

PROJECT EVIDENCE

PROJECT EVIDENCE for Prevention of Mental Disorders. The project coordinators are Dr Allan Mawdsley and Rosalie Birkin. The version can be amended by consent. If you wish to contribute to the project, please email admin@mhyfvic.org

[2] Selective Programs are indicated for situations where subjects are at high risk of developing mental disorders unless there is preventive intervention.

[2 a] Biological factors

- i Infant mental health/ Attachment problems (including Post-natal depression)
- ii Children with chronic illnesses
- iii Children with learning difficulties

[2 a i] Infant mental health/ Post-natal depression

The field of Infant Mental Health is a wholistic appraisal of a child's development within its family during the first three years of life. Although there is an emphasis on the social/emotional aspects of development, the physical, intellectual and language aspects are also relevant. The pivotal role of the parent/child relationship as a substrate for healthy development requires assessment and treatment of infant and parent to be undertaken jointly.

The first year or so lays the foundation for a young person's whole life trajectory. Whilst life events at later stages can also have a profound effect, it is extremely difficult to achieve satisfactory developmental progress unless the foundation is well-established. The fundamental requirement is for the infant to have a secure attachment, normally to the mother. Although the father and other nurturing figures may provide additional healthy attachments, the term "mother" will be used throughout this paper to signify the primary attachment figure (which does not have to be the biological mother).

The mother-child reciprocal attachment ordinarily develops quickly from the earliest days, having generally been predisposed by attitudes and emotions during pregnancy and actualised by the actions of nurturing the dependant infant. Whilst there may be a biologically based component of the mother's bonding to the child, there is certainly a major psychological/emotional component. Similarly, there is a biologically based need of the infant for nurturance which is accompanied by an emotional responsiveness to its needs being met and being physically and psychologically comforted. Ongoing experience over time strengthens the reciprocal relationship.

In the context of a secure attachment the infant learns to communicate moods and needs to the mother and to anticipate maternal responses. The early developmental tasks of affect regulation, frustration tolerance and increasing complexity of communication are progressively achieved, laying the foundation for further stages of development.

Difficulties or aspects for intervention may be Identified in:

- Biopsychosocial factors in the infant
 - Physical deformities, chronic illnesses, intellectual handicap, hearing and eyesight impairment, neurodevelopmental disorders, temperament and reactivity disorders
- Biopsychosocial factors in the parent
 - Perinatal depression, other parental mental disorders, parenting problems,
- Biopsychosocial factors in the infant/parent relationship
 - Disorders of parental mental portrait of infant

All parents hold a unique mental portrait of each of their children. This representation or "meaning" of the child has major impact on all the parent's behaviour in relation to that child. Disorders of parental experience involve

remoteness, insufficient empathy, denigration, or idealization, over-involvement, and a poor match with the actual characteristics of the child. The discrepancy stems from distorted perceptions, misinterpretations, or fantasies about the child. [Lewis p.1066]

Biopsychosocial factors in the infant

Physical deformities, chronic illnesses, intellectual handicap, hearing and eyesight impairment, neurodevelopmental disorders, temperament and reactivity disorders, including sleeping and feeding patterns.

Biopsychosocial factors in the parent

Perinatal depression, other parental mental disorders, parenting problems,

Early detection and treatment of post-natal depression. Phillip Boyce and others noted that “the Maternal Mental Health Alliance in the United Kingdom has been advocating for establishing specialist perinatal service, including mother and baby units, arguing that an investment in perinatal mental health will reap great health benefits for the next generation as well as reducing costs in the long run.

Biopsychosocial factors in the infant/parent relationship

Disorders of parental mental portrait of infant

Assessment

The basic principles of Case Assessment are set out in Project Evidence paper PE4. In the case of Infant Assessment, there are some specific additional emphases.

“Single Session Approaches with Infants”, a paper by Rosalie Birkin, gives a valuable framework for a single session primary consultation model for collaboration with professionals of first contact, by which a decision can be made for subsequent management.

Different levels of competence in aspects of infant mental health assessment and management are expected of persons in different professional roles. Consideration of this spectrum of competence and of training appropriate for

various roles is well described in the Australian Association for Infant Mental Health – Western Australian Branch Competency Guidelines 2019 digital version.

Valuable information on a range of issues from basic principles to web-based training workshops is available from the Sick Kids Hospital, Toronto, Canada, via <https://www.imhpromotion.ca/Resources/Best-Practice-Guidelines>

Management

The specialist area of Infant Mental Health is intimately meshed with paediatrics, maternal & child health and medical general practice as well as community health and mental health services. This management section therefore has subsections considering Screening and early identification, professional management and Organizational (Public Health) aspects.

Screening and early identification.

Screening infants for signs of somatic illnesses has been established as a part of primary health care in many countries and has been shown to be an effective way for improving health of infants and young children (e.g. Köhler 1991). Awareness of the importance of mental health early in life has been steadily increasing ever since 1970s, and tools for detecting psychological distress in infants and young children have been developed as a consequence (e.g. Guedeney, Puura and Matthey 2013). Finland is one of the Nordic countries with a well-baby clinic network that has long been developing strategies and tools for screening for both physical and mental health for infant and young children, and also studied the feasibility of screening in primary health care (Puura et al. 2010, Kaukonen et al. 2010, Borg et al. 2014). Based on findings of earlier studies, The Basic Infant Mental Health Screen (BIMHS) was developed as a joint effort of Drs. Kaija Puura, Astrid Berg, Elmarie Malek and Päivi Kaukonen. It is a simple and short tool to be used to screen for the basic markers of infant mental health globally, as the items most likely are not affected by cultural differences, at least not during the first year of life.

The first two items are simple questions of whether the parent is worried about the child and how the parent is feeling herself/himself. The question about parental worry was derived from a previous study, where the question: “Overall, do you think that your child/this child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people” alone was found to be quite reliable as a screening question for developmental or psychological problems in young children in a survey done in primary health care in Finland (Borg et al. 2014). For the BIMHS the question was rewritten to “Are you worried about your infant/child?” and with a positive answer from a parent, further questions are to be used to clarify what sort of worry the parent has.

Parental mental health problems like anxiety and depression, have been associated with poorer parent-infant interaction and infant distress in several studies (e.g. Mäntymaa et al. 2008, Luoma et al. 2013). The second question of the BIMHS comes from a study by Puura et al. (2010) where infants aged 4, 8 and 18-months of age were screened in primary health care for infant social withdrawal symptoms. In this study, a question “How has your mental health been during the past 12 months?” was quite reliable in finding parents who had not been well psychologically, and whose infants showed symptoms of infant social withdrawal (Mäntymaa et al. 2008). For the BIMHS the question was reformulated into “How have you been feeling?” to help tap any symptoms of anxiety, depression or other mental health issues. It is also a way to show the parent that the primary care worker is interested in the parent’s well-being.

The third item on the BIMHS is weighing and measuring the child for two reasons: abnormalities in weight and height can be markers of malnutrition or somatic illnesses, but growth can also be slowed as a result of psychological distress (e.g. Patel et al. 2004, Walker et al. 2007). The two further items: infant’s eye contact with the parent and the health care worker and the shared pleasure between the infant and the parents are markers of both parent-infant interaction and infant social behaviour. Eye contact between an infant and the parent or examiner has been previously connected with good-enough early interaction and healthy infant development in studies from several countries (Matthey et al. 2005, Dollberg et al. 2006, Lopes, Ricas and Mancini 2008, Puura et al. 2010; Puura et al. 2013).

Shared pleasure as defined by eye contact and simultaneous smile or laughter between a parent and an infant has in recent studies been found to be associated with good parent-infant interaction and less emotional problems in early childhood in samples from Finland and South-Africa (Mäntymaa et al. 2015, Lachman et al. 2016, Puura et al. in press). The final item about the possible worry of the primary health care worker was also found to be a good predictor of possible problems of young children in the study of Borg et al. (2014) and was therefore included into the BIMHS.

For each item of the BIMHS we created some additional questions to be asked, should the parent tell about problems or should the primary care worker detect a problem in the growth or social behavior of the child. These questions were meant to help further discussion on the possible problem and can be modified and added to. As we wanted the BIMHS also to offer help for the primary care workers in what to do with the possible problems, Drs Berg and Malek also created action guidelines. These guidelines naturally can and must be adjusted according to the possibilities and services available in different sites. Prior to this project, the BIMHS has not been in clinical use, but it has been mentioned as an example in an article meant for general practitioners on what to pay attention to when screening for mental health problems of young infants and their parents (Puura and Tamminen, 2016).

Professional therapeutic management

Professionals seeking additional training can liaise with the Australian Association for Infant Mental Health or seek web-based training such as that via <https://www.imhpromotion.ca/Resources/Best-Practice-Guidelines>

Specific material relating to management of perinatal mood disorders, including national clinical guidelines developed by Scottish Intercollegiate Network 2012 from the National Institute for Health and Care Excellence, can be UK NHS website <https://www.evidence.nhs.uk/search?q=guidelines+parent+infANT+mental+health>

Organizational (Public Health) aspects

How do we best promote systems which address these disruptions and encourage the development of healthy attachment?

The UK NHS advice for children's centres advocates that Community Health Centres provide specific programs for:

- Promoting Parenting skills
- Promoting positive mental health of new mothers
- Groups to reflect demographic needs *eg* teenage parents

Their advice is on the website:

<http://www.healthychildprogramme.com/best-practice-pathways/universal-partnership-plus/infant-mental-health>

References

Lewis, M. Child and Adolescent Psychiatry – a comprehensive textbook. Lippincott, Williams & Wilkins. 3rd Ed. 2002.

Berg, A. (2012). Infant-parent psychotherapy at primary care level: Establishment of a service. South African Medical Journal, vol 102;6: 582-4

Borg A-M, Salmelin R, Joukamaa M, Tamminen, T. (2014). Cutting a Long Story Short? The Clinical Relevance of Asking Parents, Nurses, and Young Children Themselves to Identify Children's Mental Health Problems by One or Two Questions. The Scientific World Journal, vol. 2014, Article ID 286939, 11 pages. doi:10.1155/2014/286939

Dollberg, D., Feldman, R., Keren, M., & Guedeney, A. (2006). Sustained withdrawal behaviour in clinic referred and nonreferred infants. Infant Mental Health Journal, 27:292-309.

Gao W, Lin W, Grewen K, Gilmore JH (2016). Functional Connectivity of the Infant Human Brain: Plastic and Modifiable. The Neuroscientist, February

Field, T. M. (1992). Infants of depressed mothers. *Development and Psychopathology*, 4: 49-66.

Guedeney A, Matthey S, Puura K. (2013). Social withdrawal behavior in infancy: A history of the concept and a review of published studies using the alarm distress baby scale. *Infant Mental Health Journal*; 34; 6: 516-31.

Kaukonen P, Salmelin R, Luoma I, Puura K, Rutanen M, Pukuri T, Tamminen T. (2010). Child psychiatry in the Finnish health care reform:

National criteria for treatment access. *Health Policy* 2010; 96; 1: 20-7.

Köhler L. (1991). Infant Mortality: The Swedish Experience. *Annual Review of Public Health*; Vol. 12: 177-193.

Lopes S, Ricas J, Mancini MC.(2008). Evaluation of the psychometric properties of the Alarm Distress BaBy Scale among 122 Brazilian children. *Infant Mental Health Journal*; 29(2), 153–173.

Luoma I, Puura K, Mäntymaa M, Latva R, Salmelin R, Tamminen T. (2013). Fathers' postnatal depressive and anxiety symptoms: an exploration of links with paternal, maternal, infant and family factors. *Nord J Psychiatry*; 67; 6: 407-13.

Matthey S, Guedeney A, Starakis N, Barnett B. (2005). Assessing social behaviour of infants: Use of the ADBB Scale and relationship to mother's mood. *Infant Mental Health Journal*; 26: 442-458.

Mäntymaa M, Puura K, Luoma I, Kaukonen P, Salmelin R, Tamminen T. (2008). Infants' social withdrawal and parents' mental health. *Infant Behavior and Development*; 31: 606-13.

Mäntymaa M, Puura K, Latva R, Luoma I, Salmelin RK, Helminen M, Tamminen T. (2015). Shared pleasure in early mother-infant interaction: predicting later emotional and behavioral problems in the child and buffering the influence of parental psychopathology. *Infant Mental Health Journal*; 36; 2; 223–237.

Patel V, Rahman A, Jacob KS, Hughes M. (2004). Effect of maternal mental health on infant growth in low income countries: new evidence from South Asia. *British Medical Journal*; 328:820–3.

Puura K, Guedeney A, Mäntymaa M, Tamminen T. (2007). Detecting infants in need: Are complicated measures really necessary? *Infant Mental Health Journal*; 28(4): 409-21.

Puura K, Mäntymaa M, Luoma I, Kaukonen P, Guedeney A, Salmelin R, Tamminen T. (2010). Infants' social withdrawal symptoms assessed with a direct infant observation method in primary health care. *Infant Behavior and Development*; 33; 4: 579-88.

Puura K, Mäntymaa M, Leppänen J, Peltola M, Salmelin R, Luoma I, Latva R, Tamminen T. (2013). Associations between maternal interaction behavior, maternal perception of infant temperament, and infant social withdrawal. *Infant Mental Health Journal*; 34(6): 586-93.

Puura K, Tamminen T. (2016). Pikkulapsipsykiatria – ei tarua vaan todellisuutta (Infant psychiatry – not fiction but reality). *Lääketieteellinen Aikakauskirja Duodecim*; 132(10):951-9.

Surkan P J, Patel S A, Rahaman A (2016). Preventing infant and child morbidity and mortality due to maternal depression. *Best Practice & Research Clinical Obstetrics and Gynaecology*. Article in Press.

Walker S P, Wachs, T D, Meeks Gardner J, Lozoff B, Wasserman G A, Pollitt E. (2007). Child development: Risk factors for adverse outcomes in developing countries. *The Lancet*; 369, 145–157.

[1] <http://www.statssa.gov.za/publications/P0302/P03022014.pdf>

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