing others in how they interact with their children. Studies show that many fathers want to be productive and nurturing in the paternal role, which influences paternal role satisfaction. Additionally, father involvement in the child's activities is critical in enhancing the child's cognitive, emotional, and physical development. Little research has been conducted on how/on whom low-income African american fathers model their parenting behavior when assuming the paternal role. The goal of this qualitative study is to identify how low-income Afro-American men in southeast USA learn to become fathers and describe who acts as role models to influence their paternal role. Using semi-structured interview guide data from a study on social support needs of fathers with infants, including questions about how they learned to be a father and who was most helpful to the father in becoming a father, a secondary analysis using content analysis methodology determined the results. 20 new and experienced low-income Afro American fathers of a full term infant aged between 2-12 months participated in interviews. Three themes emerged: 1) Learning to become a father; 2) Processing fatherhood; 3) Being supported as a father. Health care professionals need to have a better understanding of how low-income fathers learn how to become fathers so they can

be better informed of supportive and anticipatory guidance approaches for fathers in transition to the paternal role.

P03.64

**LINGUISTIC, VOCAL, AND BEHAVIOURAL ANALYSIS OF MATERNAL AND PATERNAL PROTODIALOGUES WITH THEIR BABIES IN GROUPS OF FULL TERM AND PRETERM INFANTS**

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In the light of contemporary knowledge early vocal participation in social exchanges provides the basis for the communication development in infants. It is also known that intuitively didactic parental Infant Directed Speech (IDS) facilitates language acquisition in either full or preterm children. The question arises about verbal and nonverbal aspects of parental behaviour that promote child's vocalisation during protodialogues. The aim of the study was to identify relationship between IDS temporal and linguistic structure, parental nonverbal behaviour, and the frequency of child vocalisations during parent-infant protodialogue in the groups of full term and preterm infants. A total of 25 preterm and 24 full term 3-month-old infants with both of their parents participated in the study. Mothers and fathers were visited at home and asked to play with their babies "as they usually do". Parent-child protodialogues were recorded and one minute long episodes were selected for the analysis. Parental IDS and child vocalisations were annotated with the application of the Praat 5356 software. Transcriptions of IDS were linguistically analysed on the basis of Roman Jakobson's theory of communication functions. Special coding scheme was developed to code nonverbal parental behaviours. BehaView (<http://behaview.pmbogusz.net/>) video viewer was used for behavioural data coding and analysis. Behavioural and linguistic data analysis is still in progress. In order to analyse temporal aspects of parent-infant vocal interactions hierarchical regression analysis was used. Preliminary results show, that the more vocal pauses in parent-infant interaction, the more infants vocalise. In mother-infant dyads, the number of infant vocalisations is also predicted by infant's gestational age at birth. In father-infant dyads, the number of infant vocalisations is associated with the number of paternal utterances.

P03.65

**MENTALIZATION IN THE SHARED CONSTRUCTION OF THE ADOPTIVE RELATIONSHIP: THE SUPPORT OF VIDEO INTERVENTION THERAPY**

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Along the adoption path there are transition moments which are of utmost importance but not immediately understandable by the parents. Mentalization ability is essential to understand the world of a baby who experienced such early and tragic relational fractures, in order to avoid adoption failures. The use of video is a technique that enables direct observation of the relationship, helping parents' ability to access fears and problems related to the baby's mental universe. Through a case analysis, we'll spotlight the children's concealed messages, which can have a powerful effect on the growing relationship. Actually the parents deal with the consequences of deep relational fractures, that do not let the child trust and are the result of traumatic relational experiences. Using the video to observe interactions moment by moment, allows the parents to get the child's limited and concealed signals, allowing the integration in the new reality. The "speak for the baby" technique, can promote the adult's ability to mentalize the possible meanings of the child's behavior. Therefore it becomes possible to increase the ability to explore the adopted child's world,

leaving room for the child's past, and giving meaning to the hard moments. The activation of repairing emotional exchanges become protective area in the co-construction of the relationship.

P03.66

### **MIND-MINDEDNESS IN MOTHERS OF PRETERM INFANTS: ASSOCIATIONS WITH PARENTING STRESS AND PERINATAL PTSD**

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Preterm birth represents a sudden and potentially traumatic interruption of pregnancy. The unexpected delivery, the medical risks for both the mother and the infant and the long hospitalization can lead to high levels of stress in parents. This traumatic experience can also affect mothers' wellbeing and the capacity to adjust to this event which, in turn, can impact the quality of early mother-infant interactions. Mind-mindedness is defined as the maternal proclivity to consider her infant as having her autonomous and active mental life of desires, emotions, needs and thoughts. This ability plays an important role in mother-infant interaction and is linked to positive child functioning (e.g., attachment security, ToM). This study aims at exploring whether preterm birth can influence maternal mind-mindedness in mothers of 6 months-old infants. Relationships between PTSD symptoms, parenting stress and maternal mind –mindedness will be also considered. 50 mother-infants dyads (25 FT; 25 VLBW PT) were observed during a play session at 6 months. Maternal comments were transcribed and then coded as mind-related according to whether they included mental state language referred to the infant. Maternal perinatal PTSD, level of parenting stress and quality of social support were also assessed. Preliminary analyses (N=32) showed no differences between mothers of full-term and preterm infants in the use of mind-related comments. However, high levels of parenting stress resulted associated with low mind-mindedness only in mothers of full term infants ( $p < .05$ ). Mothers of preterm infants who experienced higher symptoms of perinatal PTSD showed less mind-related comments referred to their infants' mental states ( $p < .05$ ). These findings suggest that the maternal perception of childbirth as a traumatic experience and the subsequent development of PTSD symptoms rather than preterm birth per se can alter mother's capacity to represent her child's mental states.

P03.67

### **PARENTING IN THREE GENERATIONS AFTER THE KHMER ROUGE REGIME IN CAMBODIA**

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The social experiment of the Khmer Rouge leaders in Cambodia between 1975 and 1979 left a quarter of the population dead and a generation without role models of good parenting due to the systematic separation of families and their deportation into different working camps. In Cambodia, every family has been affected and to a certain degree traumatized. Researchers from the Royal University of Phnom Penh Cambodia in collaboration with the Sigmund-Freud-Institute Germany conducted the first three-generation study. This three-generation study focuses on the impact of the intergenerational transmission of trauma stemming from the Khmer Rouge regime on parenting styles and mental health adjustment of the children. The study includes children (generation 3) aged 14 years, their biological mothers (g2) and their grandmothers (g1) (N=1.056). Parentification and parent-child attachment styles were investigated using the Parentification Inventory, the Parental Bonding Instrument and the Relationship with Parents Scale. As the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist are reliable instruments in South East Asia, they were used to

describe events of traumatization and current mental health adjustment. We are now in the middle of the statistical analyses. Results will be presented at the conference. Trauma exposure of grandmothers and mothers is expected to be predictive of children's adjustment only indirectly through its linkage with current grandmothers' and mothers' trauma symptoms. We hypothesize that parental styles involving role reversing and overprotective parenting would mediate the impact of current Khmer Rouge related trauma symptoms on the mothers' (g2) and children's (g3) psychological distress reflected in more severe anxiety and depressive symptoms. In times of the refugee crisis and aftermaths in post-conflict countries, the case of Cambodia allows to draw a picture on the severe impacts of traumatization and separation on parental care and parent-infant interactions.

P03.68

**UNDERLYING UNCONSCIOUS STRUCTURES IN MOTHER-BABY INTERACTION. A PSYCHOTHERAPEUTIC PROCESS ANALYSIS**

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Patterns of interaction constitute ways of organizing experience; schemes to coordinate affects, ideas, actions, which together with fantasies activate our unconscious processes. The relevance of these patterns for psychotherapy roots in that they are the ports of entry to therapeutic action, to "moments of meeting" that constitute the way to change the mental organization at a procedural level. The aim of this work is to study the underlying unconscious structures set at mother baby interactions in the context of a psychotherapeutic process, id est. the interchanges that are repeated during the interpersonal communications and can be conceptualized as patterns of interaction –automatic procedures of how to relate with others and the world. In the context of a brief psychotherapeutic process and using the Box & Jenkins time series mathematical model, different patterns of interaction in dyads of three babies close to one year of age, who suffered from infant asthma were identified. The results are studied for each case, articulating in depth the two levels that involve the passage from the clinic to empirical research, to re-analyze the empirical results in the light of the clinic. Three cases of mother infant dyads are compared. Each one have it's own pattern of interactions and the similarities and studied for the three cases. This work is a contribution to empirical research in psychoanalysis, since it is a design of mixed methods in which qualitative research is enhanced but not driven by the quantitative method. It is also a contribution to the field of psychotherapy research of parents and children, especially mother-infant interaction.

P03.69

**USE OF DIGITAL DEVICES: ASSOCIATIONS WITH TODDLER EMOTIONAL COMPETENCE AND ATTACHMENT (NAEL PROJECT)**

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Ownership and use of interactive and mobile devices among families with young children is nearly universal, but emerging research suggest several concerns about effects on child socio-emotional development, particularly attachment and emotional competency. First, parent use of mobile devices while caring for young children is related to a lower quality of parent-child interaction and decreased frequency of verbal and nonverbal interactions. This may limit parents' ability to perceive and respond to children's emotional signals and needs and thus impact the quality of relationship attachment. Second, use of mobile devices to calm young children when they are upset may disrupt

socialization of emotion processes and thus, child's emotional competences. Published data of the impact of mobile/interactive screen use on children's socio-emotional development, and attachment in particular, are lacking. The aim of this study is to explore longitudinal associations between parent and child attachment representations, mobile device usage behaviors, and child emotional competences. This study will be conducted among a sample of 300 parents and their toddlers. At T1, T2 and T3, parents' attachment will be evaluated through self-reported questionnaire and interview, while children's attachment will be evaluated through standardized observations. Children's adjustment and emotional competence will be evaluated through standardized observation and questionnaires. Parents will also report on their parenting practices and specifically their emotion-related practices. They will also be interviewed on their representations of the child and their relationship with him/her. Parents will report on their own use of screen media and that of their child through questionnaires and a passive sensing smartphone application. Finally, parental stress, sense of parenting competence and child behavioral problems will also be measured. The results of this study will contribute to the knowledge base about mobile media and child social-emotional development, with the potential to prevent relationship dysfunction by providing advice/guidance for parents/professionals.

P03.70

### **WHAT'S GOING ON IN MY BABY'S MIND? MOTHERS' EXECUTIVE FUNCTIONS CONTRIBUTE TO INDIVIDUAL DIFFERENCES IN MATERNAL MENTALIZATION DURING MOTHER-INFANT INTERACTIONS**

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Maternal mentalization (MM) refers to a mother's capacity to regard her child as a psychological agent and reflect on her child's mental states (Sharp & Fonagy, 2008). In mother-infant interactions, MM can be divided into two dimensions: appropriate and nonattuned interpretations of the infants' mental-states (Meins et al., 2012). Appropriate MM refers to interpretations that seem to be compatible with the infant's behaviors, whereas nonattuned MM refers to noncompatible interpretations. The aim of this study was to investigate the cognitive mechanisms that contribute to MM. Specifically, we investigated the role of executive functions in MM, and the moderating roles of two infant-related factors, prematurity and child temperament. Mother-infant free play interactions were coded for maternal mind-mindedness (Meins & Fernyhough, 2010) in a sample of 102 mothers and their 6-month-old infants (61 preterm, 41 full-term). Temperament was assessed using the Infant Characteristics Questionnaire (Bates et al., 1979). When children were 66-months old, mothers completed cognitive tasks, assessing updating (n-back), resistance to interference (Flanker effect and n-back intrusion cost), response inhibition (antisaccade), and shifting (cued task-switching). Regression analyses revealed a positive association between appropriate MM and updating ( $\beta = .26, p < .05$ ), which was moderated by child temperament: the link was stronger when temperament was rated as more difficult ( $\beta = .49, p < .01$ ) compared to easier ( $\beta = .07, ns$ ). Furthermore, resistance to interference was negatively associated with nonattuned MM among mothers of full-term infants ( $\beta = -.43, p < .05$ ) but not among mothers of preterm infants ( $\beta = .10, ns$ ). These findings suggest that appropriate references to infants' minds rely on a mother's ability to monitor relevant information in the environment, while misinterpretations of the child's mind reflect instances in which mothers have difficulties in suppression of irrelevant information, such as distractors or currently-irrelevant memory representations.

P03.71

### **ADDRESSING COMPLEXITIES IN THE MOTHER-DAUGHTER RELATIONSHIP THROUGH PARENT-INFANT PSYCHOTHERAPY**

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This poster will present work with two families in which the mothers had a history of mental ill health, and adverse life experiences. In each case the transition to motherhood was affected by strained relationships with the maternal grandmothers. Both patients had a history of mental ill health, and reported difficult experiences and relationships in childhood and in to adulthood. Stern (1995), writes about unconscious processes of intergenerational transmission, paying particular attention to the mother-daughter relationship, when the daughter becomes a mother herself. In each case discussed there was a supportive father figure present, which acted as an emotional buffer to the more negative experiences with the patients' own mothers. Through psychoanalytic psychotherapy, the transference relationship with the therapist allows the therapist to be experienced as a more benign mothering figure. The first mother battles with a harsh inner voice, echoing that of her own mother, resulting in feelings of inadequacy. Attending sessions with her husband and baby, she was able to use the therapist to rewrite the script laid down by previous generations. The second case highlights a young mother whose toddler's developmental trajectory indicated poor outcomes. Therapy provided an opportunity to begin to develop her reflective capacities, with the hope of keeping her child in mind.

P03.72

### **EARLY INTERACTIONS AND CHILD BEHAVIORAL DISORDERS**

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Child behavioral disorders are often associated with disturbed mother-infant early interactions. The severity of troubles may be related to the child difficulties in mobilizing effective defense mechanisms when he's exposed to significant emotional distress. A retrospective descriptive study conducted at the child and adolescent psychiatry department of Mongi Slim hospital (Tunisia) from January 2016 to October 2017. Patients under 12 years old, who were referred for behavioral problems, were included except those who were diagnosed with autism spectrum disorder, intellectual disabilities and attention hyperactivity disorder. Socio-demographic, clinical and mother-infant early interaction data were collected from patients' records. Seventy-eight children with behavioral disturbances were included. Their average age was 5 years and 10 months old with a sex ratio of 3.8. Seventy-two patients presented motor disturbances (69.3% instability, 11.6% agitation and 5% inhibition) and 9 children displayed social behavior problems (theft, deceit, runaway from home). 79,5% of children had defiant and argumentative behavior, annoying deliberately others in 45% of cases. According to DSM-5 criteria, the main diagnoses were oppositional defiant disorders (19.2%), major depressive disorder (19.2%), problems related to family upbringing (17.9%), and reactive attachment disorder (11.6%). Mother-infant early interactions were disturbed in 48.7%. In most cases, they were qualitatively poor due mainly to mother post-partum depression (38.8%) and family discharge (6.4%) and in 3 cases overprotective attitude of the mother was found. Family rejection of the child was reported in 5 cases. Early separation and multiplicity of maternal substitutes were found in 24% of cases. Children exposed to early disruption of affective interactions are at increased risk of developmental adversity including externalizing behavior problems. Recognizing these situations helps prevent and improve child mental health outcomes.

P03.73

### **POSTPARTUM DEPRESSION AND THE QUALITY OF MOTHER-INFANT INTERACTION IN BRAZILIAN DYADS**

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Postpartum depression may play an important impact on mother-infant interaction. It may cause more difficulty to accurately recognize and interpret infant's sign. 42 mother-infant dyads were filmed during a structured situation that involved teaching, free play with and without toys, separation and reunion episodes. There were 27 baby boys and 15 girls. The majority of mothers (74%) were married to the infant's father. All of them were adults and the mean age was 31. 35% scored for depression in the EPDS. Babies were about seven months. Analysis of the video interaction classified maternal behavior in four categories: sensitivity, structuration, intrusiveness and hostility. Infant's categories were engagement and responsivity. Anova one-way showed that depressed mothers significantly showed more intrusiveness in the interaction with their infants. No significant differences were found between children from depressed and non-depressed mothers. The results reinforce subtle, but important difficulties in mother-infant interaction with depressed mothers. One possibility is that depressed mothers are struggling to have connection with their infants, but since they have difficulties to connect and to respond in a sensitive way, their interactions may be intrusive, over stimulating or not attending babies' response. But maybe we ought to understand this as an attempt to connect, although in a bad way, because depressed mothers do not show depressed mood all the time and may be in a huge suffering trying to care and nurture their children the way they can. Intervention with these mothers should be based on this understanding to support their interaction with children even during depressive episodes.

P03.74

### **UTILIZATION OF FOUR-FRAME COMIC MANGA IN CHILDCARE SUPPORT IN JAPAN: FOCUSING ON THE BOUNDARY BETWEEN DISCIPLINE AND ABUSE**

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There is much concern among mothers about the boundary between discipline and abuse in childrearing. In our previous study, we created a 4-frame comic pamphlet to disseminate information related to discipline and abuse as well as promote appropriate attitude and behavior toward childrearing. The aim of this study was to ascertain how the information contained in the pamphlet reflects the perception held by mothers and those who support them as well as to investigate how this perception ties in with childrearing support. The pamphlet was sent to 16 mothers and 10 people who supported mothers, together with a self-administered questionnaire. The data collected from the responses were analyzed using qualitative content analysis with the NVivo 11 tool. This research was approved by the ethics committee of Jikei University. The following four categories were extracted from the mothers as childrearing support perceived from the 4-frame comic pamphlet: [understanding the boundary between discipline and abuse], [empathy for the childrearing experience], [importance of the environment and support surrounding the mother], and [childrearing support desired for the future]. In addition, the following three categories were extracted from supporters: [the perception of understanding and consideration for one's wife], [fathers who passively observe childrearing, while being aware of the responsibility of childrearing],

and [childrearing support desired for the future]. We clarified that mothers and people who support them found the 4-frame comic pamphlet, which successfully depicts empathy and support in particular, to be effective. On the other hand, these results suggest that providing only information does not leave a lasting impression, and it is effective to use a visually appealing 4-frame comic focusing on emotions and support in the future.

P03.75

### **ARE MENTALIZING AND COGNITIVE FEATURES IN PARENTAL SPEECH LINKED WITH REGIONAL BRAIN VOLUMES IN INFANCY?**

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Associations between parent speech and child language, social, and emotional development abound in the literature. However, mechanisms by which this occurs are not entirely understood - but may include brain development. Studies with infants suggest that variations in mother-infant interaction dimensions are associated with differences in infant brain development. However, none of the studies to date have included fathers nor have they examined neurodevelopment specifically in the context of parental speech. We examined the relationship between maternal and paternal speech during observed parent-infant interactions and regional brain volumes in 3-6 month old infants. Parental speech was obtained through observation of parent-infant dyadic interactions (n = 58). Verbatim transcripts of maternal and paternal speech were coded for mentalizing statements and cognitive biases. Structural magnetic resonance imaging was performed with infants in their natural sleep. Maternal mentalizing comments were associated with larger infant mid-brain volumes. Cognitive features of maternal speech (i.e. attentional focus and affective quality) were not associated with brain volumes. In contrast, infants exposed to increased levels of father-focused speech had larger cerebellar volumes. Furthermore, more negative and critical paternal comments were linked to larger sub-cortical grey matter volumes - the association particularly evident in infants whose fathers used more directive utterances in their communication. These findings held controlling for infant age and weight at scan, family SES, maternal sensitivity and maternal depression severity. Although the study is cross-sectional and causation cannot be inferred, differences emerge in the way parent's speech is linked to the infant brain; highlighting differential mechanisms of risk transmission that may be important when considering interventions to optimize infant outcomes.

P03.76

### **CONFIGURATIONS OF RELATIONAL EXPERIENCES: AN ALTERNATIVE APPROACH TO STUDY THE RELATIONSHIP BETWEEN MOTHERS' SUBJECTIVE EXPERIENCES AND INFANTS' PROBLEMS**

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Based on phenomenological and psychoanalytic intersubjective perspectives this study proposed and used a new concept Configurations of Relational Experiences (CRE) to explore the connection between mothers' subjective experiences and infants' problems in sleeping, feeding and anger-regulation in specific areas of the mother-infant relationship and across time. Archival data from six mothers and their firstborn infants over a period of 24 months was employed. CRE were identified in 248 relationship episodes described by mothers using the CRE Method developed by the author based on the new concept and the Core Conflictual Relationship Theme (CCRT, Luborsky & Crist-Christoph, 1998). Infants' problems were identified as part of configurations and using mothers'

weekly reports. Qualitative and quantitative analyses were performed. Results indicated that configurations described relational dynamics, including a mother's need, a child's role, a mother's emotional response, and a mother's strategies to manage her child's behavior. Six types of configurations corresponding to different aspects of mothering were identified: "Control/socialization," "balancing the child's demands and those outside the maternal role," "coordination of family alliances," "bonding experiences," "being socially validated as a good mother," and "child's growth and maternal protection". In all types of configurations involving infants' problems, mothers were negatively affected by their children's problematic behavior in some aspects of their mothering. The exception was sleeping problems, which were in some cases gratifying for mothers. Similarly, the pervasiveness of a configuration was associated with anger and feeding problems, but played a preventive role in the development of problems in sleeping. Mothers' strategies to manage their children's behavior were consistently associated with infants' problems across the three areas: in sleeping problems, active soothing strategies and in feeding and anger problems, overcontrolling and/or non-responsive strategies. These findings highlight the utility of the new concept and its method for understanding infants' problems and their connection with mothers' subjective experiences.

P03.77

#### **CO-REGULATION AND MOTHER-INFANT RELATIONSHIP QUALITY IN FULL-TERM AND PRETERM/VERY LOW BIRTHWEIGHT INFANT-MOTHER DYADS**

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Parent-infant interactions occur through dynamic co-regulation, with ongoing contributions from each partner (Fogel, 1993). While research has examined separate mother and infant variables, co-regulation of interactions has been largely overlooked, especially in at-risk populations, and beyond the first 6 months of life. To more deeply understand co-regulatory processes in infant-mother interactions, we examined: 1) differences in co-regulation between dyads with infants born full-term and preterm/very low birthweight (VLBW), 2) associations between co-regulation and mother-infant relationship quality. Participants were 12-month-old infant-mother dyads who were born full-term (n=36), or preterm/VLBW (n=36). Dyads engaged in 15-minutes of free play subsequently coded for co-regulation (Fogel et al., 2003; Revised Relational Coding System). Categories included: 1) symmetrical (both partners engaged in a sequential back and forth), 2) asymmetrical (both partners engaged, but only one contributes to the interaction), 3) unilateral (one member disengaged while the other follows the partner, or demands the partner's re-engagement), 4) unengaged (partners not interacting), 5) disruption (misinterpreted cues and dysregulation). The quality of the mother-infant relationship was coded using Biringen, Robinson, and Emde's Emotional Availability (EA) scales, and included 3 maternal (sensitivity, structuring, nonhostility) and 2 child scales (responsiveness, involvement). Results of multiple hierarchical regressions indicated that lower levels of infant responsiveness and higher levels of involvement were associated with more time spent in sequential-symmetrical co-regulation. Lower levels of maternal sensitivity were associated with more following-unilateral, while higher levels of maternal hostility were associated with more demanding-unilateral co-regulation. Lower levels of maternal structuring and hostility were associated with more time spent unengaged, and full-term dyads spent more time unengaged than preterm/VLBW dyads. These findings suggest that co-regulation is associated with mother-infant relationship quality, and birth status. Results highlight that relationships are both shaped by and influence co-regulation, with the potential to exacerbate difficult, or foster, positive social dynamics.

P03.78

### **COULD LANGUAGE DELAY BE ASSOCIATED TO FORCED FEEDING ?**

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From a few observations of children with language delay and among whom we identified the notion of chronic and severe forced feeding, we were interested about a possible link between this particular parental feeding practice and the language delay, despite the lack of previous literature. The aim of this study was to look for an association between forced feeding and language delay among a specific population: the consultants of Child and Adolescent Psychiatry Department in Tunisia. This study has been conducted in Child and Adolescent Psychiatry Department in Razi hospital. It included 110 patients that consulted between July and September 2017. Parents' patients were questioned about their children's feeding habits especially forced feeding and language Delay. Demographic and clinical data were recorded. The average age of our population was 7.20, ranging from 1 to 17 years-old, with a sex ratio of 2.43. We found that 60.9% of the sample had a history of forced feeding, and that 22.1% experienced a severe form. Language delay was found among 58.2% of the sample. No association was found between forced feeding and language delay in the whole population ( $P= 0.43$ ), however, after excluding the children with the diagnosis of Autism Spectrum Disorder and intellectual disability and only including the severe form of forced feeding, we found a significant association ( $p= 0.029$ ) between the severe form of forced feeding and language delay. No association was found between corporal punishment or physical restraint and severe form of forced feeding. This study suggests that the severe form of forced feeding could be a risk factor of language delay. Considering the importance of verbal language in our societies, further studies seem necessary to explore this hypothesis especially among a larger effective.

P03.79

### **CRISIS MANIFESTATIONS IN EARLY CHILDHOOD DUE TO FAMILY INTERACTION**

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Present research aims to identify the relationships between manifestations of the 1 and 3 year old child's crises and characteristics of family interaction. The study of the "1 year old child's crisis" involved 25 triads «mother-father-child», the age of children - from 10 months to 1 year 11 months, Mage = 1 year 4 months. The study of the "3 year old child's crisis" involved 117 children (from 2 year 1 month to 3 year 11 month, Mage = 3 year) and 117 mothers. Methods used were: questionnaires of crisis manifestations by V.Vasilenko and T.Guskova; «Parent-child emotional interaction questionnaire» by E.Zakharova; «Analysis of family relationships» questionnaire by E.Eidemiller and V.Yustitskis; Family Adaptation and Cohesion Scales (FACES III) by D.X.Olson, J.Portner, I.Lavi, observation. In the period of "1 year old child's crisis" mother's sensitivity to child, her ability to influence to the child's state combined with some "conditional love" from the fathers are important for the development of autonomous child speech and the emergence of motivating presentations. Negativistic symptoms are less pronounced in the case of mother's ability to influence to the child's state. «3 year old child's crisis» is more pronounced at lower emotional acceptance of the child, underdevelopment of parental feelings, immaturity of maternal emotional behavior in actual interaction of mothers with children, maternal educational uncertainty, indulgence overprotection. At the same time crisis can be expressed in the case of well-being in family interaction (the mother's sensitivity to child, family cohesion), that confirms its normativity.

Thus, emotional well-being in the parent-child relationships and the maturity of parenting styles can be regarded as resources for the successful flow of the age crises. The younger the child, the more pronounced the relationship between the constructive component of crisis and the system of child-parent interaction. Research was supported by RHSF №16-06-00392.

P03.80

**DEVELOPMENT OF SOCIAL-EMOTIONAL HABILITIES IN CHILDREN FROM 12 TO 30 MONTHS AND THEIR RELATIONSHIP WITH THE QUALITY OF PARENTAL INTERACTIONS**

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Social – emotional skills in children emerges in a relational context (Belsky, 1990; Coppola, et al., 2016; Sroufe, 1997). During the first months of life, children are open to stimulation, show interest and curiosity for the environment and the people around, which, in turn, favors social responses from their caregivers (Sroufe, 1997). This relationship keeps through different cultures (Richaud, et al., 2013) and it becomes more complex with time. Understanding such changes and factors at the base, can help to understand risk factors and contribute to the development of timely interventions, especially for vulnerable groups. The main goal is to analyze the possible changes in the development of social-emotional skills in children at 12 and 30 months of age, and its relationship with the quality of parental interactions. 70 dyads were assessed in 2 moments. This research will use the Greenspan's approach to the development of social-emotional skills, which emphasizes the role of the emotions as organizers of the development processes (Greenspan, et al., 2001). The quality of parental interactions will be observed the Roggman, et al., 2013 approach. The results will be presented and the clinical implications discussed.

P03.81

**DISCUSSION ON INTERACTION BETWEEN DEPRESSIVE MOTHER AND HER INFANT - THROUGH LONGITUDINAL OBSERVATION OVER SIX MONTHS AFTER CHILDBIRTH –**

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The purpose of this study was to longitudinally observe an infant's development and his mother having a tendency to depression after childbirth, and discuss the developmental process of the mother-infant interaction. The research started one month after childbirth and ended six months after childbirth. The mother showed a tendency to depression and scored nine or more on the Edinburgh Postnatal Depression Scale (EPDS) after childbirth. During the research period, visits at the same time every week. At one and three months Neonatal Behavior Assessment Scale (NBAS) was used to evaluate the infant's abilities. After childbirth, the mother's EPDS score was changed from seven (at two weeks) to 10 (at one month) and decreased to 4 (at three months). The NBAS showed the infant's undeveloped control in the motor and state systems still at three months. At one month the infant was crying and hitting his mother, so that he couldn't suckle well when the mother tried to breast-feed him. The mother was very anxious and blamed herself for not being able to deal with him. At two months, the breast-feeding problem was somewhat settled, but it often occurred that the infant couldn't drop off to sleep, with thrashing his legs. The mother was puzzled, but she tried to find a good treatment of holding him in her arms and understand her infant's characteristics. After three months, some difficulty in raising him was still observed, but the mother accurately read and responded to his reactions without taking a pessimistic view. After childbirth, the mother told that she was apt to depend on the manual and couldn't take flexible

actions, so she was quite worried about child rearing. However, the observation process showed improvement of her maternal emotional availability to her infant.

P03.82

### **EXPERIENCES OF MATERNAL AND CHILD HEALTH NURSES IN USING THE NEWBORN BEHAVIOURAL OBSERVATION SYSTEM**

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This project looked at the experience of Australian Maternal and Child Health Nurses (MCHN) in their use of the relationship-building tool the Newborn Behavioural Observation (NBO) system. Clinicians in the presence of the family undertake the NBO in the first weeks or months on the infant's life. The project aims were to explore the experiences of nurses in using the NBO during routine visits with the baby and family and to understand what value or limitations they saw in its use to enhance the capacities of parents to better understand their baby's behaviour. This qualitative project was designed using phenomenological theory. Face to face interviews were conducted with nurses and the interviews were transcribed and analysed thematically to provide real-life information about the nurses experience in use of the NBO. The results show that nurses valued NBO learning, have incorporated NBO into their clinical practice, and see use of NBO as having a positive impact on infant parent relationships. The nurses recognised that through learning about NBO, they had changed their practice to have a greater focus on the infant and to share and engage more with families, particularly with fathers. They are implementing the NBO into an already busy working environment, so have adapted their practice to perform NBO items in conjunction with undertaking a physical assessment of the infant. This challenge has impacted their ability to perform NBO in its full form during the infant's visit and to be confident in use of all items. The research suggests the perceived value of embedding NBO principles in MCHN practice. However a majority do not use the NBO in full, and rather use the flexibility of the tool to select aspects to use when they think it is indicated. The findings suggest future research might look at the therapeutic value and impact of NBO learning and use, on the way nurses engage with infants and support parental understanding and relationship with their newborn.

P03.83

### **EXPLORATORY STUDY ON INDIVIDUAL AND RELATIONAL DEVELOPMENTAL PATTERNS IN VISUALLY IMPAIRED CHILDREN: THE FIRST DATA CONCERNING A COMPARISON BETWEEN TOTAL-BLIND-CHILDREN FAMILIES AND PARTIAL-BLIND-CHILDREN FAMILIES**

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Working with blindness stresses out several differences between blind and sighted worlds, as well as many questions about blind babies development. Blindness itself has to be considered a substantial risk factor in the process of development, forcing blind children and their families to make efforts in order to succeed in what for the sighted children is simply "grow up". The aim of the research is to study blind children families in order to analyse: a) blind children cognitive and psychomotor development; b) development and quality of parents-children interaction; c) parents' characteristics, competences and individual difficulties. We hypothesize that even the smallest visual acuity could represent a remarkable discrimination element in the individual and relational child development. Including criteria are: 1-36 months of age; visual impairment: 0-1/20 visual acuity (ACT); no other disabilities. Instruments used are: Reynell-Zinkin Scale, Millon Clinical

Multiaxial Inventory, Multidimensional Scale of Perceived Social Support, Parenting Stress Index, Family Adaptation and Cohesion Scale, Parent Development Interview, Reflective Functioning Scale on the PDI, 20 minutes parent-child free-play interaction video. We collected so far a sample of 22 families and we proceed with a comparison between the total-blind-child-families subgroup (TBCF) and the partial-blind-child-family one (PBCF). The comparison operated points out some statistically significant differences between the two subgroups. These differences show more difficulties in the TBCF subgroup. These first results seem to confirm our starting hypothesis: blindness itself represents a risk factor in the child individual and relational development and a criticality element for the whole family. In fact, although partial blindness itself represents a big obstacle in the reality discovery, total blindness seems to have greater repercussions. Even the smallest visual access to the world helps the child in the mental construction of a reality image which is consistent and shareable with the sighted world.

P03.84

**FAMILY-CENTRED MUSIC THERAPY WITH PRETERM INFANTS AND THEIR PARENTS IN THE NEONATAL INTENSIVE CARE UNIT (NICU) IN COLOMBIA - A MIXED-METHODS STUDY**

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Preterm birth is a main cause for neonatal mortality and long-term morbidity around the world. The required hospitalization in the Neonatal Intensive Care Unit (NICU) can be a very stressful life event for both the preterm babies and their parents. Music therapy is known to be beneficial for fostering the self-regulation and development of preterm babies and can help parents to reduce stress and anxiety levels and improve their wellbeing in the NICU. This paper reports a mixed-methods study of music therapy (MT) with preterm infants and their parents in a Neonatal Intensive Care Unit in Colombia. The aim was to find out whether live MT during kangaroo care had an effect on the physiological outcomes of the neonates and would help parents to decrease their anxiety levels and improve parent-infant bonding. Included were 36 medically stable neonates born between the 28th-34th week of gestation and their parents, which were compared to 36 infants in a control group. The quantitative data collection included heart rate, oxygen saturation, weight gain, length of hospitalization and re-hospitalization rate. Anxiety and bonding were assessed with the State-Trait Anxiety Inventory (STAI) and the Mother-to-Infant-Bonding Scale (MIBS). Thematic analysis was used for the qualitative data collected with semi-structured interviews and questionnaires. The quantitative results showed statistically significant improvements in maternal state-anxiety ( $p=.007$ ) and in the babies weight gain ( $p=.036$ ). Positive trends were found regarding the babies' length of hospitalization, re-hospitalization rate and parental bonding. The qualitative analysis showed that MT was important for parental well-being, empowerment and for fostering the development of the neonates. Interacting musically with their babies helped the babies in their development and the parents to experience feelings of connectedness and to distract themselves from their difficulties and from the noisy hospital environment.

P03.85

**HOW DO THE ATTITUDES AND PREJUDICES INFLUENCE HOW WE FACE TO THE SUBSTANCE-ABUSING PREGNANT WOMAN AND FAMILIES WITH INFANTS IN VARIOUS SOCIAL AND HEALTH SERVICES?**

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The poster presents what kind of experiences the substance-abusing pregnant woman and families with infants have had in various social and health services. The negative attitudes and prejudices of authorities are commonplace and affect how we communicate with the parents and their babies. Recovery from substance abuse is a long process and requires a complete life change. The substance-abusing pregnant woman and families with infants need all the support and help instead of being blamed. In Finland around 60 000 babies are born yearly, of which 6% have mothers with alcohol or drug problems. The Federation of Mother and Child Homes and Shelter's Holding Tight® -treatment system is comprised of mother and child homes and open care units specialized in treating substance abuse. It combines child protection and addiction treatment and forms base for child-centered substance abuse work in the Federation. Pregnancy and infancy provide a special window of opportunity for rehabilitation. Holding Tight® -treatment system includes: support for early interaction, addiction treatment, elements of the therapeutic community and reflective working method. The reflective working method and worker's improved emotional intelligence creates a new kind of culture in addiction treatment. According to studies, when mother and baby pairs undergo treatment together, the mothers reflective functioning improves. Most mothers who were in Holding Tight –treatment were able to function as their child's primary carer when the child was two years old.

P03.86

### **HOW PARENT-INFANT INTERACTION ASSOCIATES WITH INFANT SOCIAL-EMOTIONAL DEVELOPMENT AND WELL-BEING AMONG PRENATALLY DEPRESSED MOTHERS?**

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The interaction between parent and infant is of vital importance to infant's psycho-social development and well-being. An infant grows within an emotional relationship to the primary caregiver and the child's developmental outcome is highly dependable on its quality. Maternal prenatal depression may seriously affect both the interaction quality, and, subsequently, the infant's later social-emotional development. In this study, we analyze first, how mother-infant emotional interaction quality is associated with infant social-emotional development and secondly, how the interaction quality is associated with infant's well-being indicated by emotional or behavioral symptoms. The sample consists of 45 prenatally low to moderately depressed mothers with their 12 months old infants. The dyads were derived from a community-based sample from four well-baby clinics in Southern Finland. They participated in a longitudinal RCT intervention study from pregnancy until two years of age (Salo et al., 2017). The mother-infant interaction quality was assessed by the Marschak Interaction Method (the MIM), a semi-structured video-recorded procedure with age-appropriate interaction tasks. The interactions were scored by the Dyadic Emotional Interaction Style Scale (D-EIS; Salo & Mäkelä, 2006, 2010), assessing parental guidance/child co-operation, emotional engagement, nurture and playfulness separately for mothers and infants. The infants' social-emotional development was assessed by the Bayley's Socio-Emotional Scale. The infants' well-being was indicated by emotional or behavioral symptoms assessed by the BITSEA questionnaire (Briggs-Gowan, 2002). The preliminary analyses show significant statistical correlations between the parent-infant interaction dimensions and the infant's social-emotional developmental state and the existence of emotional or behavioral symptoms, respectively. Assessing the quality of parent-infant emotional interaction seems clinically warranted in prevention and treatment of infant's early social-emotional development and well-being when mother have presented depressive symptoms.

P03.87

**INFANTS IN MOTHER-BABY INPATIENT PSYCHIATRIC UNITS (MBUS): WHAT DO WE KNOW ABOUT THEM AND WHAT DO THEY NEED?**

**Hill R.\***

*Helen Mayo House, Women's and Children's Health Network ~ Adelaide ~ Australia*

The joint care in MBUs of mentally ill mothers and their infants has been assumed to reduce stress for both members of the dyad, thus promoting both secure attachment in the infant and recovery in the mother, while simultaneously supporting the mother's development within the mothering role. The available literature on MBUs reveals much about maternal disorders and outcomes, but only a very small amount concerning the infants. MBU professionals use considerable clinical experience to inform treatment planning for admitted infants, but without systematic evidence it is difficult to make strong arguments for the care of these infants to other health professionals and to funding organisations. The latter often view infants in MBUs as healthy boarders incidental to the treatment. This presentation will argue that the severity of their mothers' mental illness defines these infants as a high risk group, and further that systematic data collection aimed at characterising the infants' health, development and evolving attachment will show that a large proportion warrant age-appropriate diagnoses of mental disorder in their own right. A case series of infants in our MBU supports this hypothesis. Recommendations will be made concerning the future directions of systematic research in this area and the accompanying mandate to advocate for the needs of this group of infants.

P03.88

**INVESTIGATION OF RISK SIGNS OF AUTISM IN PREMATURE BABIES AND FRATRITIS OF AUTISTIC SIBLINGS IN BELO HORIZONTE, BRAZIL**

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Introduction: Babies communicates with all his body. The motherese, with prosodic feature, acute, with long melodic forms transmits affective information to the baby. One of the forms of communication between the other and the baby occurs from the baby's motivation in the motherese. However, this interaction often does not occur satisfactorily. Prematurity causes harm to the baby's interaction, due to the necessary medical care. Siblings of autistic children are more likely to develop autism, therefore such interaction may be altered. Objectives: To identify risk signs for autism in preterm infants and autistic siblings. Methods: Cross-sectional longitudinal study, a sample consisting of infants of both sexes, aged from 0 to 9 months old, separated into two groups: preterm infants from Ambulatório Criança Risco from Federal University of Minas Gerais (ACRIAR) and infants siblings of autistic from ACRIAR and from Hospital João Paulo II, Brazil. All children were submitted to the PREAUT protocol<sup>8</sup>. The performance presented in the test was classified due to the score as low (risk for autism), intermediate or high. Results: 93 children, including 65 premature infants and 28 siblings of autistics, participated in the study. PREAUT signs of autism risk were found in 3% of the preterm infants. Babies with gestational age, cephalic perimeter and higher birth weight presented better performance. In the babies of autistic siblings, PREAUT signs were found in 17,8%. Conclusion: It was not observed greater prevalence of PREAUT signs in premature babies. But, it is observed that the more premature the birth, worse the performance. In the autistic siblings, there is a higher proportion of PREAUT signs in the autistic siblings. Corroborating the literature that mentions an increase in the incidence of autism in siblings. Premature babies and autistic siblings because they are at risk for language acquisition should be followed up.

P03.89

**MATERNAL SENSITIVITY IN MOTHERS SUFFERING FROM POSTPARTUM DEPRESSION: ASSOCIATIONS TO PARENTING STRESS, SOCIAL SUPPORT AND MARITAL QUALITY**

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About 13% mothers suffer from postpartum depression after giving birth to a child (O'hara & Swain, 2009). Various depressive symptoms with postpartum onset are specifically associated to the demands of caring for a child and handling the new motherhood (Riecher-Rösler, 2006). Previous research indicates that mothers with postnatal mood disorders show some deficits in the mother-child interaction (Challacombe & Sakovskis, 2009; Hoffman & Drotar, 1991; Hornstein, 2011; Whaley et al., 1999). To date, there are only few studies investigating sensitivity and its predictors in a clinical sample of mothers with postpartum depression. Thus, the purpose of the current study is to examine the associations between maternal sensitivity, parenting stress, marital quality and social support in postnatal depressed mothers compared to a control group. Current data are part of a longitudinal study examining sensitivity, mental health and a video-based interaction-therapy in mothers with postnatal mood disorders. The sample consists of 30 mothers and their babies in a psychiatric clinic and 30 mothers-child-dyads of a healthy control group. Maternal sensitivity was assessed in a semi-structured observation and rated using six 5-point scales (responsiveness, promptness, adequacy, intrusiveness, positive and negative affect) based on Ainsworth's definition of sensitivity (Ainsworth, 1978) and widely used sensitivity scales (Matas et al., 1978; NICHD, 2003). Mental health, parenting stress, social support and marital quality was examined using questionnaires (Brief Symptom Inventory, BSI, Franke, 2000; Edinburgh Postnatal Depression Scale, EPDS, Cox et al., 1987; partnership questionnaire, PFB, Hahlweg, 1996 and the German version of the Parenting Stress Index, EBI, Tröster, 2011). The results indicate that mothers suffering from postpartum depression are at risk for lower levels of maternal sensitivity. The experienced parenting stress and marital quality seem to be associated with some facets of sensitivity. Still running analysis will reveal the impact of the further social support in the family. Hence, adequate support for mothers with postpartum depression is needed. Especially the inclusion of the family in therapeutic settings seem to be an important issue for enhancing the mother-child interaction and therefore preventing children's attachment or behavior problems in the longer term.

P03.90

**MATERNAL TOUCH AND SPEECH DURING FACE-TO-FACE INTERACTIONS WITH 3 MONTH-OLD INFANTS**

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Until recently, studies on preverbal communication tended to focus on vocal characteristics, paying little attention to the role of nonverbal sensory modalities in Infant-Directed-Speech (IDS) and vocal communication. Thus, even though recent research has shown that IDS is associated with modified expression in other modalities (Meyer et al., 2011 ; Nomikou & Rohlfing, 2011 ; Gogate, Maganti & Bahrick, 2015), little is known about the ways in which touch and voice are coordinated when parents communicate with their infant. The aim of this study was to analyze how maternal voice and touch are associated in infant-directed communication with 3-month-old infants. We filmed 20 mothers' spontaneous interactions with their full-term, healthy 3-month-old infants in their home environment. Two-minute sequences were selected and analyzed for each dyad in order to

quantify mothers' tactile and vocal behaviors, such as the extent of verbalization, semantic and prosodic characteristics of maternal utterances and types of touch. Results confirm previous studies showing great variety in mothers' tactile behaviors with a predominance of affectionate touch over stimulating touch at this age. We also found higher amplitude and lower pitch of maternal utterances when voice and touch were synchronous or coordinated. Mothers also tended to use more agentive vocabulary to address their infant when voice was dissociated from touch. Thus, our study suggests that temporal coordination between tactile and vocal behaviors influences semantic and acoustic characteristics of mothers' infant directed speech. Although our study suggests that maternal touch and voice are coordinated, we do not know how infants perceive this coordination. Further research is needed to understand the influence of maternal behavior on infant perception and their early sensitivity to multimodal congruence.

### **P03.91**

#### **THE ADOPTIVE CHILD'S PROFILE SELECTION IN BRAZIL: RACISM X MATERNAL IDENTIFICATION**

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Racism is a social reality in Brazil and 65% of children for adoption are blacks. Parents wishing to adopt are faced with the racial question in the child's profile selection. The purpose of this paper is to understand the relationship between child's profile selection, racial prejudice and the desire to be a mother. A collective case study was carried out with six white women waiting to be an adoptive mother. The women were interviewed about the feelings and expectations occurred during waiting time. The interviews were analyzed by thematic analysis. Half of the mothers accepted black children in the child's profile. A contrast was found between mother's speeches who accepted and excluded black children. The main theme found in the interviews was the maternal identification. Mothers who accepted black children identified themselves with the child, mainly due to the relationship established with black relatives, while mothers who didn't accept black children justified the exclusion with the society racial prejudice. Human beings need to identify with the child in order to invest emotionally. Similarities between individuals facilitate emotional attachment, as occurs between biological mother and child. However, when parenting occurs through adoption, parents expect some level of identification, and they tried to achieve it, in some way, in the profile choice. The non-acceptance of black children could be related with the difficulty of identifying with a child that will be different, despite the explicit justification was the society racial prejudice. Also, adoption could be seen in a negative way, and children with differences could be a constant reminder that the son isn't biological. Identification with children can be achieved in other ways beyond physical, as demonstrated by mothers who accept black children. Therefore, the racial question must be approached in adoption processes to better understand parental identification between parents and children.

### **P03.92**

#### **NURTURE TOGETHER WITH NATURE; EFFICACY OF VIDEO-FEEDBACK INTERVENTION TO PROMOTE POSITIVE PARENTING ADAPTED TO AUTISM (VIPP-AUTI)**

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An autism spectrum disorder (ASD) is a genetically controlled neurodevelopmental dysfunction in domains of social communication, interaction and behavioral performance. Although a high estimated heritability, the environmental social context can influence disorder severity and course. Especially in young children, high brain plasticity makes them susceptible to learn. The program

Video-feedback Intervention to promote Positive Parenting adapted to Autism (VIPP-AUTI) is based on attachment theory (the natural bond between child and primary caregiver to ensure survival and development) and social learning theory (learning from environmental experiences via behavioral techniques). VIPP-AUTI aims to empower parents to nurture their child with ASD by understanding the nature of autism characteristics and to create a supporting, stimulating context for their child's social communication development. The intervention consists of five home visits in which parents receive video-feedback, including film fragments of personal parent-child interactions in daily situations. In a randomized controlled trial we studied the efficacy of VIPP-AUTI with 78 children with ASD (aged 16 to 61 months) and their primary caregivers. The VIPP-AUTI program, was compared with usual home training of equal intervention intensity, but without video-feedback. Primary outcome was parental emotional availability, measured with observational scales of Biringen et al., 2000. VIPP-AUTI effectively reduced parental intrusiveness (a form of overstimulation, with limited room for child's exploration) and enhanced parental feelings of self-efficacy in child rearing. No significant group differences were found on other aspects of parent-child interaction or children's play behavior. At follow-up, three months post intervention, children of the intervention group, showed significant increased initiating joint attention behavior, which is considered to be important for language and social development. The results of this study support a naturalistic, developmental, behavioral intervention as beneficial for young children with ASD.

P03.93

#### **PREMATURED BIRTH: WHAT MEETINGS FOR WHAT INTERACTIONS?**

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Prematurity precipitates parents and children early in a situation of interaction to which neither is ready yet. This is a cross-sectional study conducted from March to May 2017 at the Pediatric Department of Mongi Slim Hospital, including ten premature baby-mother dyads hospitalized in neonatal care. The mothers were subjected to a semi-directive interview with a maintenance grid, the Edinburgh Postnatal Depression Scale (EPDS) for screening for postpartum depression with a threshold score of 12, the Arabic version of the sub-anxiety "scale of the Hospital Anxiety and Depression Scale (HADS) for the measurement of anxious symptomatology and the Postpartum Bonding Questionnaire (PBQ) for measuring the mother-child bond. The mean age of mothers was 32.4 years with extremes ranging from 22 to 47 years. Two mothers described a depressive personal psychiatric history related to a traumatic life event. The first meeting was made through the walls of the incubator for 8 mothers and via photos for the 2 others. At the EPDS, the average score in our study was 7.88, three mothers had scores above 12. At PBQ, three mothers had the highest scores of 36, 20 and 18, respectively who had high scores on the Edinburgh scale. The mean and high levels at the HADS subscale were found in 3 mothers for whom we had the highest scores for depressive symptomatology. Prematurity appears to be a real risk factor for interactive difficulties.

P03.94

#### **PRENATAL REFLECTIVE FUNCTIONING RELATED TO CHILDHOOD ATTACHMENT AND ONE'S OWN PARENTING: INTERRELATIONS AND EFFECTS ON MOTHER-INFANT INTERACTION AMONG DRUG-ABUSING MOTHERS**

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Mother's prenatal reflective functioning (RF) is known to predict the quality of postpartum mother-infant relationship. RF can be measured either based on one's childhood attachment experiences, or directly related to one's own parenting. The interrelations of these two types of RF are not well-known, and it is not clear whether they predict different aspects of future parenting. This study examines, first, the interrelations between mother's prenatal attachment-related RF and pre- and postnatal parenting-related RF, in a sample of treatment-enrolled drug-abusing (DA) mothers. Second, we examine, how these two types of RF are associated with mother-infant interaction quality at 4 and 12 months and with post-intervention change in interaction quality. The DA group comprised 51 mother-infant dyads, participating in outpatient substance-abuse/parenting interventions. The control group comprised 50 dyads without maternal substance-abuse. Mother's attachment-related RF was measured with AAI during pregnancy in the whole sample, and parenting-related RF only in the DA group, with PI during pregnancy and PDI at child age of 4 months. Mother-infant interaction quality was measured with Emotional Availability Scales at 4 and 12 months. There was no difference in AAI-RF between DA and control group, both showing lower-than-average RF. AAI-RF was highly correlated with parenting-RF both pre- and postnatally ( $r=.59$  and  $r=.51$ ). Lower prenatal parenting-RF predicted lower maternal sensitivity, structuring, child responsiveness and child involvement at 4 months, but more positive change from 4 to 12 months. Higher prenatal AAI-RF predicted more positive change from 4 to 12 months especially related to hostility and intrusiveness. Our results suggest that AAI-RF and parenting-RF are related, but only partially overlapping constructs. Prenatal parenting-RF may be more predictive of dyadic interaction and easier to target in parenting interventions, whereas AAI-RF may indicate more general vulnerabilities in maternal emotion and behavior regulation.

P03.95

**PROSPECTIVE ASSOCIATIONS BETWEEN MATERNAL WEIGHT, REFLECTIVE FUNCTIONING, MOTHER-CHILD EMOTIONAL AVAILABILITY AND ATTACHMENT SECURITY**

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Mothers with obesity are thought to present a risk not only to their children's physical development (Linabery et al., 2013) but also to their children's psychosocial development (Van Lieshout et al., 2011; Van Lieshout, 2013). In this context, possible problems in the emotional and attachment related development of their children may play a role (e.g. Anderson & Whitaker, 2011, Yap & Jorm, 2015, Middleton et al., 2009). Emotional Availability (EA) in early mother-child interactions as well as maternal Reflective Functioning (RF) has shown to be important aspects in the development of secure attachment relationships (e.g. Cassibba et al., 2012, Fonagy & Target, 1997). The present study aims to explore prospective associations of these aspects in obese compared to normal-weight mothers. We expect children who share highly emotionally available relationships with their mothers at t1 to display a better attachment to their mothers and higher EA at t2. Also, we expect children whose mothers show high RF to show a better attachment at t2. The role of maternal weight status as a moderator is investigated. The sample consists of  $n=30$  children of obese and  $n=30$  children of normal-weight mothers. During a visit to our laboratory (T1; child age: 6 to 47 months) we videotaped mother-child interactions which we coded with the Emotional Availability Scales (Biringen, 2008). At t2, 11 months later, we observed mother-child interactions at home coding for EA. We also assessed the quality of the mother-child attachment with the Attachment-Q-Sort (AQS, Waters & Deane, 1995). We furthermore assessed maternal RF with the Reflective Functioning Scale on the Adult Attachment Interview (Fonagy et al., 1998). Preliminary analyses show positive associations between EA at t1 ( $r=.31$ ,  $p<.05$ ), EA at t2 ( $r=.40$ ,  $p<.05$ ) and RF at t2 ( $r=.32$ ,

$p < .05$ ) with attachment security. We will present detailed data including mediation and moderation analyses regarding our hypotheses.

P03.96

### **REFLECTIVE FUNCTIONING MEDIATES THE RELATIONSHIP BETWEEN INTERPERSONAL TRAUMA AND PSYCHIATRIC SYMPTOMS IN ADULTS AWAITING A CHILD**

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Childhood abuse and neglect is associated with an increased risk of mental and physical health problems. Pregnancy is a critical period with regard to mental health and can be even more challenging for adults with personal history of abuse or neglect (Isosävi & al., 2017; Sexton & al., 2017). Reflective function (RF) is a potential buffer between childhood trauma and psychopathologies (Fonagy & al., 2016). Future research is required to support this claim (Camoirano, 2017). The objective of the study is to evaluate if the RF mediates the relationship between trauma and psychiatric symptoms in adults awaiting a child. Women and men awaiting a child were recruited in general community health care services and in services designed for adults presenting vulnerabilities. Participants ( $n=157$ ) were invited to complete, during the third semester of pregnancy, self-report instruments, including the Childhood Trauma Questionnaire, the Reflective Functioning Questionnaire, the Dissociative Experiences Scale, the PTSD Checklist for DSM-5, the Edinburgh Postnatal Depression Scale, and the Personality Diagnostic Questionnaire. Interpersonal trauma correlated with psychiatric symptoms during pregnancy: PTSD ( $r=.47, p \leq .01$ ), dissociation ( $r=.26, p \leq .01$ ), depression ( $r=.31, p \leq .01$ ) and borderline personality disorder ( $r=.38, p \leq .01$ ). Interpersonal trauma also correlated with hypermentalization ( $r=.22, p \leq .01$ ), but not with hypomentalization ( $r=.13, p \leq .01$ ). Hypermentalization partially mediated the association between trauma and PTSD ( $\beta = -.26; p < .01$ ), dissociation ( $\beta = -.17; p = .03$ ), depression ( $\beta = -.28; p < .01$ ) and BPD ( $\beta = -.24; p < .01$ ). Results suggest that personal history of childhood maltreatment represents a critical risk factor for the psychological well-being of adults awaiting a child, which may impact their child in utero and have consequences for the parent-infant relationship. However, we observed that mentalization may act as a buffer between trauma and psychiatric symptoms. This calls for the development of trauma-informed practices addressing the specific needs of expecting parents with personal history of abuse and neglect.

P03.97

### **SITUATIONAL EFFECTS ON THE INTERACTIONAL BEHAVIOR OF MOTHER-CHILD-DYADS**

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There has been numerous research on the situational effects on mother's sensitivity behavior (e.g. Seifer, Sameroff, Anagnostopolou, & Elias, 1992; Leyendecker, Lamb, & Schölmerich, 1997,...) and found differences of the maternal sensitivity between play and care-taking situations. But mostly the child's behavior has been disregarded, an aspect which should be considered, because interaction is defined by at least two individuals. Aim of the study was to analyse the situational effects on the interactional behavior of mothers and especially their 7 month old infants. 52 mother-child-dyads of a German community sample were visited at home and three interaction situations (play, feeding, diapering) were videotaped. These videos were coded based on a macro-analytic coding scheme of maternal and child behavior (e.g. maternal sensitivity, child activity level, ...). Only 26 mothers completed all three situations and were used for the following analyses. Multivariate ANCOVA (controlled for mother's age, child age, child sex, income and migration background)

showed an effect of situation on some of the interactional items (e.g. negative regard for the child, child activity level) and some items were not influenced by the situation (e.g. child's social interest in the mother). Some behavior and some aspects of the interactional quality of mother-child dyads seem to be states influenced by the situational context in which they are happening, whereas some aspects seem to be traits. These states should be considered as situational dependent, when interaction quality is measured only by one situational context.

P03.98

#### **SUPPORTING GROUP FOR ADOPTIVE FAMILIES AS A MECHANISM TO PROMOTE ATTACHMENT**

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The initial period that parents spend with their adopted child is a delicate moment to establish first contact as a family and initiate attachment process. Therefore, a supporting group may be a tool to help them. This study aimed to describe an experience coordinating two groups: for adoptive parents and for children in a partnership between university and a non-governmental organization. Groups occurred at the same time, monthly during one year and were mediated by four psychologists, post-graduation students. The mediation intended to give an empathic understanding and clarify doubts about psychological aspects of adoption. The adults' group allowed to discuss their feelings through some themes: expectations, fears, myths, love, child's devolution, adoption's waiting time, infant development, routine, healthy habits for children and the construction of love. For children, meetings were a space for welcoming and respect their demands while they could, through playful resources, speak openly about their feelings and about being adopted. The schedule was the same for both groups. It's possible to discuss that sharing their stories in a supportive group may have allowed parents to discuss what they expect and fear in a safe context promoting contact with their emotions about adoptive parenthood as they search for love. To children, it was a space to improve the social network and have a psychological understanding to their difficulties through the adoption processes. Differently from individual interventions, the group experience might enhance attachment between parents and children while families talk about difficulties and rewards in this journey.

P03.99

#### **SUPPORTING PARENTING AND EARLY MOTHER-INFANT INTERACTIONS THROUGH THE PRACTICE OF INFANT MASSAGE**

**Porreca A.\*, Marzadro A., Rocci R., Bozza G., Simonelli A.**

*Department of Developmental and Social Psychology - University of Padua ~ Padua ~ Italy*

Early relationships require a close physical and psychological contact between mother and infant. Given the central role that the experience of sensitive touch plays in early infancy, infant massage could represent a useful, easy-to-do, and low-cost technique to support parenting and child development, through the enhancement of parental sensitivity and of emotion regulation within the dyad (Underdown, 2009). This study aimed to assess quality of m-c interactions during the unfolding of infant-massage classes and its associations with maternal psychological distress. The study involved 20 m-c dyads with children (7 boys, 9 girls) aged between 2 and 7 months. The dyads were videotaped during massage classes at the beginning (T1) and at the end (T4) of a 4-lessons massage course. Quality of m-c interactions was assessed through the Emotional Availability Scales (EAS – Biringer, 2008), which provide a measure of both adult and child's contribution to emotional exchanges. The results were then compared. Moreover, the presence of maternal psychological distress was screened through the Symptom Checklist-90 revised (SCL-90-R – Derogatis, 1977). As

far as it concerns the EAS, significant differences ( $p < .05$ ) were found between (T1) and (T4), with an increase in the scores of maternal sensitivity, structuring, nonintrusiveness and nonhostility. Furthermore, a significant increase ( $p < .05$ ) was found also in child's responsiveness and involvement of the adult. Finally, associations between the SCL-90-R and the EAS scores were found, with maternal sensitivity at (T1) significantly correlating with the GSI ( $r = -.62^*$ ,  $p = .01$ ). Infant massage represents a useful technique for the strengthening and the enhancement of adult-child relationships. This cost-saving technique could constitute a simple but effective way to sustain the construction of early affective bonds. Considerations about the clinical implications of the findings and on the influence of maternal psychological distress are presented.

P03.100

### **TEMPORAL DYNAMICS OF INFANT PHYSIOLOGICAL REGULATION WITH MOTHERS AND FATHERS**

**Ekas N.\***

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The ability to regulate emotions is a hallmark of socio-emotional development. During the first year, infants use behaviors to regulate emotions. Shifting attention away from a stimulus is associated with a decline in negative emotion, suggesting that this behavior is a regulatory strategy. This research relied upon behavioral indices of negative emotion; however, physiological reactivity should be studied. Heart rate generally increases during frustrating situations. There is no research examining whether the behavioral strategies that infants use also affect their physiological reactivity. The first aim is to examine whether behavioral strategies are associated with a change in heart rate in infants. The second aim is to determine whether the effectiveness of a strategy differs according to whether infants are interacting with their mother or father. Six-month-old infants and their mothers ( $n = 77$ ) and fathers ( $n = 73$ ) participated in the Still-Face Paradigm. Infant behaviors (look at parent, look away from parent, self-soothing) and heart rate were measured each second. Infant regulatory behavior and heart rate at time  $t$  were entered as predictors of infant heart rate at time  $t + 1$ . Looking away from the mother was associated with a subsequent decline in infant heart rate ( $b = -.45$ ,  $t = -4.41$ ,  $p < .001$ ). Looking at the mother was associated with an increase in infant heart rate ( $b = .28$ ,  $t = 2.67$ ,  $p = .008$ ). Self-soothing was not significantly associated with infant heart rate. There were no significant associations with fathers. This is the first study to demonstrate that infant behaviors regulate physiology. Similar to previous studies of affect regulation, looking away from the source of frustration (i.e., unresponsive mother) was associated with declines in infant heart rate; however, this was only the case when interacting with mothers.

P03.101

### **THE CONTRIBUTION OF THE FAMILY ALLIANCE TO CHILDREN'S EMOTIONAL NARRATIVES: A LONGITUDINAL STUDY IN EARLY CHILDHOOD**

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*Developmental Psychology ~ Haifa ~ Israel*

Parents' empathy, sensitivity, and optimal structuring when interacting with their children promote the capacity to construct emotionally coherent narratives by providing a secure and organized framework needed to develop narratives around affectively charged themes. Research to date has focused primarily on mothers' contributions to children's narratives and the contributions of fathers and the mother-father-child triad has not received research attention. Therefore, in this study, we examined the contribution of mother-father-child triadic interactions assessed at 18 months and 4.5 years to children's narratives. We hypothesized that more coordinated family alliances, at both early and current assessments, would be associated with more emotionally coherent MSSB story-

completions at the preschool age. Seventy-one children and their parents were observed at 18 months and 4.5 years in the Lausanne Trilogue Play (LTP) assessment in order to measure their Family Alliance. Children's narratives were assessed using the MacArthur Story Stem Battery (MSSB), in which children enact play narratives in response to emotionally evocative story beginnings. More cooperative family alliances were associated with more emotionally coherent MSSB narratives, but only with regard to concurrent assessments of the family alliance. Even though the family alliance was moderately stable between toddlerhood and the preschool age, the early alliance was not related to children's MSSB narratives. Additionally, unexpected gender differences were found in the family alliance stability and its contribution to children's narratives. The triad's ability to work together as a team, using coordination, cohesion and sensitivity between its partners, served as a key factor in shaping the emotional narrative skills of the child. The study highlighted the significance of the triadic emotional environment, in which the child is raised, and suggests that children's MSSB narratives do not only reflect their emotional inner world, but also the current emotional climate in their family.

P03.102

### **THE MATERNAL EXPERIENCE OF THE ROLE OF CARING DURING CHILD DEPENDENCY PERIOD**

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Motherhood is influenced by an idealized idea, which usually doesn't consider hostile feelings a mother may experience towards her baby. These aspects contradict the real experience of the role of caring that is influenced by those feelings. The aim of the study was to investigate the maternal experience of the role of caring in the period of child dependency. We used a multiple case study design in which three mother-child pairs participated. We carried out semi-structured interviews on the experience of motherhood and child development at six different times (6th, 12th, 18th, 24th, 36th and 48th month). Data were analyzed by clinical report, based on the following thematic axes: Maternal manifestations of dependence and independence, Ambivalent feelings regarding the maternal caring role and Mothers' healing experience. In the first thematic axis, mother-child dependence is initially mutual, which requires maternal emotional availability. In relative dependence, the gradual separation of mother and child was an intense movement, experienced according to the possibilities of each pair. In the second axis, when the mothers are caring for the baby, in addition positive feelings such as satisfaction, they were faced with difficulty and tiredness. Therefore, the ambivalent feelings were overwhelming. In the third axis, while caring for the baby, it was possible to readjust the care received in their own childhood, which meant they had the possibility of revisiting parental models by repeating or avoiding them. The role of caring seems to be a construction carried out in the context of the mother-child relationship in which the mother gestates the child in the womb and in psychic terms, and similarly the child helps the mother improve in her caring role. We emphasize the importance of encouraging maternal knowledge and legitimizing the experience of ambivalent feelings in child care.

P03.103

### **THE PARENT-CHILD RELATIONSHIP SCALE: VALIDATING AN INSTRUMENT TO ASSESS RELATIONAL PATTERNS AND DISORDERS**

**Fortunato A.\*, Maggiora Vergano C., Speranza A.M.**

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Understanding the quality of infant/child-caregiver relationship appears an essential part of the diagnostic process in infancy and early childhood, regardless of the child's symptoms or disorders.

In this study, we aimed 1) to validate the Parent-Child Relationship Scale (P-CRS), a scale assessing the quality of interactive patterns and relationship between the parent and the child; and 2) to assess the correlations between infant/child symptomatology and quality of relationship with the caregiver, in clinical and non-clinical children. The clinical group is composed of 250 children with different clinical diagnoses, the non-clinical group consisted of 250 children, matched by age. General and clinical information was collected with the Clinical Data Form. Symptomatology was measured through the Child Behaviour Checklist (CBCL), completed by the parents, and the Caregiver-Teacher Report Form (C-TRF), compiled by the clinician. The relationship with both caregivers was evaluated by the clinician with the P-CRS. Factor Analysis for P-CRS items revealed three main factors which describe the functioning of a specific relationship model: withdrawal, hostility, and anxiety. The comparison between clinical versus non-clinical children evidenced significant differences in the quality of parent-child relationship, in particular with respect to withdrawal and anxiety factor, and especially with mother. Furthermore, significant correlations were found between the quality of parent-child relationship and the child symptomatic pattern. The study highlights that P-CRS is a valid tool to understand the mutual influence between psychopathology and relationships in infancy and early childhood, showing the importance of the parent-child relationship's assessment from the early stages of development and the need of valid and reliable tool for both researchers and clinician.

P03.104

#### **THE POWER OF 'HOLDING' IN PROMOTING SECURITY OF ATTACHMENT IN FAMILIES FROM DIVERSE COMMUNITIES**

**Lowagie A., Salvo R.\***

*Mirrabooka Communities for Children ~ Perth, Western Australia ~ Australia*

Illustrate and discuss the role of reflective practice – including peer support and reflective supervision – in enabling practitioners to deliver COS-P with integrity and fidelity to groups of parents from a diverse community. The Mirrabooka Circle of Security Parenting project. The Circle of Security Parenting (COS-P) project started mid-2015 in the northern Perth suburb of Mirrabooka, Western Australia. It has reached over 170 families so far. The project is building the capacity of family support workers from different local organisations to facilitate the COS-P (DVD) course, with the aim to meet the demand in their multicultural local community and provide follow-up support to parents who have completed the course. Intensive collaboration between local service providers, mentoring of newly trained co-facilitators, reflective supervision, culturally sensitive practice and flexibility are key elements of this challenging 4-year project. The presentation will describe the complexity of the work with families from diverse cultures and backgrounds—including teen parents, Karen-speaking Burmese mothers, fathers and Aboriginal parents—and the many learnings of this successful collaboration. Case studies and stories will illustrate the work with, and the response of parents, team members and other collaborators. We will discuss the case studies, stories and learnings through the lens of reflective conversations and supervision. We aim to demonstrate the crucial role of reflective supervision in enabling the various levels of 'holding' (being the COS 'hands') for new co-facilitators and mentors so they, in turn, can hold the many stories of the parents who participate in COS-P.

P03.105

#### **THE PROPOSAL OF A METAPHOR: THE BOY AND THE DRAGON- THE FIRST TELLING. CREATING A STORY BOOK FOR FAMILIES AND CHILDREN**

**Van Der Merwe C.\***

*Private ~ Randfontein ~ South Africa*

Showing the Story-metaphor as tool that allows us in a play-full setting to search for health, happiness, understanding and coming-together (This by telling in parallels what worked for us, and what did not. While searching better ways forward). Illustrated in a series of drawings (that develop in a circular flow of '12-steps'), is depicted the storyline of the intended book. The Poster Highlights the basic path we took to 'recovery'. Where increased exposure to the world was seen to spark the child's interest, build understanding and his 'relation-to-life'. A core quest is: to explore understanding the special friendship of "The Boy and The Dragon". Some ideas conveyed in pictures: Starting by 'trying to prevent the child from being eaten'(it develops further along the path we took -from diagnosis through to health), to 'establishing contact with the child'; 'building relationship and understanding'; 'exploring the world'; and lastly- 'bringing him home'! This path lead to the improved health of the child(and better life-quality for the core family). It does touch furthermore on unresolved issues that persist. Playing with the metaphor helped 'us' find, design and live a better life. Hopefully, others can too.

P03.106

### **THE RELATIONSHIP BETWEEN INFANT TEMPERAMENT AND BEHAVIOUR, AND MATERNAL INFANT-DIRECTED SPEECH**

**Woolard A.\*<sup>[2]</sup>, Benders T.<sup>[1]</sup>, Armstrong T.<sup>[3]</sup>, Karayanidis F.<sup>[4]</sup>, Murphy V.<sup>[5]</sup>, Mallise C.<sup>[2]</sup>, Whalen O.<sup>[4]</sup>, Campbell L.<sup>[2]</sup>, Lane A.<sup>[5]</sup>**

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The interaction between mothers and their infants influences early infant development. One way mothers interact with their baby is through infant-directed speech (IDS), which is a unique speech register used by adults when speaking to infants. One aspect of IDS is the trajectory of pitch, known as F0 contours. Research shows F0 contours are associated with infant affect and attention, but less is known about how F0 contours vary in association with infant characteristics, such as temperament and behaviour. Temperament is a trait referring to infants' reactivity and regulation. Conversely, behaviour varies over time and contexts. Ten 6-month-old infants and their mothers participated in a 15-minute recorded interaction, partially involving toys. From the interaction, maternal F0 contours were extracted, and infant behaviour was assessed using the Temperament Adjective Triad Assessment (Seifer, Sameroff, Dickstein, Schiller & Haydon, 2004). Infant temperament was assessed using the parent-report Revised Infant Temperament Questionnaire (Carey & McDevitt, 1978). Product-moment correlations were used to determine the association between infant temperament and behaviour scores, and mothers' F0 contours. Temperament: sinusoidal contours were correlated with lower distractibility ( $r=-.733$ ,  $p=.016$ ) when no toys were present. Slowly-falling contours were associated with negative mood ( $r=.798$ ,  $p=.006$ ), higher distractibility ( $r=.645$ ,  $p=.044$ ) and less rhythmicity ( $r=.687$ ,  $p=.028$ ). Behaviour: slowly-falling contours were related to less activity ( $r=-.777$ ,  $p=.008$ ). U-shaped contours were associated with higher intensity ( $r=.638$ ,  $p=.047$ ). Rapidly-falling contours were correlated with less approaching behaviours ( $r=-.811$ ,  $p=.004$ ). These preliminary results suggest that both the infant's temperament traits and behavioural state are associated with maternal F0 contours. Further research into how the infant influences their mother is recommended, as this can inform early interventions to assist in forming healthy mother-infant relationships.

P03.107

## **VALUES IN WORK WITH INFANTS HELD BY THE FEDERATION OF MOTHER AND CHILD HOMES AND SHELTERS IN FINLAND**

**Sellergren H.\*, Henttonen T.**

*Federation of Mother and Child Home ~ Helsinki ~ Finland*

The aim of the poster is to reinforce the baby's point of view in society. Infancy is an important time period that plays a significant role throughout the life of an individual. A society that is suitable for babies is suitable for everyone. The poster presents the values of The Federation of Mother and Child Homes and Shelters from a baby's perspective:

1. Participation: Babies have opinions that need to be heard and seen. They need to be interpreted and brought forward particularly in situations where adult matters take precedence and there is a danger that the baby might go unnoticed or ignored.
2. Safety: It is the parents' duty to create a safe environment for the baby. Babies need physical contact – laps and hugs. Babies should not be left alone.
3. Justice: The baby and its family should be treated equally and their differences respected. Justice implies that those in need of help receive it according to their own specific personal situation.
4. Humanity: The baby and its parents do not have to be perfect. They are allowed to learn and make mistakes. The baby should be accepted for being his/her own self, just as it is.
5. Courage: Defending a baby implies immediate interference and intervention, when there is a suspicion of child neglect or abuse.

The poster also briefly presents various forms of Infant Work carried out at The Federation: Baby Blues work, Day groups and Mother and Child Homes.

## **Parenting and family process**

P03.108

## **PARENT-CHILD INTERACTIONS DURING THE PRE-BEDTIME PERIOD AND CHILD SLEEP QUALITIES**

**Albert L.\*, Hoyniak C.P., Bates J.E.**

*Indiana University ~ Bloomington ~ United States of America*

Bedtime routines, which occur in the context of the pre-bedtime period, are widely recognized to be important for child sleep outcomes, including greater amounts of nighttime sleep (Staples, Bates, & Petersen, 2015). Clinical and experimental research suggests that implementing a nightly bedtime routine is associated with improved child sleep (Mindell, Telofski, Wiegand & Kurtz, 2009), potentially through fostering a feeling of security for the child, which aids in the child falling asleep (Dahl, 1996). The current study examines the association of the quality of the pre-bedtime period, particularly emotional security, and child sleep quality using analysis of a narrative record of parent-child interactions during the hour before bedtime. The current study included a sample of 111 30 month-old children who participated in the wider Toddler Development Study. Children participated in an in-home observation of child bedtime routines where two trained observers came to the home and evaluated parent-child interactions and home environment. Qualitative narratives written at these visits were rated for items such as routine organization and parent responsiveness. Actigraphy data was also collected over the span of two weeks using minute-by-minute recordings of motor activity and indexes of sleep duration, timing, and activity were created. Additional data was obtained about parent-reported sleep problems through the Child Sleep Habits Questionnaire (Owens, Spirito, McGuinn, & Nobile, 2000). The associations between the narrative ratings and several sleep actigraphy composites were examined using Pearson correlations. Findings suggest

that bedtime routine quality as rated by observers was highly correlated with parent-perceived child sleep problems ( $r(109) = -0.29, p < .01$ ), increased child sleep duration ( $r(109) = 0.31, p < .01$ ), and earlier child bedtimes ( $r(109) = -0.25, p < .05$ ). These findings suggest that particular characteristics of the bedtime routine could be more important than others for improving child sleep quality.

P03.109

**PARENTING CHILDREN AFTER PEDIATRIC HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT)**  
**Zanato S.<sup>[1]</sup>, Traverso A.<sup>[1]</sup>, Porreca A.\*<sup>[1]</sup>, Sinatora F.<sup>[1]</sup>, Di Florio N.<sup>[1]</sup>, Tremolada M.<sup>[2]</sup>, Capello F.<sup>[3]</sup>, Marzollo A.<sup>[3]</sup>, Tumino M.<sup>[3]</sup>, Mainardi C.<sup>[3]</sup>, Gabelli M.<sup>[3]</sup>, Calore E.<sup>[3]</sup>, Pillon M.<sup>[3]</sup>, Messina C.<sup>[3]</sup>, Basso G.<sup>[3]</sup>**

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Parents of children that underwent HSCT are at risk of developing high levels of stress and burnout (Lindahl-Norberg et al, 2014) even at a temporal distance from the transplantation period, as well as depressive symptoms that could bring them to be less responsive to the patients' needs. Sources of stress may include coping with medication compliance, lengthy hospital stays, and other medical complications, frequent visits and time spent to the transplant center while concurrently caring for other family members, living in separate households, work-related changes, financial burdens (Rodrigue et al, 1997). In this sense it is important to consider the impact that HSCT could have on the whole family system. The present study aimed to assess parenting stress in caregivers of HSCT survivors. 74 parents (37 mothers and 37 fathers) were administered the Parenting Stress Index-Short Form (PSI-SF) (Abidin, 1995), a questionnaire that explores parenting stress factors grouped in four main domains (Parental Distress-PD; Parent-Child Dysfunctional Interaction-PCDI, Difficult Child-DC, Defensive responses-DEF). Social and medical information concerning HSCT was also collected. Both mothers and fathers reported high parenting stress levels in PCDI (35% above clinical cut-off) and DC (32% and 24% above clinical cut-off). All parents recognized a negative effect of HSCT on parenting abilities, mainly due to difficulties experienced in the relationship with their child and to child difficult characteristics. The results highlighted significant differences between mothers and fathers in DEF ( $Z=-2.10, p<.05$ ). Finally the PSI-SF scores presented associations with specific social and medical factors ( $p<.05$ ). HSCT constitute a stressful event that could have a strong impact also on close family members of pediatric cancer survivors. As a consequence, clinical protocols should assume a wider perspective, considering the whole family system. Considerations about the clinical implications of the results in terms of prevention and intervention are highlighted.

P03.110

**PATERNAL DEPRESSION AND PATERNAL SENSITIVITY IN THE PERINATAL PERIOD**  
**Nieri L.\*<sup>[2]</sup>, Amaya V.<sup>[1]</sup>, Gonzalez A.<sup>[1]</sup>**

<sup>[1]</sup>UADE ~ Buenos Aires ~ Argentina, <sup>[2]</sup>UADE-CONICET ~ Buenos Aires ~ Argentina

During the last years, several investigations have demonstrated that since the beginning of pregnancy, fathers go through a process in which they build up their fatherhood, and such transition starts with the decision of having a child. The way in which this process develops, will depend on different factors, such as: his own history as son, his relationship with his father, his personality type, his relationship status, and his current situation, among others. Due to the above, the main objective of the current study was to analyze the relationship between paternal depression and levels of paternal sensitivity among a sample of fathers of healthy babies who were up to two years

old. There was used a non-probabilistic incidental sample of 110 male adults, between 18 and 55 years old (M = 32.76; SD = 6.493), living in Buenos Aires. They were given the Beck Depression Inventory II and the Paternal Sensitivity Questionnaire (this one evaluates feelings and paternal reactions, the care that the father is minded to give to his wife and children; the bond he established with his child; the father's nurture history and his representation and identification with his child). Results showed that there exists a negative and statistically significant relationship between paternal depression and paternal sensitivity ( $r = -.258$ ;  $p < .01$ ), and with the dimension reactions, behaviors and paternal feelings ( $r = -.214$ ;  $p < .05$ ). This study represents an initial approach to the knowledge of how fathers living in Argentina face fatherhood, and suggests the need to treat fathers' depression as a mean to increase their involvement and sensitivity towards the nurture of their children, and therefore an improvement in the father-child relationship.

P03.111

### **PREDICTING POSTPARTUM DEPRESSION AMONG ADOLESCENT MOTHERS: A SYSTEMATIC REVIEW OF RISK**

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*University of Edinburgh ~ Edinburgh ~ United Kingdom*

Postpartum depression (PPD) is a debilitating illness that has been shown to have adverse consequences for affected mothers and their families. Such consequences have included poor maternal-infant attachment and subsequent deficits in children's social, emotional and cognitive development. Research suggests that adolescent mothers, in particular, are at an increased risk of developing PPD, with prevalence rates estimated around 30-50%. This would suggest the need for a better understanding of the risk factors implicated in PPD within an adolescent population; particularly so as it has been suggested that adolescent mothers may have different experiences with PPD as compared to adult mothers. Despite this, there has been a paucity of research exploring the unique factors that place adolescent mothers at risk of developing PPD. A systematic review identifying risk factors that have been implicated in the onset of PPD in adolescent mothers, and appraisal of the current quality of this evidence-base. A systematic literature review was undertaken following PRISMA guidelines. Both published and unpublished literature were searched, restricting articles to those published since 1992. Inclusion criteria were studies from developed countries; using a validated measure of PPD; with onset of illness defined as within 12 months of childbirth, but which had persisted past two weeks postpartum; adolescent mothers <20 years of age; and which included risk factor(s) that occurred prior to the postpartum period. A total of 12 studies were identified as meeting inclusion criteria. Overall quality of the evidence of these studies ranged from weak to moderate. A narrative synthesis of the studies will be presented, structured around type of risk factor. The implications of the findings will be discussed from both clinical and policy perspectives, including recommendations for future practice and research aimed at this vulnerable population.

P03.112

### **READINESS FOR PARENTHOOD 2: READINESS FOR PARENTHOOD AND SUPPORT BASED ON THE COUPLE'S IFEEL**

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During the early stages of pregnancy, women experience only an arousal of emotions such as joy and vague anxiety without perceiving their fetuses as a realistic presence until they enter the second trimester of pregnancy. In this study, (1) we examined the relationship between a woman's emotions towards pregnancy and the couple's affect-recognition tendencies, then (2) applied these findings to support couples during pregnancy. Participants: (1) 43 pregnant women and 28 of their husbands. (2) 5 pairs of pregnant women and their husbands who attended prenatal parenting classes offered by a private organization that provides postpartum care. Materials: The Japanese version of IFEEL Pictures (JIFP), the Scale of Feelings toward the Child (Hanazawa, 2008), and Self-Rating Depression Scale, or SDS (Zung, 1965). Procedures: (1) The participants were asked to describe the feelings the infants in the JIFP might feel. They were also asked to complete the questionnaires. (2) We made the couples' JIFP profiles according to their responses to the JIFP, and provided feedback on their relationships. (1) We analyzed the correlation between the participants' responses to the JIFP and their scores for each scales. The results showed that a couple's affect recognition tendencies were related to their attitudes toward childrearing and a sense of depression. (2) The feedback based on the couples' JIFP profiles enhanced their mutual communication and deepened their readiness for parenthood. In the light of these findings, we discuss by presenting several cases, the effectiveness of explaining the characteristics of each couples' JIFP answers to them, to support the soon coming child-rearing.

P03.113

#### **ROLE OF FATHERS OF 0-3-YEAR-OLD IN DOUBLE-INCOME HOUSEHOLDS, AND RELATED FACTORS**

**Sugiuchi M.\*<sup>[1]</sup>, Nagayoshi M.<sup>[2]</sup>, Takahashi K.<sup>[2]</sup>**

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The development of attachment between infants and fathers has been found to undergo the same process as that with mothers. Double-income households have been growing in Japan. The importance of paternal roles in the social development of children has been increasingly discussed. To investigate 1) the employment conditions of parents of 0- to 3-year-old infants, 2) father's role and child-rearing behavior, and 3) relationships among factors. A cross-sectional, questionnaires were conducted on 290 fathers of 0- to 3-year-old infants going to six private nursery schools in Tokyo. Correlation between factors was analyzed statistically using Spearman's rank correlation coefficient. Fifty-seven respondents (19.7%) were analyzed (mean age: 37.2 years [SD = 11.9]). The mean age and mean developmental age of infants were 28.9 months (SD = 11.9) and 32.9 months (SD = 11.5), respectively. No associations were found between infants' developmental age and Parenting Stress Index (PSI) or Early Childhood Parenting Scale (ECPS) scores. ECPS scores showed significant negative correlations with PSI child domain ( $\rho = -.49, p < .001$ ) and parent domain ( $\rho = -.53, p < .001$ ). The mean time spent on child-rearing by the fathers each week was 27.1 hours (SD = 17.4), showing positive correlation with the "state of father's role" ( $\rho = .38, p < .01$ ). The state of father's role correlated with hours worked by mothers per week ( $\rho = .30, p < .05$ ). Fathers were found to play stronger paternal roles the longer the hours worked by the mothers were, increasing satisfaction of the fathers. The more the fathers positively accepted their role as a parent, the less their child-rearing stress was. Providing advice on and positive feedback on involvement in nurturing to fathers who bring their children to school every day may promote good father-child relationships.

P03.114

#### **SUPER PARENTS: A PARENTING PROGRAM FOCUSED ON RESPONSIVE PARENTING, MINDFULNESS & EXECUTIVE FUNCTIONING**

**Morris A.\*, Slocum R.**

Oklahoma State University ~ Tulsa ~ United States of America

In this poster, we will share our experiences working with parents in the Super Parents program, and will demonstrate mindfulness and executive functioning activities. We will discuss implementation of the program and evaluation results and tools. In addition to basic child development information and positive parenting approaches, Super Parents weaves various stress reduction techniques, executive function activities and mindfulness practice into group sessions. Parents are encouraged to play executive function building “games” with their children that target emotion regulation, motor and cognitive inhibition, mental flexibility and working memory. The mindfulness element exposes parents to in-the-moment experiences that allow them to recognize the feeling of calming down busy minds and learning methods to relax the body. Super Parents’ activities have been incorporated into a new version of Active Parenting: The First Five Years.

P03.115

**ATTACHMENT MATCHING AND CO-PARENTAL INTUITIVE INTERACTIONS IN SAME-SEX AND OPPOSITE-SEX COUPLES WHO PROGRAMMING PARENTHOOD**

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Research has shown that parents own implicit communicative abilities allow them to care for and stimulate their baby and to cooperate co-parents in order to support infant development. The aim of this study was to explore how partners’ adult attachment styles match in order to ensure a higher quality of intuitive co-parental interaction. Two characteristics of adult attachment style have been investigated in this study: a) the couple average level of security in attachment; b) the difference in attachment security within the couple. One-hundred fifteen unmarried Lesbian Gay Heterosexuals couples were recruited across Italy and Belgium (Belgium N = 128; Italy N = 102; 64 Gay M=29.05, SD=7.22; 62 Lesbians M=25.98, SD=5.15; 96 Heterosexuals M=25.00, SD=4.08). We used the Security Scale of the Attachment Style Questionnaire (ASQ), to operationalize the construct of attachment matching. Two variables for the attachment matching within the couple members have been created: CAAS (Couple Average Attachment Security) and CDAS (Couple Difference Attachment Security). Co-parental intuitive abilities have been assessed via Prenatal Lausanne Trilogue Play paradigm. We performed a multiple regression analysis to test main effects, as well as the interaction, between CAAS and CDAS in predicting intuitive co-parenting. Results revealed a significant interaction between CAAS and CDAS. The interpretation of the interaction effect showed that CAAS has a negative non-significant effect when CDAS score is high but a positive marginally significant effect when CDAS is low. The mean of security between partners has an effect on co-parental intuitive behaviors only when the two partners have a similar level of attachment security. Results show how a similar pattern of attachment between the partners predict the quality of co-parental interactions irrespective of whether the parenting couple comprised two mothers, two fathers or a heterosexual mother and father.

P03.116

**BURNED OUT BY YOUR BABY? THE DUTCH VERSION OF THE PARENTAL BUROUT INVENTORY**

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Recently Roskam et al (2017) developed the parental burnout inventory (PBI) and confirmed that parents can be so exhausted by their parenting role that the term burnout seems appropriate. They

developed their French version of the PBI in a Belgium community based population of men and women and showed that the proportion of burnout and exhausted parents lies between 2 and 12%. The aim of the present study is to validate the Dutch translation of the Parental Burnout Inventory in a community based sample of working men and women in the Netherlands having an infant aged 0-3 years. We will link the PBI to the Maslach Burnout Inventory (professional burn out), to parental stress (assessed with the Parental Stress Questionnaire) and family friendly organisations. We will examine whether a tridimensional structure of the burnout syndrome (i.e., exhaustion, inefficacy, and depersonalization) also held in the Dutch parental context with parents having infants 0-3 years. Datacollection is ongoing and results will be presented and discussed at the conference. The study will gain more insight in factors related to exhaustion of parents with young children.

P03.117

### **PLANTING THE SEEDS OF UNDERSTANDING FOR PARENTS OF YOUNG CHILDREN WITH ASD**

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The CORE Program of Rivendell School, established in 2007, provides early intervention to preschool children with Autism. Through relationships with trusted adults, CORE builds an incremental understanding in these children of complex environments and the roles of the people they find within them. CORE has been very successful and is highly regarded in NYC. The aim of the presentation is to outline the challenges that early interventionists confront when they work to simultaneously enhance the social thinking of preschoolers with ASD and support parental expectations. The presentation defines how we use CORE key concepts and competencies to develop and support the understanding both children and parents enrolled in our program need to improve outcomes in their relationships. The parents of CORE children are distressed by their child's slow progress and remain traumatized by their child's diagnosis of autism. They need support to cope with the ongoing shock of losing their perfect baby and accommodating to the demands placed on them by this "other" child. The nature of their child's diagnosis demands nurture of that child and her family. At CORE we work to plant the seeds of understanding with parents after the devastation of receiving their child's diagnosis by giving parents the KEY CONCEPTS their children must develop to connect them to the social world and linking those findings to parental perceptions. In some cases we see immediate growth, but in others understanding develops later.

P03.118

### **PRESCHOOL GIRLS WITH EXTERNALIZING BEHAVIOR PROBLEMS: THE FUNCTION OF MATERNAL AND PATERNAL CHILD-REARING PRACTICES**

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Externalizing behavior in children are characterized by aggressiveness, impulsiveness and disruptive behaviors (Achenbach, 1991). Snyder et al. (2012) revealed that some externalized behaviors are more present in girls, and include lying, hiding something harmful and keeping secrets. However new investigations have been suggested regarding these manifestations in girls (Paula et al., 2014). Furthermore, studies have suggested strong associations between coercive parental child-rearing practices and externalizing behavior problems (Mondin, 2008; Pacheco, 2004). Two families (mothers and fathers) with two preschool daughters with clinical scores in the Child Behavior Checklist (Achenbach, 1999) for externalizing behavior problems. Parents responded to the Interview of Child-rearing Parenting Practices (Alverenga & Piccinini, 2009) that investigates child-rearing practices. A qualitative content analysis was used to evaluate the interviews based on

categories derivated from literature. When the dynamics parent-child interaction was investigated, each dyad (mother-child; father-child) took part in a free play interaction section of 20 minutes, half for each dyad (Piccinini et al., 2000). In one family, the girl presented more veiled behaviors; the mother used more coercive child-rearing practices, involving verbal punishment (42,8%) unlike the father, who used more inductive child-rearing practices involving explain/talk (19,2%). In the other family, the girl presented more ostensive behaviors; the mother used more inductive child-rearing practices involving explain/talk (27,6%); and the father used more inductive child-rearing practices involving facilitative attitude (32,6%). Both veiled and ostensive behaviors were shown by the girls with externalizing behavior problems. Likewise, corroborating the literature, coercive practices were revealed, especially in the family that the daughter reproduced more veiled behaviors. Moreover, inductive practices were predominant in one family, what may indicate that the manifestation of externalizing behaviors could be reinforced by the malfunction of these practices (Petterson et al., 1992).

P03.119

#### **PRETERM BIRTH: PARENTING AND CHILD DEVELOPMENT**

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Preterm birth represents a potentially traumatic event that involves infants and parents. The major advances in perinatology and neonatology have determined a significant increase of survival rate in premature birth, but the comorbidity of physical behavioral and mental issues is very high in premature babies. The premature birth is a dramatic event that overwhelms parents in an emotional turbine of fear, anxiety and distress. In case of premature birth, mother's fears and sense of frustration might determine a sense of incompetence in the parental role that could induce her to be alienated from experience of motherhood. The aim of this study was to evaluate at the time of birth and follow-up of 8-13 months of correct age, the prevalence of maternal depression and anxiety also investigating the psychomotor development of children. The sample consisted of premature children admitted to NICU (EG $\leq$ 37 w) and their mothers. At the time of birth and at 8-13 months of corrected age, mothers completed the EPDS and STAI (Y1-Y2). Infant levels of development were assessed, at follow-up, through the Griffiths Mental Development Scales. The results showed a significant reduction of maternal symptoms (anxiety and depression) at the time of follow-up. However, about 38% of mothers of sample continued to manifest at follow-up a high risk of developing anxiety and depression symptoms. A relation emerged among maternal anxiety and baby's development: higher levels of maternal anxiety predicted lower development quotients in the child, particularly with regard to the Hearing-Language Scale ( $p = .041$ ). Furthermore, children with lower Hearing-Language Quotients have significantly more anxious mothers compared to children with standard Hearing-Language Quotients ( $p = 0.35$ ). The results confirmed the impact of prematurity on maternal affective state and on infant development. A timely and supportive interventions could be useful to preventing future problems in both mothers and child.

P03.120

#### **THE CHALLENGE "KINDERGARTEN" - TWO CASES OF CHILDREN WITH AUTISM SPECTRUM DISORDER AND THEIR PARENTS**

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The transition from family to kindergarten is a major step in the life of all children with and without Autism Spectrum Disorder (ASD). It is often difficult for parents of children with ASD to decide between inclusion in public or private school or special education programs for kindergarten. A good strategy is to select the type of education depending on child's developmental needs and the educational resources available in their local area. Often parents of children with ASD share expectations that attending kindergarten is going to substantially improve their child's functioning - "communicate with others", "look and learn from them", "be like the others". This topic usually emerges during consulting sessions and poses important questions - Is the child ready? Are parents ready?, When, where and how to happen?, What are the benefits or disadvantages? We present two cases of a girl and a boy (3,6 years) with ASD, patients of the Child Psychiatric Clinic "St. Nikolas", and their experience in kindergarten. We discuss how these parents manage the process of integration in kindergarten and how their beliefs, attitudes, and fears reflect upon it.

P03.121

### **DISCOVERING THE GHOSTS AND PUTTING THEM TO REST: THERAPY WITH A FIVE YEAR OLD AND HIS PARENTS**

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In her paper Ghosts in the Nursery (1975) Selma Fraiberg brought to our awareness the effects of unrecognized, unresolved elements of the parental past that impact parenting. Therapy with Romeo and his parents allowed for awareness of previously unremembered affects in loving parents who were enabled for the first time to recognize their child's suffering. Romeo's parents requested consultation after his first kindergarten class where he had been fearful and cried on being separated from his parents. An intelligent, verbal child with well developed play skills, Romeo's expressed wish was to always stay at home with his mother. Play therapy sessions began in which Romeo quickly displayed anxiety and underlying anger. Themes included dead and missing siblings and ambivalence about being an only child. Both parents had experienced deprivation and/or abusive relationships with their own parents and losses related to infertility and aging. Enabling the parents to develop a narrative recognizing their own losses and sharing it with Romeo was key to the evolution of this therapeutic process. Thinking about "ghosts in the nursery" provided a theoretical framework to address the multiple factors affecting this boy and his family. Excerpts from play sessions as well as parent/family meetings will be used to illustrate the content and process of the therapy.

P03.122

### **CHILD DEVELOPMENT, PARENTING AND PRIMARY HEALTH CARE ROLE: PARENTS' AND FAMILY PHYSICIANS' PERSPECTIVES.**

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Current scientific and social progress has allowed the knowledge of child development, looking at a child as a Person. The Touchpoints model has a significant contribution in a human development and intervention perspective: dynamic, anticipatory, relational, collaborative and inclusive. However, child health services remain poorly aimed to children and families, often relying on a pathological model, making them not entirely effective in contributing to parental satisfaction and healthy family dynamics. Literature shows limitations in the quality of care in child development areas, especially regarding the difference between recommended care and the one actually received. Qualitative study involving two groups of participants: P and FP involved in maternal and child consultation in PHC. Multiple focus group technique is used. A script was designed specifically to explore "parenting experience and familiar wellbeing" and the "maternal and child consultation model in PHC". Each focus group will have six to eight participants, living in the north of Portugal, recruited using a snowball sampling technique. Focus group will be recorded and later entirely transcribed. Data will be analyzed based on a semi-inductive procedure using NVivo© software. Differences and complementarities between the two participant groups will be presented. Results will be discussed taking into account the Touchpoints model and the concepts of parental competence and family wellbeing, in the light of the 2013 National Infant and Juvenile Health Program from the Portuguese Health Authority.

P03.123

### **MATERNAL AND PATERNAL CHILD-REARING PRACTICES AND PRESCHOOL CHILDREN WITH EXTERNALIZING BEHAVIOR PROBLEMS**

**Sebben S.\*, Bortolini M.**

*Universidade Federal do Rio Grande do Sul ~ Porto Alegre ~ Brazil*

Externalizing behavior problems in pre-schools are associated with parental child-rearing practices (Mondin, 2008). Parental child-rearing practices are strategies that parents adopt to manage children's behaviors, and can be classified as inductive, that aims at describing to the child the consequences of his behavior; or coercive, in which behavior control is through punitive reactions (Hoffman, 1975). The coercive child-rearing practices represent the main predictors of externalizing behavior manifestations (Karreman et al., 2010). This study investigated maternal and paternal child-rearing practices of preschool children with externalizing behavior problems. Based on the literature, it was expected that parents would report more coercive child-rearing practices than inductive ones. Six families took part in the study, whose children (two girls and four boys), presented clinical scores in the Child Behavior Checklist ½-5 (CBCL, Achenbach, 1991). Parents answered the CBCL and the Interview of child-rearing parental practices (Alvarenga & Piccinini, 2004). A qualitative content analysis was used to evaluate parental reports based on categories derived from literature. The results reveal that in one family, coercive child-rearing practices were more frequently reported, both by the mother (63,1%) and the father (45,4%); in another one, while the mother reported more coercive child-rearing practices (49,9%), the father reported more inductive ones (47,8%). Finally in four families, inductive practices were reported by both mothers and fathers (63,4% and 66,6%; 48,4% and 72,2%; 47,4% and 54,3%; 67% and 56,3%, respectively). Hence, only two cases corroborate the literature about the association between coercive child-rearing practices and externalizing behavior in preschoolers (Karreman et al., 2010). Contrary to expected, in four cases inductive child-rearing practices were frequently reported by both parents. This last finding may be explained by the fact that parents were not employing adequately inductive child-rearing practices, or that it was not functional towards the children's externalizing behaviors (Petterson et al., 1992).

P03.124

## **A LITERATURE REVIEW OF FACTORS RELATED TO BREASTFEEDING IN JAPAN**

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Although before giving birth, 98% of mothers in Japan express a desire to breastfeed, in reality, only 42.4% of them breastfeed exclusively at one month after birth. The objective of this study was to elucidate through a literature review, nursing practice in Japan and its future challenges pertaining to factors related to breastfeeding up to one month after birth. Searches were conducted in the databases Iqaku Chuo Zasshi and CiNii using the following keywords: breast milk, breastfeeding, breast milk nutrients, factors, and agents. The current paper reviews 27 studies published between 2007 and 2017. These were summarized and categorized based on the study objective, and factors related to breastfeeding were identified in each category. Factors related to breastfeeding regarding term infants, infants in the NICU, and milk expression were extracted from the literature. For both term infants and infants in the NICU, three factors—maternal factors, neonatal factors, and breastfeeding care—were related to breastfeeding. For maternal factors, different factors were identified in the pregnancy, delivery, and postnatal periods, depending on maternal health. For neonatal factors, postnatal course influenced breastfeeding, depending on neonatal health. Childcare support for term infants, as well as treatment and care in the NICU and milk expression for infants in the NICU, were additional related factors. For infants in the NICU, milk expression is necessary due to the forced separation between mother and child immediately after birth. In contrast to term infants, infants in the NICU require time to develop under treatment and care in the NICU before they can be directly breastfed. The study results suggest that it is critical to understand the effects of each factor related to breastfeeding, while providing continuous support to the mother from pregnancy through the delivery and postnatal periods.

P03.125

## **ADOLESCENT MOTHERS LIVING WITH HIV: UNDERSTANDING THE MOTHERHOOD EXPERIENCE THROUGH DANIEL STERN'S "MOTHERHOOD CONSTELLATION" PERSPECTIVE**

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The experience of adolescent motherhood in the presence of HIV infection is still a topic poorly addressed in the scientific literature. The Daniel Stern's perspective of "Motherhood Constellation" is a rich theoretical tool to analyse the personal and subjective aspects of motherhood experience and has not been used to understand adolescent mothers experiences. The aim of the present study was to examine, among adolescent HIV+ mothers, the themes of the Motherhood Constellation proposed by Stern (1977): Life-growth, Primary relatedness, Support matrix and Identity reorganization. Nine HIV+ mothers (aged from 16 to 21 years) participated in the study. They were recruited from public health services in Porto Alegre, RS, Brazil, and were all of low socioeconomic status. A semi-structured interview was carried out and a qualitative content analysis was performed. This analysis demonstrated the mothers' concern about their babies' health, fear of infect them and anxiety about the possible positive diagnosis for HIV. The presence of HIV infection was verified to be a great challenge to adolescent mothers, although they also described positive feelings related to motherhood. It was also found a good social support network, especially family support, which helped these mothers to be responsible by babies' care. The Life-growth theme was emphasized, because maternal feelings of children protection seemed intensified among these HIV+ young mothers, due to the possibility of vertical transmission of HIV

since pregnancy. These results highlight the relevance of providing psychological support for HIV+ mothers during the pregnancy period and the first months of a baby's life.

P03.126

**AN EVALUATION OF THE NOBODY'S PERFECT PARENTING PROGRAM FOR JAPANESE MOTHERS WITH PROBLEMS OF CHILDCARE DIFFICULTY OR CHILD MALTREATMENT**

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Aims of the study is to investigate whether the Nobody' Perfect Parenting program is effective in improving parental psychosocial wellbeing for Japanese mothers with problems of childcare difficulty or child maltreatment. Introduction: Since the latter half of 1990s, the number of mothers with problems of childcare difficulty or child maltreatment have increased. Group-based parenting programs for mothers with those problems have not been implemented so far. Material and Methods: A pretest, posttest design with an equivalent comparison group was employed. Attendees from 6 Nobody' Perfect groups were recruited to participate in the study and those who came to "mother and child salon" of a public institution were recruited to serve as the comparison group. The questionnaire consisted of Tool to Measurement Parenting self-efficacy (TOPSE), Beck Depression Inventory(BDI) and so on. Results: 4 subscale scores of TOPSE and BDI score of the intervention group(n=38)improved significantly from the pretest to the posttest respectively. By contrast, there was no significant improvement or significant becoming worse in TOPSE scores and BDI score in the comparison group(n=38). Mothers' Psychological changes(e.g., I began to think about how I got so badly after getting angry) and parenting skills and ideas(e.g. coping with irritation)be obtained by qualitative analysis for mothers' open-ended respons. Conclusions: The Nobody's Perfect Parenting Program improves the parental self-efficacy and the depression tendency of Japanese mothers with problems of childcare difficulty or child maltreatment.

P03.127

**ANALYSING THE EXPERIENCE OF MOTHERHOOD AMONG ADOLESCENTS LIVING WITH HIV**

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Adolescent motherhood is considered a condition of vulnerability that can be further complicated by the presence of HIV infection, but little is known about how adolescent mothers experience this process. The aim of this study was to analyse the experience of motherhood among adolescents living with HIV. Seven mothers (15-21 years) recruited in specialized services in Porto Alegre/Brazil, whose babies' ages ranged from four to six months, were interviewed. Interviews were tape-recorded and transcribed verbatim, and analyze through a qualitative content analysis. The analysis of the interviews revealed a positive vision of motherhood, related to satisfaction with the maternal role and personal fulfilment. Pregnancy and motherhood served to these adolescents as an encouragement for self-care. The mothers' difficulties were related to HIV and to the repercussions of this clinical condition, especially feelings of frustration and incompleteness of motherhood on the impossibility of breastfeeding, as well as fear facing the risk of MTCT. Future research of longitudinal design and with larger samples will be important to extend the knowledge of the specificities of this experience over time for young people of different ages and social backgrounds.

P03.128

### **INFORMATION AND PEER SUPPORT FOR DIVORCED PARENTS**

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*The Federation of Mother and child homes and shelters ~ Helsinki ~ Finland*

At Finland, 40.000 children face parents divorce every year. Divorce is a risk for child to lose relationship to the parent with whom child doesn't live. A child has the right to the get care from both parents, also after the divorce. Even though your ex-spouse isn't longer your companion, to the child he or she is still unique as a parent. The parents must be able to cooperate and support their child in the new family situation. It is vital that parents get help to understand the situation from child points of view. The federation of Mother and child homes and shelters have developed group models to work with parents during or after divorce. These support groups are led by professionals, but peer support is also used. These support groups have been held over 10 years and there are found from 20 different cities at Finland. Eroneuvo event (divorce advice) service is intended for parents who are considering or have already divorced. The Vanhemman neuvo (parents' council) is a peer support group the helps parents with post-divorce parenting issues. From these groups parents receive information and peer support for matters related to divorcing and how to support the child and do co-parenting. From the collected feedback, group members tell, that they feel themselves relieved and talking with others helps to survive. Group members learn to cooperate with the other parent and to see the best interest of the child. Parents would highly recommend these groups for other parents. When parent is facing divorce, and all the emotions that it brings along, can the child easily be forgotten. To help children, we must help parents to understand, that a relationship can end - parenthood cannot.

P03.129

### **PARENT CORE BELIEFS OF THE SELF AND COPING STRATEGIES PREDICT WELL-BEING**

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Core beliefs define the ways we make judgments of self and others, with implications for well-being and adaptive coping strategies: Negative appraisals are associated with maladaptive coping and poor well-being outcomes including depression and anxiety. Core beliefs are an important construct in responses to social stress, as described by Beck's Cognitive Triad of Depression, which provides a useful explanation for individual's stress management and emotional reactions. The current study aims to address parent well-being, via core beliefs of themselves and others, and maladaptive coping strategies. Participants (n=188, 53% male,  $\mu=32.41$  years), reported on their children under two years old (59% male,  $\mu=14.66$  months). Participants of children younger than 2 completed an online survey recruited through MTurk. Participants completed an anonymous survey about background demographics, and a survey set on emotion and coping (i.e., Brief Core Schema Scales, Warwick-Edinburgh Mental Well-being Scale, and COPE Inventory). Pearson's correlations revealed significant relationships between WEMWBS and BCSS-Self ( $r=.324$ ,  $p<.01$ ), between WEMWBS and COPE-positive growth ( $r=.56$ ,  $p<.01$ ), and between WEMWBS and COPE-active coping ( $r=.494$ ,  $p<.01$ ). A stepwise regression examined well-being as predicted by BCSS-Self, COPE-active coping, and COPE-positive growth. Results indicated that the three predictors explained 39% of the variance ( $R^2=.39$ ,  $F=7.727(1,178)=$ ,  $p<.01$ ), such that well-being was significantly predicted by positive growth ( $\beta=.382$ ,  $p<.01$ ), active coping ( $\beta=.256$ ,  $p<.01$ ), and core beliefs of self ( $\beta=.169$ ,  $p<.01$ ). Parents using active coping and positive growth coping strategies may report more positive assumptions of themselves and thus report increased well-being overall, deterring negative appraisals and coping strategies. This presentation offers practice implications for addressing parents' maladaptive coping

strategies using Beck's theory which asserts a linkage between negative views of self, the world, and the future and subsequent impacts on coping and well-being. Recommendations for practitioners are offered.

P03.130

### **PREVALENCE AND PATTERNS OF REMOVAL OF CHILDREN FROM PARENTS WITHIN A GLAGOW ALCOHOL AND DRUG RECOVERY SERVICE**

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Parents with addiction issues are more likely to have children removed from their care. Their children are at increased risk of exposure to aversive childhood experiences. However, it is difficult to obtain a clear picture of the number of parents and children affected by parental substance use. To examine 1. The prevalence of parents who have had children removed from their care, 2. The patterns of removal of children, 3. The associations between removal and substance use, mental health difficulties and suicide attempts. Data (n=736) were collected from electronic records and discussions with care managers. 175 parents had children removed from their care (23.8% of the total sample and 37.9% of the parent sample). For females, 111 (44.4% of the female sample and 56.6% of female parents) had a child removed. While 48 men (9.9% of the male sample and 18% of male parents) had experienced removal. 108 parents (23.4%) had one episode of removal, 9 (1.9%) had two episodes where one involved a sibling group and 26 (5.6%) experienced multiple individual removals. For females, it was 73 (37.2%), 5 (2.6%) and 24 (12.2%) and men it was 35 (13.2%), 4 (1.5%) and 2 (0.8%) respectively. Drug use or drug and alcohol use were more frequent in parents who had children removed when compared with parents who had care of their children and non-parents. Mental health difficulties and suicide attempts were more common in parents who have experienced more than one episode of removal. A significant minority of parents within the alcohol and drug recovery service have had children removed. However, women who are mothers and have addiction issues are more likely to have their children removed than men. Services should be aware of the additional issues likely to present for women who are mothers with addiction issues.

P03.131

### **READINESS FOR PARENTHOOD 1: PRIMIGRAVIDA COUPLES' RESPONSE SIMILARITY TO THE IFEEL PICTURES (JIFP) AND READINESS FOR PARENTHOOD**

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Since the time of Deutsch, H., pregnancy has been regarded as a "state of crisis." To primigravida couples, readiness for parenthood is an important factor for welcoming their baby, as well as a mother's relationship with her partner (Okayama and Takahashi, 2002). This study examined a couple's responses to the babies' photos of facial expressions, applying the Japanese IFEEL Pictures, to identify the similarity of responses between a couple, as well as that of other personality variables. Materials: 1) The Japanese IFEEL Pictures (JIFP): 30 photos of babies' facial expressions; 2) Relationship Assessment Category Sheets; 3) Questionnaires regarding feelings toward the child, empathy, self-esteem, identity, depression and parent-child relationship. Participants: 26 couples with expectant mothers. Procedures: The participants were asked to describe what the infants in the JIFP might be feeling. They were also asked to complete the questionnaires. The JIFP responses, coded according to the Relationship Assessment Category, revealed a significant correlation

between the couple's reading of babies' facial expressions in the categories of Basic Emotions (BE), Physiological States (PE), Simple Description of Pictures (SD) and Rejection (R). However, no significant correlation was seen between the couple's scores in the questionnaire survey. In other words, no similarity was seen between the couples along the scales that identify the more static character variables. However, as pregnancy progressed, couples tended to become similar in terms of characteristics that are liable to fluctuate, such as the ways of reading/identifying infants' facial expressions. The results suggested that readiness for parenthood start with reading and interpreting a baby's basic emotions and states.

P03.132

### **THE "IRREVERSIBLE TRIANGLE" - A TOOL TO HELP PARENTS AFTER DIVORCE**

**Hietanen P.\***

*The Federation of Mother and child homes and shelters ~ Helsinki ~ Finland*

It's important for a divorcee to process the divorce to be able to let go of the intimate relationship. To divorcee and for the sake of child, it's necessary to understand the difference between the relationship that ends and parenthood that continues. After the divorce, child is the bond between parents and parents should learn a new way to cooperate as parents. Cooperative parenting takes a lot of effort and flexibility for the parents to make joint custody work well. When working with divorced parents, professionals need simple ways to explain the difference between broken relationship and parenthood. The Federation of Mother and child homes and Shelters has invented a simple tool to use when working with divorced parents. This "Irreversible triangle" is based on relationships between parents and between the child and parent. It's a way to picture the intimate relationship and parenthood after the divorce and what is the difference between these two things. "Irreversible triangle" is used to help parents and professionals to understand, what happens if child loses relationship to the other parent or if parents co-parenting doesn't work well. The "Irreversible triangle" can be used in peer support groups, counseling and when giving information about the parenthood after the divorce. By helping the parents to understand, the emotions they are going through during the divorce process and to see, what they can solve by divorce and what not, is important. As professionals, we should help the parents to see the significance and value of both parents to the child and try to support and protect the relationship between parents. The "Irreversible triangle" is easy and simple to use as a tool, when you are working with families and parents, that are divorced or going through a divorce.

P03.133

### **THE PREGNANT BRAIN: NEURAL ACTIVITY, MATERNAL-FETAL ATTACHMENT, AND POSTPARTUM REFLECTIVE FUNCTIONING**

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Accumulating research suggests that pregnancy is an important period of psychological and neurophysiological re-organization for expectant mothers – setting the foundation for the quality of the mother-infant relationship postpartum. Few studies have examined the prenatal brain, but such research could provide important insights into potential disruptions to the dyadic relationship prior to birth, including impaired reflective functioning. We examined the prenatal brain using electroencephalography (EEG) and measured maternal-fetal attachment (MFA) during pregnancy, and then assessed whether these measures predicted parental reflective functioning at 3-months postpartum. Using EEG, we measured frontal alpha asymmetry in twenty-five women in their third

trimester of pregnancy. Frontal alpha asymmetry has been widely studied as a neural marker of motivational processes. Expectant mothers also completed a measure of MFA. At 3-months postpartum, women completed a self-report measure of parental reflective functioning. We found that MFA mediated the relationship between prenatal frontal alpha asymmetry and postpartum reflective functioning. Specifically, during pregnancy, lower levels of frontal alpha asymmetry were associated with higher levels of MFA, and greater ability in recognizing and understanding infant's mental states at 3-months postpartum. Prenatal neural activity was associated with postpartum reflective functioning through levels of MFA. Future work will extend these findings to examine whether prenatal neural activity and MFA are also associated with postpartum caregiving behavior and child developmental outcomes.

P03.134

### **THE ROLE OF PARENTAL DEPRESSION IN FAMILY EXPRESSIVENESS ACROSS THE TRANSITION TO PARENTHOOD**

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Decades of research highlight the detrimental impact of maternal depression on child and family functioning (Downey & Coyne, 1990; Reupert et al., 2015), yet it is unclear how maternal depression affects families' emotional expressiveness. Even less is known about the consequences of prenatal parental— particularly paternal— depression. The present study aimed to explore whether emotional expressiveness in families with prenatal and postnatal parental depression differed from expressiveness in nondepressed families across the transition to parenthood. Twenty-six pregnant couples at risk for postpartum depression were observed during the Prenatal Lausanne Trilogue Play (PLTP, Carneira, 2006) and the 3-months LTP (Fivaz-Depeursinge et al., 1999). Expressiveness was coded for whole families and for overall expressiveness of mothers, fathers, and infants. Parents' prenatal and 3-months depression was assessed with the CES-D (Radloff, 1977). ANOVAs indicated that families with depressed parents (CES-D scores  $\geq 16$ ) differed significantly in their expressiveness— especially during postpartum play— from families without depressed parents. Families with prenatally depressed mothers expressed overall fewer positive and more frequent and intense negative emotions during postpartum play compared to nondepressed families. Infants with prenatally depressed mothers were overall more expressive, though they expressed fewer positive emotions. Families with prenatal paternal depression expressed a greater range of emotions during postpartum play compared to families without paternal depression and mothers expressed more negative emotions towards spouses compared to mothers without prenatally depressed spouses. Families with maternal postpartum depression expressed a greater range of emotions and evidenced fewer maternal positive expressions and more infant negative expressions at 3 months. Only one significant difference between depressed and nondepressed families emerged for prenatal expressiveness— depressed fathers were more expressive towards partners and the doll symbolizing their child compared to nondepressed fathers. Findings underscore the importance of including fathers' prenatal depression in assessments of child and family risk factors.

P03.135

### **TRANSITIONING TO PARENTHOOD: NEURAL ACTIVITY, PARENTAL-FETAL BONDING, PARENTAL MENTALIZING, AND PARENTAL WELLBEING POSTPARTUM**

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Introduction: Accumulating research suggests that pregnancy is an important period of psychological and neurophysiological re-organization for expectant parents – setting the foundation for both the quality of the parent-infant relationship and parents’ wellbeing postpartum. However, little is known about mechanisms of influence and how these important constructs might relate to one another. Aim: The aim of the current symposium is to examine the developmental course of new parents transitioning to parenthood through the lens of parent-fetus bonding, parental attachment representations, coparenting, and neural brain activity to predict parents’ mentalizing capacities, and their wellbeing (depression, bonding to infant, and stress) up to 18 months of age. The symposium focuses on the importance of parents’ prenatal attachment to their infant, or bonding, and what might predict parents’ ability to mentalize their infant. Method and materials: Three studies, using varied methodologies—including EEG, novel computer tasks and self-reports—examined longitudinal aspects of transitioning to parenthood pertaining to parental bonding, parental attachment representations, coparenting, and stress, to predict parental mentalizing, depression, and stress as late as 18 months. Results and conclusions: The first study demonstrated that mothers’ prenatal neural activity associated with motivation predicted their postnatal parental mentalizing capacities, mediated by the quality and intensity of their bonding to fetus. The second study revealed new approaches to assessing prenatal bonding and how bonding predicts parental coparenting and wellbeing. The third study showed how prenatal parental attachment representations predict parental mentalizing, fully mediated by parental stress. These studies demonstrate that parents’ neural activity, representations, and attitudes, particularly in terms of bonding with the fetus—measured prenatally—illuminate parents’ adjustment to parenthood. The studies further identify important factors that can shape and impact parents’ ability to mentalize their child.

P03.136

### **USING REFLECTIVE FAMILY PLAY TO TREAT INFANCY-ONSET TRICHOTILLOMANIA**

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Trichotillomania (TTM), or Hair-Pulling Disorder, is known to occur throughout the lifespan, with some children presenting in infancy and the preschool years. In recent years, there has been growing interest in pediatric TTM. Little is known about the nature of trichotillomania in childhood; however, a recent descriptive study suggests that its presentation during infancy or the preschool years, termed very-early onset TTM, has unique features distinct from features noted later in childhood (1, 2). In terms of treatment, most reports recommend language-based interventions that are not feasible with preverbal children. In fact, the literature provides minimal guidance for those working with preverbal children who are engaging in hair-pulling behaviours. There have been some reports of successful dyadic and family-based treatments in this age group (3, 4). In one case report, videofeedback was successfully used to treat a very young child with TTM. Here we present a case report of a child with infancy-onset TTM that presented to mental health services at approximately age 18 months. Treatment was provided to the child and her family, using Reflective Family Play (RFP). This whole-family treatment modality uses the structure of the Lausanne Trilogue Play paradigm (LTP), and integrates elements of Watch, Wait & Wonder, an attachment-based treatment for one parent and child dyad. Case characteristics, the treatment process, and outcome will be presented. Future directions are discussed.

## Problems, symptoms and disorders of the infant

P03.137

### SEXUAL ABUSE INFLUENCES EMOTIONALITY BUT NOT THE PERCEPTION OF MOTHERHOOD OF IMPRISONED MOTHERS AND CHILDREN IN URUGUAY

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A large number of incarcerated women experienced early adversity, which may have long term consequences for their affective state and mothering. In Uruguay, mothers can live together with their children in prison until they are four years old. This study aimed to describe this population and to compare the levels of anxiety and depressive symptomatology, as well as the perception of mothering, between women who reported have been sexually abused in childhood and/or adolescence and those who did not. Seventeen women and their children from Unidad 9, Montevideo, participated in this study. Forty one percent of the mothers reported having been sexual abused during childhood and/or adolescence. These women exhibited significantly higher levels of anxiety (Anxiety Inventory-Trait) and depressive (EDPS) symptoms when compared to those who did not report this experience. The perception of their mothering (Childbearing Attitudes Questionnaire) did not differ between groups and values were similar to those reported in low-risk populations. These findings suggest that the close contact with the infant can override the negative effects of early traumatic experiences or high anxiety and depressive symptoms on the perception of mothering. In accordance, previous studies show that allowing mothers and infants being together in prison was sufficient for reducing the risk of insecure attachment. Even if we covered almost the entire population, this study has limitations due to the reduced number of women as well as the variability among them and should be considered as a first advance for the understanding of factors that affect the emotionality and mothering of this highly vulnerable population.

P03.138

### ANALYSIS OF EARLY CHILDHOOD EATING PROBLEMS IN AN OUTPATIENT CLINIC IN HUNGARY

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The Early Childhood Eating and Sleeping Disorders Clinic had been set up in January 2017 in a children's hospital. The majority of the families who visited the Clinic reported various eating problems. In this study we analyse the characteristics of the eating problems of the 91 children attending the Clinic in the first five months. We apply an individualized, multidisciplinary approach. The first appointment includes paediatric examination and history taking. The parameters of the eating problem are described based on parental reports. Further investigations are available to find possible medical causes, and psychosocial factors are often also assessed. The eating behaviour may be observed during non-structured video recording sessions. In the first five months, 108 infants and their families attended the Clinic. 82 of them presented with eating problems exclusively, 9 had both eating and sleeping difficulties, 14 had only sleeping problems. Of the 91 children with eating difficulties, the mean age at the first appointment was 21,7 ( $\pm 11,3$ ) months, 45 were boys, 46 were girls. 37 (40,7%) patients had failure to thrive. The most common symptoms were: refusal of new food (74,7%), not taking adequate type of food for his/her age (57,1%), need of distraction during mealtime (47,3%), not taking adequate amount of food (46,1%), refusal of previously accepted food

(38,5%), crying (23,1%), forced feeding (19,7%), dream feeding (17,8%). For distraction, parents reported the use of toys, television, tablet, mobile phone, eating tools. When presented a refused food, most common reactions were vomiting or possetting, spitting out food, gagging, making grimaces. 52 children had previous medical investigations related to the problem, we initiated further examinations in 56 cases. Our results emphasize that early childhood eating disorders have diverse presentation therefore they require a comprehensive individualized approach which integrates medical, psychosocial and developmental aspects.

P03.139

### **AUTISM SPECTRUM DISORDERS: DSM-5 VS DSM-IV DIAGNOSTIC CRITERIA**

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Introduction: The “Diagnostic and Statistical Manual of Mental Disorders – 5th ed. (DSM-5) diagnostic criteria for Autism Spectrum Disorders (ASD), with its dimensional approach, may be a framework to revise the epidemiology of ASD. The study explores the difference between DSM-IV and DSM-5 diagnostic criteria. The aim of the study is to examine the epidemiology of Autism Spectrum Disorders according to dimensional approach of DSM-5. Sample of 29 children with diagnosis of Autism; mean age: 6,7 years. DSM-IV diagnostic criteria: Pervasive Development Disorders 71%; PDD – NOS 4%; Asperger Syndrome 25%. Assessment: clinical examination; Autism Diagnostic Interview – Revised (ADI-R); Autism Diagnostic Observation Schedule-Second edition (ADOS-2). The same sample has been examined according to DSM-5 diagnostic criteria. The study has shown that 15% of the sample lost the autism diagnosis: 4 children Asperger and 1 PDD-NOS. However it is evident a increase of pragmatic communication disorder diagnosis. The diagnosis of ASD decreased significantly according to DSM-5 diagnostic criteria, dimensional approach.

P03.140

### **COMPARATIVE CASE STUDY OF 8-MONTH-OLD INFANTS WITH FEEDING DISORDER**

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Early childhood eating disorders have dissimilar presentation and require multidisciplinary, comprehensive, individualized approach which both interns medical and psychosocial aspects to be treated effectively. We demonstrate two cases of 8-month-old female infants with the symptoms of eating disorder and severe weight gain problems, while introducing the effectiveness of parent-infant consultations paralleled with adequate medical treatment. Rhapsodic intensity feeding difficulties since birth, nourishment refusal, body-wide rash and spitting included the main symptoms of the first infant. The second infant preferred exclusive breastfeeding, as she struggled with complementary, bottle- and spoon-feeding. During examination dystrophia, hypotonia, cow-milk protein allergy was detected in both infants. Despite of introducing adequate medical therapy the nutritional status of the infants didn't develop, therefore parent-infant consultations were started. Lack of maternal self-confidence triggered by compliance constraints, criticism raised by personal environment as well as disappointment was revealed in the background of the first infant's case. Mental support and increasing maternal confidence in feeding related activities were our main task during the consultations. In the case of the second infant the conflict generated by tight schedule due to the mother's diabetes and breastfeeding on cue was detected. Therefore, rearranging schedule and discussing feeding situations covered our key topics. Furthermore, we helped the mothers in both cases communicating their feelings and thoughts on the children's

health, therefore the nutritional status of the infants improved. Parent-infant consultation is a crucial supplementary method in severe cases parallel the medical treatment.

P03.141

### **EARLY TV VIEWING AND DELAYED LANGUAGE DEVELOPMENT IN TODDLERS AGED BETWEEN 18 AND 36 MONTHS**

**Sahli L.<sup>[1]</sup>, Bourgou S.<sup>[1]</sup>, Fakhfakh R.<sup>[2]</sup>, Ben Hamouda A.<sup>[1]</sup>, Hamza M.\*<sup>[4]</sup>, Charfi F.<sup>[4]</sup>, Skhiri H.<sup>[2]</sup>, Bouden A.<sup>[3]</sup>, Belhadj A.<sup>[4]</sup>**

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Television has become part of children's daily life. Some studies showed that screen viewing may provoke either positive or negative impact to children developments'. Examine the different modalities and the content of TV viewing in Tunisian children with delayed language development (DLD). Parents of Tunisian toddlers aged between 18 et 36 months visiting primary care centers and enrolled in nursery schools in 4 governments in the north of Tunisia, were asked to complete the tunisian dialectical adaptation of the MacArthur-Bates Communicative Development Inventories (CDI). This study was developed by the Child Psychiatry Department of Mongi Slim Hospital, (Tunis,Tunisia). All toddlers, with delayed language development according to CDI scores, were convened for clinical and psychiatric examination. A questionnaire evaluated the television-viewing among these toddlers. 333 parents have completed the questionnaire. 266 were included. 37 toddlers had delayed language development according to CDI scores. Eight with somatic or psychiatric disorder were excluded. 14 could not be reached. The average age in the language delayed group was 22 months with a sex ratio of 1,2 . All toddlers were exposed to TV since their first year of life. 72,7% started watching television at an age lower or equal to 8 months. 27,3% spent longer than 2 hours per day watching TV during the first half-year of life, 45,5% spent longer than 2 hours per day watching TV during the second half-year and 54,6% spent longer than 2 hours per day on TV during the third half-year of life. An arabic TV channel airing video clips for children 'Touyour Al Janna' was the most viewed channel (45.5%). These findings highlight the need to investigate the characteristics of TV viewing among toddlers with DLD.

P03.142

### **INVERSE ASSOCIATIONS BETWEEN CORD VITAMIN D AND ATTENTION DEFICIT HYPERACTIVITY DISORDER SYMPTOMS: A CHILD COHORT STUDY**

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The population prevalence of Attention Deficit hyperactivity disorder (ADHD) has raised exponentially during the last two decades. A multifactorial aetiology is suggested with a wide variety of environmental factors moderating a primary genetic susceptibility. In a population-based birth cohort, CBCL:1½-5 was returned from parents of 1,233 infants with mean age 2.7 (SD 0.6) years. Adjusted associations between cord 25(OH)D and CBCL-based ADHD problems were analysed by multiple regression. The median cord 25(OH)D was 44.1 (range: 1.5–127.1) nmol/L. Mean ADHD-problem score (range 0-12) was 2.7 (SD 2.1). In adjusted analyses, cord 25(OH)D levels >25 nmol/L and >30 nmol/L were associated with lower ADHD-problem scores compared to levels ≤25 nmol/L (p = 0.035) and ≤30 nmol/L (p = 0.043), respectively. The adjusted odds of scoring above the 90th

percentile on the CBCL-based ADHD-problem scale decreased by 11% per 10 nmol/L increase in cord 25(OH)D. An inverse association between cord 25(OH)D and ADHD symptoms in toddlers was found, suggesting a protective effect of prenatal vitamin D.

P03.143

**LEIKKI PICNIC IN UNIVERSITY HOSPITAL OF HELSINKI, FINLAND**

**Tuomimäki H.\*<sup>[1]</sup>, Peltonen T.<sup>[2]</sup>**

*<sup>[1]</sup>Helena Tuomimäki ~ Helsinki ~ Finland, <sup>[2]</sup>Teija Peltonen ~ Helsinki ~ Finland*

Our aim is to present a tube weaning intervention called Leikki picnic. The intervention is based on the tube weaning intervention treatment model called Play picnic, part of Notube programmes. It was developed in the Austrian University of Graz. Leikki picnic was started in Helsinki at May 2015. The aim is to increase oral consumption and to minimize anxiety and interaction disorders in eating situations in families whose child has a gastrostomy. Leikki picnic is neither linked to, developed nor approved by Notube. The poster will present tube weaning intervention which is a multi-professional, structured one-hour group session at hospital from Monday to Friday within 3 weeks twice a year. Intervention also includes parents' group meeting twice a week. The Children and parents participate in the group which is led by a psychiatric and a somatic nurses and a speech therapist. Children familiarizes freely with food with all their senses, on the floor level. The feeling of hunger is increased by decreasing and eventually stopping tube feeding within three days. During the sessions the group leaders act as role models for oral eating, support parents to understand more about child's emotions and behavior and create space for self-regulation of the child. Effectiveness of Leikki picnic is measured before and after the intervention by the BPPA questionnaire (Behavioral pediatrics feeding assessment). The questionnaire measures how parents experience the change in children's eating behavior and parents' feelings about them or strategies for dealing with these behaviors.

P03.144

**MEASURING BEHAVIOUR PROBLEMS IN ONE AND TWO YEAR OLDS USING AN INVESTIGATOR LED INTERVIEW: THE ADAPTED VERSION OF THE PARENTAL ACCOUNT OF CHILDREN'S SYMPTOMS.**

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Behaviour problems are thought to affect 5-10% of children aged 1-3 years. Externalising difficulties can continue into middle childhood and adolescence and have a pervasive impact on children's outcomes across the life course. Given this, robust evaluation of early intervention programmes is critical, yet there are few validated tools available that can accurately measure behaviour problems in very young children. Those instruments that are available are often reliant on parent-report questionnaires, which can be confounded by parents' expectations of improvements in behaviour, knowledge of age-related norms, and other reporting biases. This study examined the psychometric properties of an investigator-led, semi-structured interview measure of behaviour problems (an adapted version of the Preschool Parental Account of Childhood Symptoms; PPACS-A) in children aged 1-3 years. This study draws on data from the Healthy Start, Happy Start randomised controlled trial involving 300 families of young children (aged 1-3 years) at-risk of behaviour problems. Families were recruited from health care and community settings in the United Kingdom. Data on child behaviour was collected at baseline using the PPACS-A and the Child Behaviour Checklist (CBCL). The PPACS-A measures severity and frequency of problem behaviour across 11 areas. Analysis

included an exploration of the factor structure and concurrent validity of the PPACS-A. Preliminary findings from exploratory factor analysis revealed a three factor structure for the PPACS-A (disruptive behaviour, inattention and restlessness, and oppositionality). The PPACS-A total score showed moderate association with the CBCL total score ( $r = .40$ ) and externalising score ( $r = .49$ ). The findings provide preliminary support for the factor structure and concurrent validity of the PPACS-A in assessing behaviour problems in young children. Further psychometric assessment, such as determining the PPACS-A's predictive validity for later psychopathology, will allow for further conclusions to be drawn.

P03.145

### **PRESCHOOL CHILDREN REFERRED TO THE FAMILY AND INFANT PSYCHIATRY UNIT AT TAMPERE UNIVERSITY HOSPITAL – THE BEHAVIORAL AND EMOTIONAL SYMPTOMS AND THE DIAGNOSES OF THE CHILDREN**

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*Tampere University Hospital ~ Tampere ~ Finland*

The Family and infant psychiatry unit in Tampere University Hospital studies and treats children from infancy to six years with symptoms of behavioral and emotional disorders, difficulties of psychological development or severe difficulties in parent child interaction. The preschool child psychiatric team, who treats children four to six years of age, was founded in August 2014. The aim of the study was to explore preschool children who were referred to the preschool child psychiatric team, to explore the psychiatric evaluation process, behavioral and emotional symptoms of the children and the diagnoses of the children. The study will include 4-6-year-old children who were referred to the Family and infant psychiatry unit in Tampere University Hospital during 2015 -2016 (about 80 children). Diagnoses are based on clinical assessment, which includes family observation, clinical interviews of the child and the family, Child Behavior Checklist (CBCL) and play narratives. The data will be collected from the medical records of the children. This is still an ongoing study and the results will be presented later. Information on the evaluation process, the symptoms and the diagnoses of the children who have been treated in the preschool team is important in order to evaluate and develop the work of the team.

P03.146

### **PRESENTATION OF THE EARLY CHILDHOOD EATING AND SLEEPING DISORDERS CLINIC BY THE ANALYSIS OF THE FIRST 100 CASES**

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The Early Childhood Eating and Sleeping Disorders Clinic started operating in January 2017 in the Heim Pal Children's Hospital. It had been attended by 108 infants and families in the first five months. Our aim is to present the assessment and management process of the Clinic by the analysis of the data collected in this period. The diagnostic assessment is focused on the examination of the medical background first: there is a detailed paediatric examination and further investigations if necessary. Furthermore, we also look for the functional and other causes. The psychological diagnostic consultation is an important method for the assessment of the psychological background of these difficulties. The developmental psychologic examination provides assessment for children with developmental delay or special needs (motor and cognitive functions, fine motor abilities, speech, social and behavioural issues). Chewing and swallowing skills, sensory problems are examined by a speech-language pathologist. A dietitian is also included in the management process.

There is opportunity for non-structured observation and video recording of the feeding interaction. The assessment process and the documentation is determined by a pre-established concept developed by team members and represented on flowcharts. Of the 108 infants attending the Clinic, 82 patients (75.92%) presented with feeding problems solely. 9 (8.33%) had both eating and sleeping difficulties. Exclusively sleeping problems were seen in 14 cases (12.94%). Mean age was 20.7 months. Based on the child's symptoms, the following examinations were performed: paediatric specialist in 23.1%, developmental neurologic examination in 5.6%, psychological developmental examination in 11.1%, speech-language pathologist in 21.3%, dietitian in 22.2% and motor function assessment in 1.85% of the cases. The assessment and management of early childhood eating disorders requires multidisciplinary approach. This is integrated in the medical care of the newly set up outpatient clinic.

P03.147

### **REGULATION DISORDERS, RISK FACTORS IN CASE OF IMPAIRMENTS AND DIVERGENT DEVELOPMENT**

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The trauma of a disability and the divergent development during the first year affects deeply the everyday life of the mother-infant dyad and the family. The early relationship and attachment patterns might be seriously disturbed, roles might be unusual in the family, community activities, connections might also be changed. Our poster will demonstrate possible sources of risk factors affecting early relationship and attachment in cases of divergent development. Although regulation disorders in this stage are difficult to be exactly differentiated from organic symptoms, we assume that this life situation provokes emotional reactions and intervenes with alignment in such a way that might facilitate the occurrence of regulation disorders or aggravate them. Integrated parent – infant consultation is based on applied psychological models of early development and interactions, is embedded in theory of attachment, and affected by psychodynamic perspectives and modern developmental theories via considering societal, economical, and systemic aspects. During the intervention the consultant works with the family or the mother-infant dyad using video feedback techniques achieving the emotional, cognitive awareness of the mother/family to modify behavior in interactions. Resilience from the trauma originating in divergent development, impairment etc. lies in resources such as powerful relationships within the family, circle of relatives and friends, also professional support from early interventionists, medical workers alongside with integrated parent-infant consultants.

P03.148

### **TV VIEWING PRACTICES IN CHILDREN WITH DELAYED LANGUAGE DEVELOPMENT**

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TV viewing practices have to be explored in children with delayed language development (DLD). Describe TV viewing practices in Tunisian children with delayed language development. Parents of Tunisian toddlers aged between 18 and 36 months visiting primary care centers and enrolled in

nursery schools in 4 governments in the north of Tunisia, were asked to complete the tunisian dialectical adaptation of the MacArthur-Bates Communicative Development Inventories (CDI). This study was developed by the Child Psychiatry Department of Mongi Slim Hospital, (Tunis,Tunisia). Toddlers, with delayed language development (DLD) according to CDI scores, were convened for clinical and psychiatric examination. A questionnaire evaluated the TV viewing practices and the parental perceptions on television toward their child's development. 333 parents have completed the questionnaire. 266 were included. 37 toddlers had delayed language development according to CDI scores. 8 were excluded of the study because of somatic or psychiatric disorder after their examination. 14 could not be reached. The average age in the language delayed group was 22 months with a sex ratio of 1,2 . All toddlers were exposed to TV since their first year of life. 72,7% started watching television at an age lower or equal to 8 months. 36 ,4% of the children took their meals while watching television and 27,3% slept in front of the television. Only 9,1% watched TV alone. Among 45,5% of the children, there was no parent-child communication while watching television. Among those who communicated while watching TV, 60% communicated about the content of the programs viewed. 45,4% of the parents watched frequently the television. 45 ,5% of the parents believed that television is useful and yield benefits to children's developments. These findings highlight the need to investigate the characteristics of TV viewing of toddlers with delayed language development and also their parents'.

#### **Promotion and prevention in community context**

P03.149

#### **CLINICAL PRACTICE OF INFANTS AND TODDLERS FEEDING DIFFICULTIES AND DISORDERS IN THE CITY OF ESPOO, FINLAND**

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Feeding difficulties are common in infants and toddlers, up to 20-30 % of children under 5 years of age suffer feeding difficulties and 1-5 % of them have a feeding disorder. Problems in the feeding situations affect quickly the child-caregiver interaction in a negative way. In Finland over 99% of all the families attend maternity and child health clinics regularly in primary health care services. This service is free of charge for the family. Majority of the toddlers also attend day care and eat their meals there, hence feeding difficulties will often show there too. A clinical practice for infants and toddlers with feeding difficulties or disorders was built in a multi-professional group of primary health care workers. The aim was to provide help to children and their families fast enough, before the difficulties would proceed to disorders and would affect the child-caregiver interaction negatively. We also wanted to improve the knowledge of the primary health care workers and day care specialists about infants and toddlers feeding difficulties and disorders, and about how to help the children and their caregivers in their everyday life as fast as possible. We built a four level clinical practice. At the first level the nurse in child health clinic and/or the kindergarten teacher becomes aware of the problem and start to help the family together. If more assessment or help is needed we include family worker, nutritionist, speech or occupational therapists, family counseling psychologist or child psychiatrist to help the child and the family (second and third level). In the fourth level there is a possibility to consult or make a referral to specialized medical care for more intensive care with pediatrician, child neurologist or child psychiatrist if needed.

P03.150

**FACILITATING THE SYSTEMATIC INTEGRATION OF COPARENTING- CENTERED INFANT MENTAL HEALTH ACROSS DIVERSE POPULATIONS**

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*University of South Florida St. Petesrburg ~ St. Petersburg ~ Russian Federation*

This transformative, systems level strategy details a collaboration underway in Florida, USA in which a university-based Infant-Family Center is partnering with infant/toddler serving organizations across disciplines including: early care and education, home visiting, pediatric medical homes, child welfare, mental health and early intervention to alter the services landscape for children birth to three and their families. At the transformation's core is a trauma-informed infant-family mental health approach. The approach is innovative in systematically facilitating involvement of children's coparents, and providing family-level supports and services. Trauma-informed coparenting and family systems-centered training, consultation and services at the community and organizational levels are being undertaken to transform the manner in which families are supported in their efforts to parent optimally and support their child's early development. The framework draws upon evidence-based, infant-family mental health interventions including infant mental health consultation to address the needs of young children and families contending with intergenerational toxic stress and trauma. This report outlines how trauma-focused infant-family mental health strategies: advance community knowledge of and practices in addressing infant mental health; use IMH Consultation across infant and early childhood systems to lessen the impact of community stressors on the developing child and; buffer the impact of intergenerational trauma by creating awareness and adoption of infant-family mental health interventions. We detail first-year child and family outcomes being charted in this systems transformation effort, including: enhancements in child social-emotional development; improvements in family relationships and coparenting practices; and improvements in connections of families to supports available in communities.

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**IT'S MORE THAN SMALL TALK: IMPLICATIONS OF ADDRESSING CHILD AND MATERNAL HEALTH AND WELL-BEING IN PRIMARY CARE SETTINGS FOR HEALTHCARE SYSTEMS**

**Buchholz M.\*, Talmi A.**

*University of Colorado and Children's Hospital Colorado ~ Aurora ~ United States of America*

HS is an evidence-based early childhood integrated behavioral health model embedded into primary care settings. The goal of the program is to provide enhanced pediatric primary care for young children and their families through a relationship-based approach to pediatric primary care. HS specialists are paired with primary care providers to see young children and their families at all well-child checks and in home visits from birth through 3 years. This study describes differences in the developmental content addressed during primary care well-child visits in the first three years of life for families enrolled in the HealthySteps (HS) program compared to families who are not enrolled. Opportunities for averting costs to the health care system through implementation of HS will be described. A content analysis of the medical records of 100 families enrolled in HS and 100 demographically matched families not enrolled in the program was completed. The children in the sample are 85% publically or uninsured and 15% privately insured. Children are ethnically diverse (35% Hispanic, 65% not Hispanic). Comparisons of the content discussed during visits will be described. The four topics most commonly discussed during HS visits at a significantly higher rate than non-HS visits were: growth and development, safe sleep, feeding topics, and maternal mood. Results will demonstrate the role HS plays in enhancing pediatric primary care. Sustainability of the

HS program will be explored by applying a business case developed to capture potential costs averted when child and maternal health topics are addressed during routine care.

P03.152

**INTERDISCIPLINARY MENTAL HEALTH SERVICES FOR EXPECTING OR NEW MOTHERS AND THEIR FAMILIES; IMPLEMENTATION AT THE HEALTH CARE INSTITUTION OF SOUTH ICELANDIC**

**Gunnarsdottir A.G.\***

*The Health Care Institution of South Icelandic ~ Selfoss ~ Iceland*

The purpose of this quality project was to increase interdisciplinary cooperation between health professionals and to improve the effectivity of the service. Introduction: General health, social and emotional conditions of women during pregnancy and in the first months after birth, can affect the development of a child. Prevention, early detection and treatment have been recommended to be carried out in the Primary Health Care. The Health Care Institution of South Iceland has no formal interdisciplinary cooperation or workflow to deal with expecting and new mothers experiencing difficulties and their families. Working instructions, registration forms and procedures were developed to identify those mothers and families who needed increased services. In addition, guidelines from the Directorate of Health were followed and the criteria for references to other resources were used. Registration was coordinated in the SAGA (the medical record system). Results: The quality project began in June 2016 and is still ongoing. Thirty eight women had been screened with the DASS list during pregnancy by the end of 2016. Twelve (31%) had severe or very serious depression symptoms. Sixty nine women had a positive risk assessment in first health visitors visit. Thirty six women out of these 69 had a score of 9 or more on EPDS or 52,2%. Conclusion: The implementation has resulted in more focused supervision for vulnerable expecting and new mothers and their families. The cooperation of health professionals has increased and is more focused, so earlier references is made to appropriate resources.

P03.153

**THE BABY WEEK: PROMOTING EARLY CHILDHOOD WITH AND FOR THE COMMUNITY**

**Almeida C.\*, Correia P., Santos A.C., Baltazar I., Goulão L., Pereira F., Menino D.**

*Cova da Beira Hospital Center ~ Covilhã ~ Portugal*

The Brazilian psychiatrist Salvador Célia inaugurated the 1st Baby Week in Canela, Brazil, in the year 2000. This initiative, supported by Unicef Brazil, spread by several cities within Brazil and South America. Cova da Beira Hospital Center was the first European Baby Week and celebrates its 11th edition this year. It is an event held with and for the community, resulting from the partnership between child psychiatry and pediatric services, primary health care, schools and other local entities. Over the course of a week, various activities aimed at parents, educators, children and adolescents are developed with the objective of promoting early childhood, maternal and child care, affective and responsible parenting and alert to the low birth rates in the region. The Baby Week includes workshops for parents on childcare topics, basic life support courses, pedagogical play activities for children, exhibitions, child development screenings, and a scientific seminar where topics are presented by experts to the community. Throughout the various editions, current themes relevant to early childhood have been addressed, accompanying the scientific evolution that emphasize the importance of the first years of life for the person's healthy cognitive, emotional, social, motor and linguistic foundations. With this work, we intend to present the experience of 11 editions of Baby Week in our city, promoting early childhood. Baby Week is an example of good practice in promoting physical and mental health in early childhood, benefiting families, babies and all professionals who work together in close proximity to the population.

P03.154

### **UTILIZING FAITH-BASED LITERACY EVENTS TO BUILD COMMUNITY AND PROMOTE POSITIVE PARENTING**

**Jespersen J. \*, Singh R., Roblyer M., Morris A.**

*Oklahoma State University ~ Tulsa ~ United States of America*

A burgeoning body of research has established that positive and continued parent/caregiver-child interactions, such as talking, reading, and singing to children, contribute to better social emotional development, increase language and numerical literacy, prepare children for school, and result in higher academic achievement (Goddard Blythe, 2011; Massaro, 2017). "Talking is Teaching: Talk, Read, Sing" (TRS) is a nation-wide public awareness and action campaign in the U.S. that seeks to empower parents and caregivers and encourage them to interact with their children in ways that strengthen the parent-child relationship and build children's socio-emotional development, literacy skills, and school readiness. In Tulsa, Oklahoma, one component of the TRS campaign involves partnering with local churches to host monthly family reading nights. The events are comprised of a free communal meal, a book gifted to each family, information for parents about child development, and parent-child reading time during which a church leader or volunteer models dialogic reading of the book chosen for the event. Our poster will present data from a mixed-methods research study that evaluated the implementation, outcomes, and impact of this church-based family reading event. Our evaluation study involved a parent self-report survey (N = 173) conducted at churches hosting events regularly, and 4 focus groups (N = 24) with church leaders and caregivers attending the reading events. Results indicated a high level of satisfaction with the implementation of the program among the church leaders and parents/caregivers involved in the events, positive outcomes for children, and a significant impact of the program on the amount and quality of parent-child interactions. Strategies for scaling up and implementing this program elsewhere will be presented.

P03.155

### **WORKING OUT DADS**

**Williams L.A. \*, McDonald (o'Brien) J.**

*Tweddle Child & Family Health Service ~ Melbourne ~ Australia*

We know parents play a critical role in providing learning opportunities and secure relationships help shape their child's brain. Research has shown a fathers' caregiving and play sensitivity are equally as important as a mother's in shaping a toddlers security (Grossmann et al., 2002) and children with highly involved fathers experience positive outcomes in socio-emotional, behavioural and cognitive areas (Lamb & Tamis-leMonda, 2004). However there is a lack of early intervention and prevention programs for dads to support them with their own emotional and physical wellbeing and connect with their child to do the best they can. Working out Dads was written by Tweddle and men's group-work academic Andrew King. The innovative 6 week program combines 1 hour of facilitated discussion and 30 minutes of guided fitness and is facilitated by men after hours at a gym. The program connects dads to each other and services in the community, strengthens family relationships and importantly helps build solid foundations in relationships between dads their babies and young children. Fifty-seven dads have participated in a small pilot study and results have shown a significant reduction in depressive and stress symptoms, and increase in perceived parenting self-efficacy.

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**PROMOTION OF EARLY READING IN A POOR COUNTY OF CHINA - THE INVESTIGATION ABOUT BORN TO READ**

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We want to explore how much budget has been paid to vulnerable families on children's early reading. Background: Born to read plays a positive role in promoting attention, reading ability and interest, brain and mental development of infants. At present, the Chinese Government has invested big part of its budget in alleviating poverty in counties, focusing materialistic support, ignoring human capital. "How much budget has to be paid to vulnerable families on children's early reading?" that is what we want to explore. Method: 150 children aged 0-12 from each family in Chang Wu county were randomly selected as survey population, It was analyzed that characteristics and value connotation of born to read by design in questionnaire. Result: The number of books which the 150 families own: 28.8% have no book, 60% have less than 5 books; Less than 50% of the children began reading picture books within 1 year of age; 47% of the children read books for less than 30 minutes per day; 85.6% of the towns and villages have no public library, and none of a nurturing care books were in public libraries of towns. Conclusion: It is seriously insufficient to carry out infant early reading in poor towns of China, children read books late. Chinese Government investment on that is far less compared to the developed countries. It is suggested that Chinese Government should adjust the poverty alleviation policy that plays an active role in guiding the parent-child reading, protecting the reading rights of infants and promoting infant early reading.

P03.157

**SUPPORT FOR CHILDREN AFTER THE GREAT EAST JAPAN EARTHQUAKE: TRENDS AND CHARACTERISTICS IN CONSULTATIONS CONDUCTED BY THE SUPPORT OFFICE FOR CHILDREN AFFECTED BY THE DISASTER**

**Ichijo R.\*, Kato M.**

*TOHOKU UNIVERSITY ~ Sendai ~ Japan*

The Support Office for Children Affected by the 2011 Great East Japan Earthquake ("S-chil") at Tōhoku University's Graduate School of Education opened in September 2011. Since then, it has provided support for children and their parents who have lost loved ones and belongings to the disaster. In this presentation, we aim to clarify the trends and characteristics in the consultations by S-chil over the past five years. We analyzed 1175 consultation records over this five-year period. Consultations regarding physical and mental health were the most frequent. The number of consultations on childrearing and development demonstrated a downward trend, while the number of consultations on school relations and the home environment rose. The proportion of consultations with patients themselves also increased, including consultations with children. Around half of all consultations with children were related to school relations, and around 30% were related to physical and mental health. Among consultations with the relatives of patients, the most frequent were with mothers. Furthermore, out of all consultations with relatives, the most frequently identified patients were children in elementary and junior high school. The proportion of consultations regarding school relations was high for junior high school and senior high school students, and the proportion of consultations on childrearing and development was high for infants and elementary school students. The proportion of consultations regarding physical and mental

health was consistent across all age groups, except among infants. The results of this study showed that there was no clear decline in the need for consultations even six years after the disaster, that consultations with children are increasing, and that the contents of consultations have shifted away from the direct effects of the disaster towards secondary problems such as school relations and the home environment.

P03.158

**BABBLING BABIES: MOVING FROM AN IMPAIRMENT MODEL TOWARDS PROMOTION AND PREVENTION IN THE PRE-BIRTH TO 3 YEAR PERIOD OF DEVELOPMENT FOR SPEECH AND LANGUAGE THERAPISTS IN IRELAND**

**Walsh G.\***

*Young Knocknaheeny Area Based Childhood Programme ~ Cork ~ Ireland*

The Paediatric Speech and Language Therapists' role in Ireland is predominately impairment based in nature. Compelling scientific research exists on the integral role of the early parent-child relationship in facilitating early language and communication development. A limited framework exists regarding prevention and early intervention at a universal level. A paradigm shift is required to move impairment based practice to a model of promotion and prevention within an Infant Mental Health context. To advance the development of a universal model of prevention to support early language development, Young Knocknaheeny Area Based Childhood Programme has established Babbling Babies Clinics. Babbling Babies Clinics are scheduled for every baby's routine 7-9 month developmental health check-up. The Speech and Language Therapist provides accessible information on how the nature and quality of the parent -baby relationship grows their baby's communication skills. The Therapist models specific parent-child interaction strategies, such as attunement and serve and return activities which support communication, interaction and the relationship, while acknowledging the vital role parents contribute in enhancing their baby's development. Key opportunities exist to start the conversation about conversations with parents at this early stage of their baby's development. Babbling Babies Clinics offer a port of entry into other areas of the Infant Mental Health Services. Evaluation of Babbling Babies Clinics incorporates a qualitative research framework. Emerging results from this pioneering service highlight the critical need for a defined Universal Primary Care Service framework to be implemented within Ireland to reduce the focus of impairment as the only model of intervention.

P03.159

**BUILDING INFANT MENTAL HEALTH CAPACITY IN STATE SYSTEMS: A MULTI-FACETED APPROACH**  
**Woodlock K., Wechsler N.\***

*Ounce of Prevention Fund ~ Chicago Illinois ~ United States of America*

Describe process of cultivating public partnerships in order to build capacity for IMH consultants on behalf of service providers; identify competency-based professional development for consultants; discuss infusion of attachment approach into community-based services; and facilitate collegial learning through exchanges between attendees. The Ounce's work of building infant mental health capacity in home visiting and center-based programs includes an integrated cycle that is informed by ongoing evaluation and research, enhanced by advocacy, and impacts statewide and national policy. This workshop demonstrates the processes and lessons learned over 30 years of supporting the parent-child relationship with infant mental health strategies across diverse professional roles and settings in community based programs. It illustrates building sustainable systems with public and private partners in concert with advocates in an effort to build sustainable IMH professional development across multiple roles. It focuses on our approach of competency-based professional

development for IMH consultants positioned to support staff and programs. It explores approaches in perinatal services for new families, parent-child focused services for families in home visiting and in center-based programs. It offers approaches for families experiencing vulnerabilities that threaten the parent-child relationship due to trauma. It explores strategies for strengthening family engagement through an attachment approach in early care and education settings. It engages attendees in exchanging their own approaches to infusing IMH practices throughout community programs and into workforces not trained in clinical practices, in order to serve a consumer group of parents and families who have not sought clinical services.

P03.160

**DEALING WITH THE AFTERMATH OF THE EARTHQUAKE IN CENTRAL ITALY: EARLY INTERVENTION AND PSYCHOLOGICAL SUPPORT WITH EMDR THERAPY**

**Maslovacic G., Zaccagnino M.\*, Civilotti C.**

*EMDR Italy ~ Milano ~ Italy*

This presentation will describe the emergency response that EMDR Italy has been developing in the last months after the earthquake that hit central Italy, as well as data related to the effectiveness of the treatment. In the immediate aftermath of a natural mass disaster, such as an earthquake, people suffer the psychological impact and can develop specific mental health needs. Early surveys confirmed the rise in the incidence of post-traumatic stress disorder (PTSD) and depression, particularly among those who lived and worked in close proximity of the crisis. Those directly exposed to the event and those experiencing personal loss were found to be most at risk for developing symptoms. A specialized psychological support with EMDR treatment has proven to be effective in reducing stress reactions and helping the population to recover and resume normal life. EMDR interventions facilitate the reduction of risk factors for mental and physical health, reducing health expenditures and promoting wellbeing. It is important to consider the role of intervening and fostering recovery as a public mental health initiative, using evidence-based brief trauma-focused treatments, such as EMDR therapy.

P03.161

**DEVELOPMENT OF A COMMUNITY-BASED 0 - 8 EARLY INTERVENTION PROGRAM**

**Meisels S.\***

*University of Nebraska ~ Omaha ~ United States of America*

Located in the mid-sized city of Omaha, Nebraska, this program—known as the Superintendents' Early Childhood Plan—is the largest and most comprehensive birth – Grade 3 (age 8) intervention underway in the US. The program includes home visiting for 0 – 3; intensive preschool for 3- and 4-year olds; and aligned curriculum and practice from preschool – Grade 3. Our basic hypothesis is that persistent efforts in the early years will result in persistence of long term effects. Relying on community-based elementary schools as the “hub” or critical link between children, families, and community in the first eight years of life, this program is intended to reduce or eliminate race- and income-based achievement gaps of children living in poverty by using evidence-based models; evaluating their implementation and impact; and creating policies at the state and local levels that enhance child development. Our approach assumes a set of interlocking program initiatives based on national, evidence-based models that can be implemented with fidelity; evaluated both qualitatively and quantitatively; and make use of public and private resources to provide sustained support. The project leverages and improves existing capabilities in schools and community-based organizations by starting in infancy, creating child-focused, developmentally-oriented programs, and sustaining a comprehensive school- and community-based program across the first eight years

of life. More than 3500 children aged 0 - 8, 300 teachers, 12 schools, and six school districts are involved. All children live amid high concentrations of poverty. An implementation study is underway and a randomized impact study will begin by fall 2018. Initial qualitative and quantitative results concerning program effects will be presented. We expect our longitudinal results will show that comprehensive community-based efforts across the first eight years increase the likelihood that children living in poverty will experience both short and long term school success.

P03.162

### **EARLY LANGUAGE STIMULATION OF TODDLERS (1-3 YEARS) AIMS TO PROMOTE LITERACY IN 1ST AND 2ND GRADE**

**Aabrekk H.\***

*Intempo ~ Sandane ~ Norway*

Around 20% of Norwegian pupils read at the lower levels when graduating. Neuropsychology recommends early stimulation. This pilot study investigates the first experiences from a systematic and early stimulation of toddlers in a community context, aimed at promoting literacy in 1st and 2nd grade. The early language stimulation was a supplement to ordinary daycare. A systematic multi-modal and multisensory language-training program, the Bravo-game, was implemented. It was directed towards all toddlers in four communities for five years. It consisted of 4 x12 weeks of 10-15 minute sessions daily where the children were presented with a variety of motor skills, 550 concepts and the alphabet in written form, an illustrative picture, and tasting/smelling/touching the item/concept. Preschool teachers received some training. A three-question Teacher Questionnaire was administered to 9 schools and the teachers of 149 pupils in 1st and 2nd grade. An average of 7% of Norwegian 1st graders are phonetic readers, while 75% read at the middle and higher levels in 5th grade. Results from the teacher questionnaire showed that an average of 49% of the children in 1st grade and 90% of the pupils in 2nd grade were phonetic readers. 17% were multilingual pupils. In conclusion, compared to the national average, a larger group of pupils were phonetic readers in 1st and 2nd grade after receiving systematic early language stimulation in a community context. However, some carefulness in the interpretation of the results is warranted because this study did not have a control group.

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### **ENGAGING HARD-TO-REACH PARENTS CAN HELP INFANTS**

**Sorsa M.\*, Åstedt--Kurki P.**

*University of Tampere ~ Tampere ~ Finland*

Hard-to-reach parents may not consider themselves in need of help, whereas a need may be inevitable from a service perspective in order to help their infants. Many mothers with simultaneous mental ill-health and substance related problems issues resist entering care, or hide problems as long as possible in fear that their children may be taken into custody (Rosenbaum 1979; Angus et al 2013; Dolman et al 2013; Tsantefski et al 2015). Engaging hard-to-reach parents can help their infants, and thus more understanding is needed to develop inclusive services. The purpose of the study is to explore the barriers and possibilities for engagement in help-seeking of parents with simultaneous mental ill health and substance related problems. A qualitative multimethod approach was used. Data were collected stepwise via client and staff interviews and an ethnographic field study. Giorgi's phenomenological analysis was used for client data, conventional content analysis for staff data and Leininger's ethnographic method in the field study data analysis. The secondary data were synthesized with Noblit and Hares meta-ethnography. Engagement and barriers are co-created between the parents and staff. As the services have set boundaries to their focus, clients

with simultaneous mental ill health and substance related problems may be excluded from help. Engagement is possible if staff recognize and approve of their clients vulnerable past. Special interfaces and micro-moments are intertwined with client choices, and thus the clients either start inner growth or decide to let go. A multimethod approach is a possibility in studying complex life situations. Hard-to-reach parents need a sensitive, individualised and family-oriented approach, where staff use their expertise skills and humanity as tools to increase engagement.

P03.164

**POPULATION-BASED SYSTEM OF PARENTING SUPPORT TO IMPROVE PARENTING AND REDUCE THE PREVALENCE OF CHILD SOCIAL, EMOTIONAL, AND BEHAVIOURAL PROBLEMS: DIFFERENCES-IN-DIFFERENCES STUDY**

**Doyle O.\***

*University College Dublin ~ DUBLIN ~ Ireland*

Parenting behaviour has been identified as a significant determinant of child mental health. The majority of interventions that promote positive parenting target families with an identified risk; yet universal preventative programmes may serve to reduce the overall prevalence rate of mental health difficulties. The science of population-based approaches to parenting is new, with only two notable trials to date. The aim of this study is to contribute to this literature by examining the population impact of the roll-out of the Triple P Positive Parenting Programme in Ireland on the prevalence of child social, emotional, and behavioural problems and parenting outcomes. A quasi-experimental differences-in-differences method was used to compare two intervention (n=1,500) regions and two comparison (n=1,500) regions using a population survey administered in all regions before and after programme implementation. Child outcomes were measured using the Strengths and Difficulties Questionnaire and parent outcomes were measured using a range of parenting instruments. Children in the intervention sample experienced lower total difficulties, emotional symptoms, conduct problems and peer problems than children in the comparison sample, and they were less at risk of scoring within the borderline/abnormal range for total difficulties, emotional symptoms, conduct problems, and hyperactivity. There were also significant improvements in parenting including less parental psychological distress and use of inappropriate discipline, engaging in more positive parenting, reporting a positive family climate and a good relationship with the child, and exhibiting less inappropriate opinions on parenting and smacking. Testing for heterogeneity by child gender and maternal education, found that, in general, effects were greater for girls and children of more educated mothers. This study demonstrated that a universal parenting programme implemented at multiple levels using a partnership approach may be an effective population health approach to targeting child mental health and parenting.

P03.165

**THE SURVEY ON THE ROLE OF NURSERY NURSE**

**Tsuda A.\*, Kimura R.**

*Kanazawa University ~ Kanazawa ~ Japan*

In Japan, in order to address the diversifying concerns pertaining to childcare, such as child abuse and developmental disorders, the trend of nurse placement has been gradually increasing in nursery schools. However, there is a regional difference in the employment rate of nursery nurses. On the other hand, although support for children with developmental disorders in nursery schools is important, few studies have clarified nurses' practice in nurseries. The aim of this research was to clarify nursery nurses' perception of their role in caring for children with developmental disorders.

Subjects of the study were the nurses working at authorized nurseries. The survey was carried out using anonymous self-administered questionnaires in September-October 2010. Questionnaires were distributed to all nurseries in prefecture A after having obtained permission from municipalities. Survey contents included: background of the nursery nurse, presence or absence of experience of caring for children with developmental disorders and content of activities for them, status of cooperation with nursery staff and the parents, cooperation with other organizations, and perception of their own role in providing support for children with developmental disorders. Responses were received from 241 nurseries (67.7%). Among them, the nurseries that had nurses were 101 (41.9%) and a significantly higher number of private nurseries than public ones ( $p < .05$ ) had nurses. Of nurses, 76% worked in cooperation with other organizations, but only 32% were consulted by parents whose children could possibly have developmental disorders. Of nurses, 72% responded that they had not got enough of a role as a nurse for children with developmental disorder. Nurses' work needs included "cooperating more with nursery teacher" and "having free time for own work." Since problems of children with developmental disorders are multi-faceted, the nursery nurse will be expected to engage in a more specialized role. For this, it is necessary to change the employment conditions of nurses in the nursery.