This symposium will begin with a series of five papers (12 minutes each), which will present research and clinical studies of parent-infant interventions. A number of risk groups will be described, including women who are postnatally depressed and those who have had a premature birth. Effectiveness of interventions both for women in the community and those admitted to mother-baby units will be presented, together with some longitudinal data. In addition, programs designed to prevent parent-infant difficulties through antenatal interventions will be presented. An active panel debate of 30 minutes will follow and include invited members. The themes to be debated are: Who needs parent-infant intervention What is the evidence that the parent-infant relationship can be changed What are the risk factors What aspects are malleable Are difficulties preventable The presenters cover an interdisciplinary range of professionals including clinical psychologists, neuropsychologist, social worker, psychiatrist, dance therapist and nurse.

Evaluation of Parent-Infant Interventions Following Postnatal Depression (PND)
Jeannette Milgrom, Elizabeth Loughlin (Australia)
Postnatal depression (PND) has been associated with both early mother-infant interactional difficulties and long-term negative effects on child development. Our previous work suggests that early disturbance of the mother-infant interaction plays a significant contributory role in later cognitive and behavioral problems in the children of depressed mothers. In addition, we have found that treatment programs that target maternal mood following postnatal depression are not sufficient to improve the parent-infant relationship. In a pilot uncontrolled study, 50 depressed mothers completed a 12 week specialized cognitive-behavioral program developed by us for maternal symptoms of PND, followed by a 3 week specialized parent-infant intervention (H.U.G.S.). At baseline (pre-treatment), 82% of women had scores reflecting a clinically dysfunctional mother-infant relationship on the Total Scale and 85% on the Parent Domain Scale of the Parenting Stress Index (>152). The core PND program reduced the rates of these interactional problems to 60% and 67% respectively after 12 weeks (as well as significantly reducing depression). After only 3 weeks of the H.U.G.S. module, the respective percentages of women still scoring in the dysfunctional interactional range had dropped to 39% (Total Score) and 30% (Parent Domain Score). Results suggest that the H.U.G.S. module which draws on the works of Field, Fraiberg, Brazelton, Cramer and Muir and targets the interaction directly, may be usefully complemented by longer experientially based parent-infant interventions (Intuitive Mothering).

Adapting an Outpatient Mother-Infant Movement-Play and Dance Intervention for InPatients of a Psychiatric Mother-Baby Unit
Elizabeth Loughlin, Andrew Dempster (Australia)
Intuitive mothering an outpatient experiential 8 week group therapy, based on Winnicott’s (1962) notion of a ‘partnership’, uses dance therapy interventions to encourage physical and expressive communication with infants and their mothers who have been diagnosed with postnatal depression. This non-verbal therapy builds on the way mothers intuitively act to joyously relate to their infants. Key indicators of infant and mother reciprocal responsiveness are gaze, vocal sounds, infant gestures, along with physical indicators of molding, spatial
direction and distancing, and whole body enlivening. Since 2001 the ‘Mothering’ intervention has been part of a larger project into Postnatal Depression. Preliminary data indicate improved outcomes in the mother’s expressiveness and infant responsiveness to mother. This intervention using movement-play and dance has been extended to refer inpatients in the hospital psychiatric mother-baby unit, where the mother’s health issues are more severe and her infant more vulnerable. The presentation will give an account of adapting key outpatient interventions to the shorter inpatient 3-4 weekly program, and examine the differences in infant responses and maternal engagement. Case vignette, video and other data will illustrate the discussion, highlighting the usefulness of this approach for mothers and infants of differing levels of risk and vulnerability.

321  Long-Term Consequences of Helping Parents Read Their Premature Baby's Body Language: An Intervention

Carol Newnham, Jeannette Milgrom (Australia)

Premature infants are often found to be difficult, unreadable and easily-overwhelmed social partners. Fifty-six premature mother (and/or father)-infant dyads were randomly assigned to intervention or control groups. Intervention parents received training in understanding, recognizing and responding to their hospitalized infant’s subtle physiological and behavioral signs of stress and social availability. Control parents received standard hospital care. The aim of the study was to assess the effect of the intervention on infant temperament, mother-infant interaction and mother’s mental health when the baby was 3- and 6-months corrected age. The results show significant differences between intervention and control groups in mothers’ abilities to stimulate and arouse their infant, duration of infant attending to their mother, the approach temperament dimension (3 months) and intensity of mother-infant interactions (3 and 6 months). These results suggest a mechanism by which a previous landmark study, reporting a similar early intervention, resulted in long-term cognitive advantages for premature infants: improvements in the quality of early mother-infant interactions.

322  Self-Directed Minimal Intervention Antenatally to Prevent Parent-Infant Difficulties

Jennifer Erikson, Elizabeth Loughlin, Rachael McCarthy, Bella Saunders, Yolanda Romeo (Australia)

This paper will describe the development and preliminary findings of a six week self-directed learning package delivered antenatally to primiparous and multiparous women (second child) from 32 weeks gestation. The intervention was designed to prevent early parenting difficulties in women at low and high risk for these problems and in a subsample of postnatally depressed women. Thus it was created to address the needs of a broad population of women such as that serviced by public maternity hospitals. The intervention targets were selected on the basis of “clinical wisdom” and an exhaustive empirical review of risk factors impacting on parenting outcomes. An extensive review of existing local and international parenting support programs was also conducted. This process yielded the following targets: expectations regarding the transition to and demands of parenthood, marital difficulties, coping with life stress, family of origin experiences, antenatal attachment to fetus and practical parenting skills. Expectant women and their partners received a self-directed learning guidebook comprised of 6 units addressing the above issues, with five modules to complete antenatally and one integrative module post-birth. Fortnightly phone calls from a telephone facilitator were provided to monitor compliance and engagement with the content.

323  Antenatal Groups for Pregnancy-Related Anxiety and Depression: Maternal and Infant Outcomes

Judith Lumley, Marie-Paule Austin, M. Frilingos, K. Saint (Australia)

Aim: to evaluate the impact of an antenatal group CBT intervention on maternal and infant psychological outcomes both in pregnancy and postpartum. Method: a randomized controlled trial evaluating the efficacy of an antenatal group CBT intervention for a homogeneous sample of pregnant women identified as experiencing depression or anxiety (symptoms or disorder) or
at risk of developing these in the subsequent perinatal period. These women are not
experiencing relationship problems nor do they give a history of inadequate parenting or abuse.
Controls are given an information booklet. Results: at this stage analyses suggest that antenatal
symptom scores (EPDS, STAI, Rosenberg self-esteem Q, Locus of control Q or LOC) are
improving significantly in group participants but not controls. The question remains as to
whether this antenatal intervention makes a difference to postnatal outcomes. Postnatal data is
not yet analyzable but approximately 80 group participants and 40 controls will have returned
follow-up data at 2 and 4 months postpartum including the Rosenberg, EPDS, STAI, Parenting
Stress Index (PSI) and short infant temperament Q as reported by mother and father (SITQ).
Full results will be available at presentation and will focus on both maternal and infant
outcomes.

325 Aboriginal Infant Mental Health and Development
Helen Milroy (Australia)

The purpose of the symposium would be to present a range of both theoretical, clinical and
research based data on Aboriginal infants in Australia. The particular focus will be on Western
Australia however, most of the information will be relevant across communities throughout
Australia.

326 "Black Milk": Nourishing the Nation
Jill Milroy (Australia)

In an Aboriginal world view the land is literally the mother. How then do Australians come to
terms with growing up with a 'black' mother? How too, do Australians come to terms with
Indigenous history and the 'truth' about Australia's past? It is a not an easy journey for
Australians to embark upon but it is a necessary one. Stories of massacres, stolen children and
genocide call into question the very heart of Australian identity: the belief in self, in family, in
community and in nation. How do we 'grow' a healthy nation? The paper combines
contemporary knowledge, Aboriginal philosophy and traditional stories in the presentation.

327 The Aboriginal Baby's Place in the World
Helen Milroy (Australia)

This paper discusses the current predicament for Aboriginal infants in Aboriginal and
Australian society from a broad based perspective including both general health and mental
health development. Although some inroads have been made in improving infant outcomes,
there has been little progress for Aboriginal infants in recent years and in general, most health
statistics for Aboriginal infants are significantly worse than for non-Aboriginal infants.
Understanding the historical legacy, contemporary climate as well as the future uncertainty
surrounding Aboriginal issues in Australia will be discussed. Understanding infant development
and needs from the Aboriginal perspective will be presented along with highlighting both the
conflicts in understanding as well as the commonalities with non-Aboriginal society. This will
also include an understanding of the kinship system for attachment and the impact on family
systems resulting from the fragmentation of families as a result of the “Stolen Generations”.
Concluding remarks and future directions will hopefully inform service provision and research
into Aboriginal infant mental health and emotional and social well-being.

328 Aboriginal Infants in Western Australia
D'Antoine Heather (Australia)

The Western Australian Aboriginal Child Health Survey will release its first publication on
health and well-being in late 2003. The purpose of this paper will be to present some of the data
on Aboriginal children in the 0-3 year age group. One of the interesting components to discuss
will be the development of the remoteness index and to consider the impact of this on health and
well-being of Aboriginal infants, families and communities. The data presented will also be able
to compare and contrast the variety of living conditions, family structure and health outcomes. The data is likely to highlight unmet areas of need and have significant implications for policy direction as well as service provision.

Crisis in Motherhood: Antenatal Enquires by Whom and for What?

Chair

Sarah Jane Jones (Australia)

This symposium aims to consider the baby's place in the world of the pregnant mother's mind. Perinatal mental health is a more recent development, addressing the past bias of attention given to postnatal mental health. All three papers are focused on the screening of antenatal women. Two of the papers discuss sub-groups of pregnant women: 1) where fetal abnormality is diagnosed, 2) teenage mothers. Our symposium considers paradigms for assisting women with the emotional experience of being pregnant. Two papers explore this theme from a psychodynamic perspective. Both propose ideas about helping women with antenatal emotional disturbance. Dinora Pines proposed that all pregnant women experience some kind of psychological turmoil, a process she calls the crisis of motherhood. Some pregnant women will also experience an extra-ordinary crisis following a screening for fetal abnormality. The third paper explores the teenage mother's antenatal idealization of motherhood and the gap between their prediction of available social support and the reality and the possible relationship of these dynamics to postnatal emotional distress.

Identifying Antenatal Emotional Disturbance

Joan Raphael-Leff (Great Britain)

Given that the foundation of infant mental health rests on the emotional well being of caregivers, early identification of their distress is crucial. Most programs focus on parent-infant therapy to resolve postnatal disorders. However, there is growing awareness of antenatal antecedents of disturbance, and it is argued that prophylactic therapy during pregnancy can mitigate some disorders before they manifest in entrenched conditions during infancy. Women accommodate to pregnancy in different ways. The placental exchange may serve as metaphor of types of engagement with the unknown fetus - which an expectant mother may regard with pleasure, or concern about being insufficiently nurturing; alarm at being exploited by her invader, or anxiety about mutual incompatibility, or contamination. Since antenatal care is ubiquitous, midwives are in a prime position to detect psychological disturbance as this arises during pregnancy. The teaching aid below facilitates awareness of incipient disorders enabling timely referral for perinatal group, or individual, intervention. It also enhances understanding of subjective meanings of mental configurations reflecting the expectant mother's self-esteem and state of mind.

Fetal Abnormality: An Extraordinary Crisis of Motherhood. How Primary Health Care Professionals Can Assist with Women's Experiences

Sarah Jane Jones (Australia)

Dinora Pines proposed that all pregnant women experience some kind of psychological turmoil, a process she calls 'the crisis of motherhood'. Some pregnant women will also experience an extra-ordinary crisis following a screening for fetal abnormality. This paper focuses on a sub-sample of larger group of women from a UK population of low risk women, who were interviewed about their experiences of having a fetus with an abnormality. Their narratives were analyzed to examine particular ways of describing their pregnancies and their feelings towards their unborn child. Psychoanalytic ideas were tested regarding their usefulness to understanding women's descriptions of the experience. The paper proposes possible ways to understand the meaning of these experiences, concluding with clinical interventions for those in primary health care settings. As primary care professionals who will encounter these women, it
is this early routine level of emotional attention and intervention which may be particularly helpful.

Idealization and Reality: Screening for Mother-Child Support Levels in Pregnancy and the Reality Experienced Six Months Postpartum
Julie Quinlivan (Australia)

Objectives: To evaluate to what extent teenage mothers are able to predict their postnatal support networks in the antenatal period, and the extent to which support correlates with social class and depressive symptomatology. Design: A prospective cohort study. Setting: Teenage antenatal clinic Population: Teenage mothers (n=124) aged less than 18 years. Methods: Women were surveyed in the antenatal period and again six months postpartum about their anticipated and actual levels of support using the Maternal Social Support Index (MSSI). The questionnaire covered key issues involved in discharge planning such as the availability of help with household tasks, emergency respite and communication. Subjects also completed social class data and the Edinburgh Postnatal Depression Scale. Data were analyzed using SAS software (2001). Results: The key finding was that teenage mothers significantly overestimated their support networks in the antenatal period compared to the reality experienced 6 months postpartum (p<0.0001). Dissatisfaction was most marked in the communication and daily activity support subscales. The level of support at 6 months postpartum correlated significantly with the Edinburgh Postnatal Depression score but not with social class. Conclusion: Services for teenage mothers that provide assistance with communication and daily support activities are required to help overcome the discrepancies between idealization and reality. Depressive symptomatology correlates with poor support levels.

Maternal DHA Levels and the Development of Attention in Infancy
John Colombo, Kathleen N. Kannass, Shashi Kundrthi, D. Jill Shaddy, Julie M. Maikranz, Christa J. Anderson, Otilia M. Biaga, Susan E. Carlson (United States)

Docosahexaenoic acid (DHA) is a long-chain polyunsaturated fatty acid (LC-PUFA) found in high concentrations in the CNS. Postnatal DHA supplementation during infancy has been shown to accelerate visual and cognitive development. The current study examined the association between prenatal DHA (maternal erythrocyte DHA at delivery) and postnatal cognitive status in infancy (habituation at 4, 6, and 8 months) and toddlerhood (attention span at 12 and 18 months). High-DHA (6.3% DHA) and Low-DHA (4.6% DHA) groups were formed based on maternal blood assays taken at delivery. On an infant-controlled habituation protocol, where a decline in look duration from 4 to 8 months is expected, infants whose mothers had high erythrocyte DHA showed an accelerated developmental trend, with a significant (p<.01) decline from 4 to 6 months and no change from 6 to 8 months. Infants whose mothers had low erythrocyte DHA showed no decline until 6 to 8 months (p<.05). Heart rate data taken simultaneously with looking suggested that this difference was attributed to more rapid information processing at 4 and 6 months. Infants were followed up on a free play session at 12 and 18 months with a single object; across these ages, look duration is expected to increase. The high-DHA increased, but the low-DHA group decreased, producing a significant Age X DHA interaction (p<.01). Thus, across the first two years, high maternal DHA levels at delivery were related to an accelerated developmental course for attention. These findings concur with other research showing positive associations between DHA and cognitive function.

The Relation of Third Trimester Polyunsaturated Fatty Acid Intake to Cognitive Development Among Inuit Infants in Artic Quebec
Joseph L. Jacobson, Sandra W. Jacobson (United States), Gina Muckle, Eric Dewailly, Pierre Ayotte (Canada)

Docosaheaxenoic acid (DHA) is the most prevalent polyunsaturated omega-3 fatty acid in cell membranes, particularly in retina and in neural synapses in brain. Experimental studies with laboratory animals and clinical trials involving infant formula supplementation have shown that
omega-3 fatty acid supplementation during infancy is associated with better visual acuity at 6 months and better cognitive performance at 6 and 12 months of age. The rapid synthesis of brain tissue during the third trimester of pregnancy markedly increases fetal requirements for DHA during that period. However, few studies have directly examined the relation of third trimester DHA to cognitive development in infancy. This issue was examined in a sample of 109 Inuit infants in Arctic Quebec where, due to the prevalence of fish and sea mammal fat in the traditional native diet, polyunsaturated fatty acid (PUFA) intake is among the highest in the world. DHA was measured in umbilical cord plasma phospholipids to provide an index of fetal intake during the latter part of the third trimester of pregnancy. Higher cord DHA concentration was associated with better visual acuity at 6.5 months and at 11 months with higher scores on the Bayley Mental and Psychomotor Scales and fewer perseverative errors on the A-not-B test. Since maternal PUFA intake during pregnancy is an important source of these nutrients for the fetus, these data suggest that it might be appropriate to consider maternal PUFA supplementation during pregnancy even in populations with presumably adequate omega-3 fatty acid intake.

Cognitive Development: Mitigation or Prevention?

Sandra W. Jacobson, Joseph L. Jacobson (United States), Gina Muckle (Canada), Lisa M. Chiodo (United States), Eric Dewailly, Pierre Ayotte (Canada)

Abstract Not Available

Effects of Long-Chain Polyunsaturated Fatty Acid Supplementation in Infant Formula on Cognitive Function in Later Childhood

Peter Willatts, Steward Forsyth (Great Britain), Carlo Agostoni (Italy), Jeffrey Bissenden (Great Britain), Paul Casaei (Belgium), Guenther Boehm (Germany)

Several randomised clinical trials have reported improved cognitive development in infants fed a formula containing long-chain polyunsaturated fatty acids (LCPUFA). One consistent finding has been shorter look durations, which may be interpreted as indicating faster speed of processing or improved ability at inhibiting or disengaging attention. The aim of this multi-centre study was to determine whether LCPUFA supplementation in infancy has long term effects on speed of processing and/or inhibitory control of attention in later childhood. 237 term children were randomly assigned to a formula supplemented with docosahexaenoic acid (DHA) and arachidonic acid (AA) (n=111) or a similar formula devoid of these LCPUFA (n=126) for 4 months. The children were assessed at 70.1 months on tests of information processing efficiency (Matching Familiar Figures Test: MFFT), inhibitory control of attention (Day-Night Test), and IQ (WPPSI). Children who were supplemented with LCPUFA had significantly better MFFT efficiency scores and significantly shorter response latencies on their correct first choices. There were no significant differences on MFFT errors and impulsivity, Day-Night Test scores, or IQ. This is the first study to demonstrate long-term effects on cognitive development in children who received formula containing AA and DHA in infancy. Our new findings suggest that the LCPUFA influence on processing speed continues well beyond infancy. Dietary preformed LCPUFA in infancy may enhance the development of important cognitive abilities in later childhood.

Keeping the Baby in Mind: Infusing Infant Mental Health into Nursing Practice

Michele Meehan, Judy Cooram, Pauline Sampson (Australia)

The object of this workshop is to examine the change to nursing practice brought about by our interest and training in Infant Mental Health. As Maternal Child Health nurses in a variety of services, centre based, home visiting service and a Paediatric Hospital, using case material we will illustrate and reflect upon how we have incorporated this new area into a traditional practice, while maintaining the well-accepted model of nursing. The Maternal Child Health Service in Victoria, Australia is a free universal service, available to all families with children.
from birth to school entry age. It provides services that offer families with young children support, advice, information, health promotion, early identification and intervention for health concerns. Maternal Child Health nurses, registered nurses with qualifications in midwifery and maternal child health degree staff the Centres. These nurses have the knowledge and experience to deal with family health issues and problems. This work is most commonly directed at supporting parents to meet the demands early parenting places on them. The discussion of cases concerning feeding, sleeping and crying behaviour will be the focus of our presentations. In the past we might have been pleased when the baby dropped off to sleep, so we could listen to the mother now we actively engage the baby in our consultation and use this interaction to illustrate and supplement our usual advisory role.

**342** Attachment Based Research in Australia and New Zealand

*David Lonie, Bryanne Barnett (Australia)*

This Workshop sets out to explore some of the Attachment based research currently being carried out or in the planning phase in Australia and New Zealand. There have been problems in establishing this sort of research because of the need for overseas training in administering and gaining reliability of research tools. However there are an increasing number of professionals in Australia and New Zealand who have had overseas training or who have used overseas raters to work with them to allow research in different settings. This has allowed comparisons across different cultures and has already lead to some confronting differences to earlier studies. The workshop should also encourage professionals in Australia and New Zealand to undertake further training and research in this area.

**343** Behavioral Markers for Autism Spectrum Disorders at Toddler Age

*Claudine Dietz, Fabienne Naber (Netherlands)*

General agreement exists upon the need for the early detection of Autism Spectrum Disorder (ASD). The feasibility and efficiency of a screening instrument on ASD was examined among a group of 323 high-risk children between the age of 14 and 36 months. The screening instrument was found to discriminate well between children with and without serious problems already at the age of 14 months. The instrument could adequately detect children with ASD, however, the differentiation with other childhood psychiatric disorders was poor below the age of 2 years. The sensitivity as well as the positive predictive value for ASD increased considerably with age. Discriminative power of individual items and alternative screening algorithms will be presented for different age groups. Next objective behavioral observations were used to detect minor differences between childhood psychiatric disorders. Data was measured ethologically, meaning the behavior of the children was analyzed on micro level within different settings as well as at several moments in time during development. This way subjective measures based on parental information or the observations of the examiner, could be sharpened. Our results show that a great variety exists within groups of children with the same psychiatric disorder that can not only explained by differences in developmental level. Demarcation and overlap in childhood psychiatric disorders will be discussed using results of both the screening- and ethological study.

**344** A Statewide Universal Early Intervention Home Visiting Program and Its Adaption for Aboriginal Australian Families

*Mary Hood, Sally Handby, Valda Rigney, Deanna Stuart, Virginia Healy, Cheryl Merritt (Australia)*

This workshop will detail the experience of implementation of a ambitious statewide universal early intervention program, implemented by the government agency Child and Youth Health SA throughout 2003, which offers great potential to positively influence outcomes for infants and families but has been a major logistical exercise. The process includes a nurse home visit of all newborns to provide health checks and an assessment with the parent of any social, financial
and health risk factors present, multidisciplinary case conferencing and connection to other services. For identified high need families, a responsive nurse home visiting program for up to two years is being developed. Early evaluation of outcomes will be discussed, with the perspectives of parents, nurses and social workers. A second aspect of the workshop will detail collaboration between key Aboriginal Health Agencies and CYH staff, to adapt the universal assessment process for appropriate and effective use in Australian Aboriginal families. All were eager for the Aboriginal community to be included in this early identification of risk. A booklet has been developed which introduces the assessment topics through words and pictures, allowing the Home Visitor to raise issues such as substance abuse, interpersonal violence, childhood abuse of parent, removal of previous children from care, with the Aboriginal parents in a non-confronting, more culturally appropriate way, and thus invite discussion and jointly plan to respond. The booklet and trials of its use will be detailed.

The Child Behaviour Development Scale Applied to Parents/Baby Psychotherapy

Elizabeth Batista Wiese (Netherlands), Daniel Mellier (France)

THE CHILD BEHAVIOUR DEVELOPMENT SCALE APPLIED TO PARENTS/BABY PSYCHOTHERAPY

Elizabeth Batista Wiese Daniel Mellier

The parents/baby psychotherapy has the aim to favour: the development of parents/baby interaction; the elaboration of parenthood conflicts; the remission of psychofunctional symptoms and the baby's behaviour development. We discuss the use of a new technique for parents/baby psychotherapy, using the Child Behaviour Development Scale (Batista Pinto, Vilanova e Vieira, 1997). The procedure implies in parents/baby's therapeutic consultations, during the first year of the child's life, in which is included the child's behaviour developmental assessment and the psychological intervention with the parents in a psychodynamic approach. Each consultation consists of the following parts: 1) the parents are stimulated to talk about their relationship with the child, focalising the conflicts (actual and transgenerational), the anxieties etc.; 2) the child's behaviour development is assessed in an interactive way, with the parents' collaboration, using The Child Behaviour Development Scale; 3) the main aspects of the assessment are discussed with the parents, as well as focalised and interpreted the characteristics of the parents/baby interaction; 4) the strategies to stimulate the improvement of the interaction are focalised. We discuss the results of researches using this technique in parents/premature baby psychotherapy. Sponsored by CAPES. University of de Sao Paulo, Brazil, ebatista.usp.br University of Rouen, France.

Outcomes of a Canadian National Project to Enhance Language and Cognitive Development of Young Children in Community Based Programs

Nancy J. Cohen, Laura Heinz (Canada)

Support for local solutions to national problems has grown considerably in recent years in the form of community based prevention initiatives. The promise of such initiatives is that they offer more relevant, integrated, and sustainable programs than centrally planned services. This poster describes the quantitative and qualitative outcomes for children involved in a recently completed national project for children 0 to 5 years located in seven communities across Canada. Most were considered to be communities at risk because of low SES and other environmental factors. Using diverse models, each site built on their existing quality programs in ways that utilized current theories of child development and knowledge of best practices. Programs generally aimed to enhance children's language and cognitive development within a relational context. The poster presents an integration of findings across sites based on quantitative standardized measures and qualitative data from semi-structured interviews. Data for a follow-up of participants at the end of kindergarten, just before entry to Grade 1, also are presented. Results generally support the positive impacts of high quality prevention programs across a range of contexts for young children.

The Earlier the Better: Working with Families During Pregnancy and After Birth
Elke Andrees, Karen Asgill (Australia)
Abstract Not Available

349
The Solihull Approach: Review of Research
Hazel Douglas, Jill Delaney, Yvonne Bunce, Helen Lake (Great Britain)
The Solihull Approach is an integrative model and a comprehensive resource pack. The model enables practitioners to work together with families with babies and young children with sleeping, eating, toileting or behaviour difficulties. We would like to present the three research projects carried out to date and share the plans for a major multi-centre controlled trial. The first published research surveyed health visitors to ascertain whether training actually changed practice. The main findings were that it had an impact on 88 of health visitors. It improved the consistency of approach between health visitors. It did not increase the overall time required for assessment and intervention. It also showed that the use of the Solihull Approach increased the practitioners’ confidence in their skills and increased their job satisfaction. The second published preliminary research on effectiveness has shown that the reduction in the severity of the symptom was very significant. Parental anxiety also decreased by 66%, as measured by the Beck's Anxiety Inventory. On average each family required three sessions. The third research study (submitted) examined health visitors experience of using the Solihull Approach through in-depth interviews. We are currently seeking funding for a multi centre group comparison design with a large number of subjects (200 plus) to examine the effectiveness of the Solihull Approach. We are also planning a qualitative study of how parents experience the Solihull Approach.

350
Starting Together
Ferko Gyula Ory (Netherlands)
Starting Together is a programme in the Netherlands to prevent psychic and behavioural problems and criminality in children. It aims to strengthen collaboration between child health centres, municipal authorities and other organisations concerned with families with young children to enhance skills in families to educate their children. Cues in very young children, parent-child interaction and environmental factors which imply a risk for developing behavioural and psychological problems are identified at the child health centres with a coverage of 96 percent of the child population from zero to four years. When the child is 8 weeks, nurses of child health centres interview the parents with a 15 minute interview schedule based on the conceptual framework of Ramey et al. and classify families as high risk, doubt and no problem families (Ramey Ramey 1998). High risk families are visited at their homes within a week. Parents and the nurse formulate together a support programme. Actual problems of the families are starting points for support. Organisations share the goal of Starting Together: prevention of psychic, emotional and behavioural problems and criminality in children and collaborate in a programmatic fashion to support families to re-organise their lives by building on their strengths and by training the families new skills. Staff-members of collaborating organisations in Starting Together are trained how to approach families who deny assistance notwithstanding the presence of serious risk factors that endangers child development.

351
Creating Competence Under Stress: Researching Parental Stress in a Dual Language Montessori Early Head Start Center: Implications for Program Planning
Mary Ervolina, Terry J. Hudgens, Tina Francis, Robet N. Emde, Doug Emch (United States)
This poster will address the practical application of findings from a University-based partnership's study which surveyed parenting stress among families living in extreme poverty enrolled in Family Star Early Head Start; a dual language, center based, year round, Montessori program in Denver, Colorado. It is well known that stress in the parenting system during the
first years of life can have a significant impact on a child’s overall development and the parent-child relationship. Recent research also suggests that family stress can attenuate the positive effects of early intervention services, such as Early Head Start, on children. Recognizing that it is often impossible to control the cascading negative life experiences that families living in extreme poverty experience, program staff at Family Star strive to help children and parents develop tools to successfully cope with life’s difficulties. The poster will outline how staff in this program, through a relationship based approach, attempt to reduce stress and encourage resiliency by providing a variety of interventions that support the development of protective factors in individual children and their families. It will also address the programmatic changes that will occur in response to the findings from the Parenting Stress Index (PSI) short form. Program partners in this research project found the results meaningful and an important incentive for further thoughtful program planning. Continued dialogue and future clinically based research studies with the University partners is eagerly anticipated.

354
Impact of Baby Massage on Maternal Depression, Baby’s Regulatory System, and Dyad’s Relationships
Zohreh Zarnegar (United States)

Twenty-five pairs of biological mothers with post-partum depression and their babies (birth to three), residing in two abused women’s shelters participated in this study. Babies were also suffering from (a) eating disorder, (b) sleep disorder, (c) digestive related disorders, none of which was medically diagnosed. Objectives of this study were to identify relationship between massage of the baby by biological mothers with: (1) reduced postpartum depression; (2) baby’s three targeted regulatory disorders; and (3) the mother-baby dyad’s relationships, measured by improved attachment and reduced stress. These dyads attended six one-hour sessions of baby massage, followed by a one-half hour of question and answer session by the mothers. A pre and posttests of maternal depression and stress, and a self-report of the babies regulatory status by the mothers were administered at the beginning and at the six months interval. The results of this study and planning for future outcome analyses of the data will be discussed.

355
Representation of Mother in Play Narratives
Kaija Palvi (Finland)

The objective of this study was to estimate the impact of mother’s perinatal or concurrent depression on her child’s parental representations in her/his play narratives. The study is a part of a prospective follow-up study on the impact of mother’s depression on her child’s emotional and behavioural development. The methods relevant for this analysis were the Edinburgh Postnatal Depression Scale (EPDS), the Present State Examination (PSE) and children’s play narratives, the MacArthur Story Stem Battery (MSSB). The material of the study consisted of 200 mothers with their 5-year-old firstborn children. After screening the mothers with the EPDS a depressive-case enriched subsample of 44 mother-child pairs was formed. The subsample mothers were interviewed by the PSE and the children by the MSSB play narratives. The results show that mother’s concurrent depression, unlike prenatal or postnatal depression, has an influence on her child’s representations of mother. In play narratives children of concurrently depressive mothers had less disciplinary (p 0.04) and somewhat less positive (p 0.08) representations and more negative representations (p 0.04) of mother. As a conclusion, the results show that concurrent depression impairs mother’s functioning as a parent and her ability to maintain secure structures. The effect of previous depression episodes seems to be reversible. It is important to obtain child-reported information in order to create understanding on how, why and when mother’s depression impairs the healthy development of her child.

356
The Impact of Maternal Depression on Her Infant Development
Ika Widyawati, Wiguna Tjhin (Indonesia)
Objective: to explore the implication of child rearing pattern in mother with Major Depressive Disorder toward her infant developmental stages. Method: this is a 4 years case study. Maternal depression was diagnosed by using Diagnostic Statistical Manual for Mental Disorders IV (DSM-IV) criteria for Major Depression Disorder. A 4 years longitudinal study is carried out from this mother since the pregnancy until she gave birth. The infant was evaluated by using a Denver Developmental Scale Test II (DDST II) every 3 months. In depth interview with the mother is also conducted in order to identify the child rearing pattern in the family. Result: the child rearing pattern in this family is not optimal to support the child development needs. The child is showing some development lack, especially in language and communication aspect.

The National Postnatal Depression Program: Enhancing the Quality of General Practitioner and Perinatal Service Partnerships

Jennie Ericksen, Justin Bilszta, Anne Buist, Jeannette Milgrom, Bryanne Barnett, John Condon, Barbara Hayes, Sherryl Pope (Australia)

The National Postnatal Depression Program aims to develop and evaluate a screening program, within primary healthcare settings, to identify women who may be at risk of perinatal depression. The objectives of the Program are to improve community awareness of depression, enhance partnerships between women, primary healthcare providers and maternity services and capacity building by encouraging strategies aimed at improving knowledge about depression assessment and treatment. Improved community awareness is being achieved through the development of educational materials. These include a GP Management Guideline, a Guide to using the Edinburgh Postnatal Depression Scale, an educational booklet and a series of promotional posters. Reviewing current levels of service, highlighting deficiencies in services and encouraging different health care sectors to work cooperatively will enhance partnerships between women and their health care providers, and between the health care providers themselves. Improving the capacity of the health care system to manage women with perinatal depression will be achieved through training programs targeted to Midwives, Maternal and Child Health Nurses and general practitioners. Highlighting the different referral options available will also be encouraged to utilise a broader base of treatment services. The Program has been implemented nationally within a variety of maternity and community settings and demonstrates a method of changing practices to improve the detection and management of depression within the Australian population.

The Neonatal Postnatal Depression Program

Anne Buist, Justin Bilszta (Australia)

Abstract Not Available

Postnatal Depressive Mood in a National Swedish Sample: Two Groups of Women at Different Risks

Christine Rubertsson, Birgitta Wickberg, Ingela Radestad, Ingegerd Hildingsson, Ulla Waldenstram (Sweden)

The aim of this study was to investigate the prevalence of postnatal depressive symptoms in a national Swedish sample, and factors associated with having depressive symptoms only postpartum compared with having such symptoms both in early pregnancy and postpartum. All Swedish speaking women, who booked for antenatal care during a period of three weeks, were invited, and 3293 (72%) consented to participate in the study. Of these women, 78 percent completed one questionnaire in early pregnancy and another two months postpartum. The Edinburgh Postnatal Depression Scale (EPDS) measured depressive symptoms and the validated Swedish cut-off 11/12 was used. In all, 12.3 percent of the women had depressive symptoms postpartum, 6.5 percent only postpartum (post group) and 5.8 percent both in pregnancy and postpartum (ante and post group). Unemployment, lack of support and complaints about physical symptoms were the most important factors associated to postpartum...
depressive symptoms in both groups. Women in the ante and post group were more socially disadvantaged with increased risk in most factors investigated. Postnatal problems such as dissatisfaction with support from relatives and infant factors were associated with depressive symptoms only in the post group. To take a psychosocial history in early pregnancy, including factors associated with depressive symptoms may be the first step towards identifying and providing individualized care for women at risk for sustained or recurrent depression during pregnancy and the postnatal period.

Postpartum Depression, the Mother-Infant Relationship, and Infant Attachment in a South African Peri-Urban Settlement

Mark Tomlinson (South Africa), Lynne Murray, Peter Cooper (Great Britain)

Most developing countries are experiencing a process of rapid urbanisation leading to a sharp increase in the number of people leaving rural homes to live in poor, overcrowded conditions in shanty towns on the periphery of established urban centres. Khayelitsha, on the outskirts of Cape Town, is one such settlement. We recruited a sample of 147 mother-infant dyads from Khayelitsha, and assessed them at 2 and 18 months postpartum, assessing maternal mood, the quality of the mother-child relationship, and infant attachment. At 2 months postpartum 34.7% of the mothers were depressed, but by 18 months this rate had declined to 12%. At two months postpartum, depression was associated with an unplanned and unwanted pregnancy and with poor emotional and practical support for the mother. At 18 months, 61.9% of the infants were rated as secure, 4.1% as avoidant (A), 8.2% as resistant (C) and 25.8% as disorganised (D). Postpartum depression at 2 months, as well as indices of poor parenting at both 2 months and 18 months, were significantly associated with insecure infant attachment at 18 months. Notably, regression analyses revealed that the critical early predictor variables for insecure infant attachment were the dimensions of disturbed mother-infant interactions (maternal intrusiveness and maternal remoteness) rather than the maternal depression per se. The high levels of postpartum depression and the associated poor mother-infant interaction and insecure infant attachment has important clinical implications for early intervention in improving child emotional outcomes.

Mother-Infant at Risk of Child Abuse and Neglect in Japan: A Preventive Intervention and Care Program in Community Based on Multi-Centre Survey

Hiroko Suzumiya, Hiroshi Yamashita, Akiko Nakagawa, Keiko Noutomi, Keiko Yoshida (Japan)

Background: In light of sharp increase of the reported incidence of the child abuse and neglect, comprehensive mental health program which targets the prevention and early intervention for mother-infant at risk is needed. Objectives: To develop a simple screening procedure for families at risk for child abuse and neglect which is applicable in a postnatal home visit in community. Procedure: Edinburgh Postnatal Depression Scale (Cox et al., 1987) and Bonding Scale (Marks and Kumar unpublished) were applied for the postnatal mothers. The bonding scale consist of the ten items which contains (1) Overall maternal affection toward babies and (2) Pathological anger. The subject mothers were the ones who received home visit by community health visitors during 4 months postpartum. Result: 3370 mothers answered the two self-report questionnaires and additional interviews on the basis of child rearing situation. Fourteen percent of the mothers were above the cut-off point of the EPDS for postnatal depression. Three percent of the mothers were at risk for the Bonding Disorder according to the Bonding Scale expressing their feeling of anger and rejection in baby care which were categorized in pathological anger. These items were positively correlated with the EPDS score. Conclusion: Mothers with postnatal depression is a high risk group for severe bonding disorder and child neglect and abuse, pathological anger need to be monitored in community.

Protecting Child Health and Welfare: Factors Influencing Reporting of Child Abuse

Beverley A. Blaskett, S. Caroline Taylor (Australia)
Members of seven professional groups involved in direct work with children were surveyed and interviewed in 2002-2003 in order to identify and compare differences in their knowledge, attitudes, experience and behavior in relation to reporting cases of suspected child abuse. Individuals were asked to nominate any factors which may dissuade them from making a report, despite forming a well-founded belief that a child was at risk of significant harm. Members of each of seven professions in Victoria (child care workers, teachers, doctors, psychiatrists, nurses, psychologists and social workers), were surveyed anonymously on their personal views on child protection legislation and practice. Related questions were posed in interviews with a small number (3-5) of selected volunteers from each profession. In comparison to other professionals surveyed, child care workers (who, like psychologists and social workers are not mandated to report child abuse), felt a professional obligation to notify suspected abuse, but often interpret this as meaning compliance with centre-based protocols for notifying child care centre directors/supervisors of any suspicions of abuse. On average, child care workers, who undergo less training than other surveyed professionals, still feel a heavy responsibility to amass conclusive evidence before forming a suspicion that a child was abused or at risk of abuse. The response rate for child care workers (n 91; 36) was higher than for other professions surveyed (whose response rates ranged from 19 to 31).