

INFANT MENTAL HEALTH EARLY INTERVENTION

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Definition

*“Infant mental health is the developing capacity of the child from birth to three to experience, regulate, and express emotions; form close and secure interpersonal relationships; and explore the environment and learn—all in the context of family, community, and cultural expectations for young children. **Infant mental health is synonymous with healthy social and emotional development.**”*



Importance of Addressing Infant Mental Health Needs

- Nearly all of the elements of early human development are affected by the early caregiver environment (family, culture, community)
- Experiences during the antenatal period and extending throughout infancy and early childhood impede or promote development.
- Adverse social and emotional experiences are linked to poorer physical, cognitive and mental health outcomes and psychopathology later in adolescence and continuing into adulthood.

How commonly do infants and toddlers experience problems with their social and emotional development?

- Very early [in the first 10 months] emergence of signs of psychopathology persisting as
 - Developmental deviations
 - Social-emotional or behavioural problems
- Best data from Copenhagen Child Cohort CCC 2000 [Skovgaard et al; 2004, 2005, 2007, 2008]
- 16-18% infants [18 months] met criteria for one or more diagnoses on DC 0-3 criteria or ICD-10 [Skovgaard et al, 2007]

Brought together
neuroscientists, clinicians
and economists - 2007

Integrates neuroscience, developmental
psychology
and programme evaluations
to develop a unified frame
work for policymaking

Set of core developmental
concepts

<http://vimeo.com/6066948>

www.centeronthedevelopingchild.com

The Science of Early Childhood Development

Closing the Gap Between
What We Know and What We Do



NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD
Center on the Developing Child  HARVARD UNIVERSITY

Predicted Infant/Preschooler Outcomes Without Intervention*

Adapted from Weatherston and Tableman [2002. p. 5]

Parent	Infant / Preschooler	
	Competent	Vulnerable
Competent	Optimal Outcome	Good Outcome
Vulnerable	Poor Outcome	Very poor Outcome

Infant difficulties or vulnerabilities

- Premature, of low birth weight or have medical problems
- Have physical and/or developmental disabilities
- Are physiologically irritable, restless, sensitive to touch, difficult to console, feed or settle to sleep

Parental difficulties or vulnerabilities

- Current stressors – poverty, illness, parental conflict, family violence, and losses/deaths,
- Maternal and/or paternal mental health disorders, alcohol and substance abuse, and personality disorder
- A parent whose childhood included experiences of neglect, physical abuse, sexual abuse, being in foster care, exposed to severe family violence or significant loss and death.
- Where the pregnancy and/or birth was problematic

- Being socially isolated or unsupported, abandoned by family or separated from family, or being disconnected from their cultural community
- Teenage parents are a risk group – known associations include lack of adequate antenatal care, negative responses from their families, high levels of depression and stress
- Developmentally disabled parents

Positive

Brief increases in heart rate,
mild elevations in stress hormone levels.

Tolerable

Serious, temporary stress responses,
buffered by supportive relationships.

Toxic

Prolonged activation of stress response systems
in the absence of protective relationships.

Toxic Stress in early childhood has persistent effects on the nervous system and the hormone system that damages brain architecture and leads to lifelong problems with learning, behaviour, physical and mental health

Precipitants – extreme poverty with chronic family chaos, recurrent physical or emotional abuse, chronic neglect, severe and enduring maternal depression, persistent parental drug abuse, repeated exposure to violence in the family

Absence of continuous, supportive relationship

Implications

- Central aspect of Intervention will be directed to supporting a nurturing relationship
- Infants and toddlers experiencing stress need to be linked with preventative or therapeutic services as needed
 - All young children suspected abuse or neglect
 - Maternal depression: prompt and early diagnosis and specialised treatment of mother and mother-child relationship

Effect of Maternal Antenatal Affective State on the Developing Foetus

- Pregnancy is a critical transitional developmental phase, may stir unresolved conflicts, and thus anxiety / affect disturbance
- Depression, anxiety, elevated life stress
- Subtle alterations in the neurobiological substrate of the foetus's emerging affect regulation system

- High stress linked to in-utero foetus greater reactivity
- Newborn has elevated levels of basal cortisol
- Higher scores on depression, anxiety and stress linked to infants with reduced high frequency heart rate variability [HRV]
- After birth 'profile of dysregulation'
- Low birth weight, intra-uterine growth restriction and pre-term delivery linked with untreated depression and anxiety disorders

- Altered immune functioning
- Antenatal depression linked to silencing of a gene that controls the over production of stress hormones
- Infant more vulnerable to irritable, intrusive or withdrawn maternal care

Antenatal Intervention

- Important to direct early intervention to ameliorate the negative effects on the offspring of psychologically distressed women
- Implications for pre and postnatal interventions
- In utero bio-behavioural adaptation can be modified by interactions in the infant's social world

- Relaxation techniques, exercise, meditation, yoga
- Massage Therapy – Field et. al. [1999]
- Psychotherapy – small studies using IPT, and control 16 week clinical trial of IPT versus a parenting education programme. IPT best results
- Psychotropic medication

Postnatal Depression

- Meta-analysis 59 studies, nearly 13,000 subjects using EPDS scores > 12 find mean prevalence 13%
- Changes in postpartum mood also reported for fathers
- 1 in 4 mothers of 9 month old infants, living below poverty threshold are moderately to severely depressed
- Increasing incidence over the first year
- Co-occurrence with adversity that has additional impact on infant development and complicates treatment

Outcomes for children

- Perform less well on cognitive, emotional and behavioural assessments
- Increased risk for later mental health problems, social difficulties and school performance

Effect on Maternal and Infant Socio-Emotional Behaviour

- Mother compromised
 - in ability to respond to infant signals
[sensitive/insensitive]
 - In capacity to support interactions with infant
[intrusive/withdrawn]
- Infant compromised
 - Difficulties engaging in sustained social and object engagement
 - Difficulties regulating affective states
 - Lower scores on Bayley Scales of Infant Development
 - Irritable

- Dyad
 - Depressed mothers and their infants share negative behaviour states more often and positive behaviour states less often
- Overall effects most pronounced
 - Effect size greatest the younger the child
 - When the mother's illness is severe and chronic
 - Mother from an economically disadvantaged background
- Attachment
 - 62% infants of chronically depressed, low income families, no intervention classified as disorganised [Lyons-Ruth et. al. 1990]

- EEGs of infant show brain activity similar to adults with depression, more pervasive with depressed withdrawn parent and when depression occurring in 2nd and 3rd year
- Shape child's stress biology
- Higher and more fluctuating levels of cortisol
- CVS patterns suggestive of emerging hypertension

- Major depression requires professional intervention
- Reducing mother's / parents symptoms alone does not necessarily lead to improved parenting or improved outcomes for children

- Recent meta-analysis and results from the Avon longitudinal study are highlighting the need for 'two generation' approaches to treatment.
- Those focusing only on the mother's psychopathology are inadequate for improving the infant-parent interaction
- Earlier resolution of depression sees some improvement in the quality of interactional play [Goodman et. al. 2008] Mothers treated with anti-depressants and low risk sample

Referral

Who for:

- Families where risks and vulnerabilities have been identified, particularly those that place an infant in an environment of severe stress and/or there exist probable antecedents for the infant to have a disorganised attachment relationship
- Parental mental health disorder the most common being PND
- Exposure to family violence
- Parental alcohol and substance abuse
- Neglect
- The infant has repeated separations and/or has lost their primary attachment figure

- Referral is required for infants identified somewhat later as at risk or already showing significant social, emotional and behavioural problems
- Persistent aggression
- Listless, depressed, apathetic infants
- Failure to thrive [require GP/paediatric review first]

Where to:

- What is available in your area – including services for Maori, Pacific
- NGO's – expertise, training, supervision
- Maternal MHS
- Infant MHS
- MOH initiatives

Recommended Approach

- **From birth to 7 months**
- **Infant States** – recognise them and know what works best to support the infant.
- **Infant Behaviours** – watch for their baby's own unique behaviours in different situations
- **Infant Cues** – these are nonverbal behaviours and it's important to understand what they may be communicating

- Support parents to develop effective ways of managing and comforting the infant when distressed and/or tired
- Support parents to develop effective ways of noticing their own distress and irritability/anger and managing these feelings

Early Parent Child Interaction

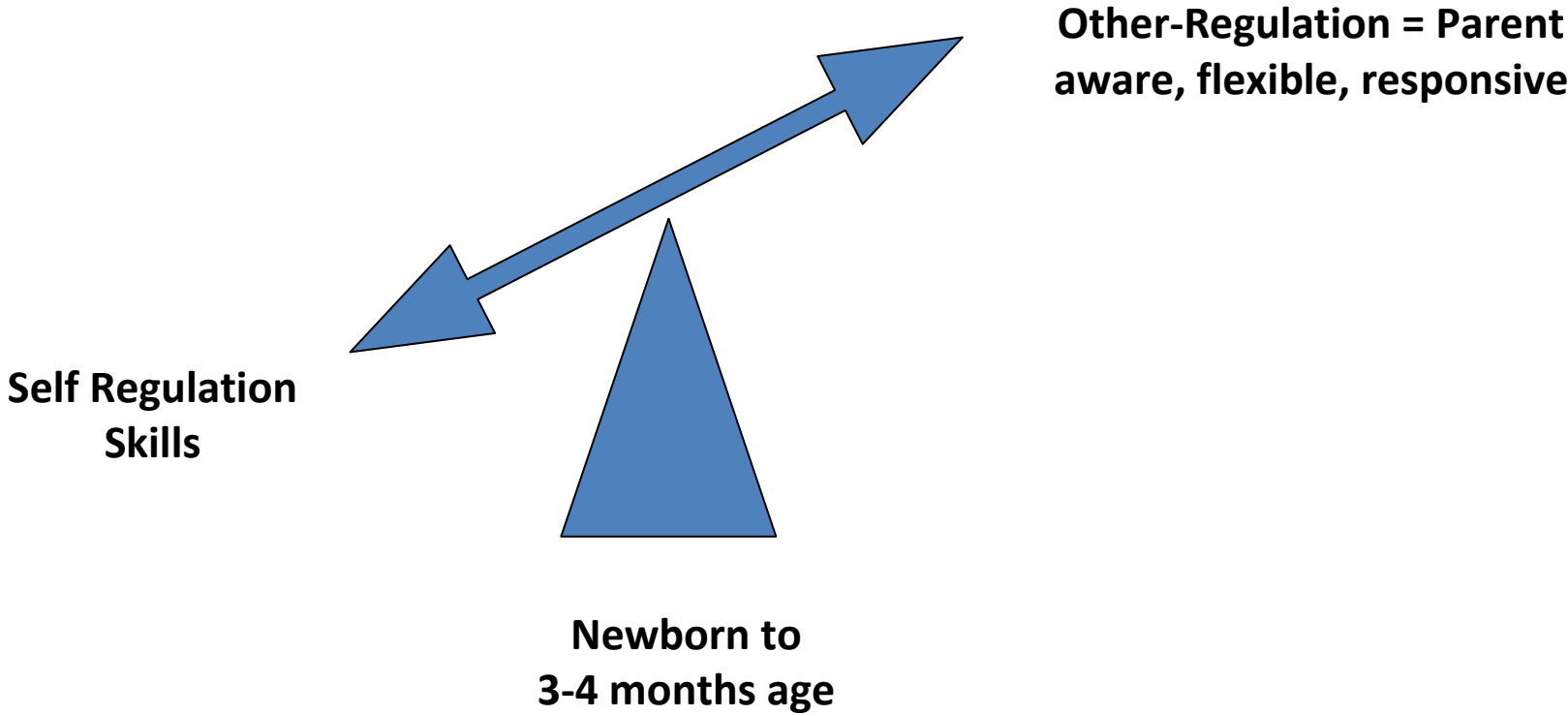
Interactive Regulation [dyadic]

- Bidirectional
- Contingent
- Each makes moment to moment adjustments
to the behaviour of the other

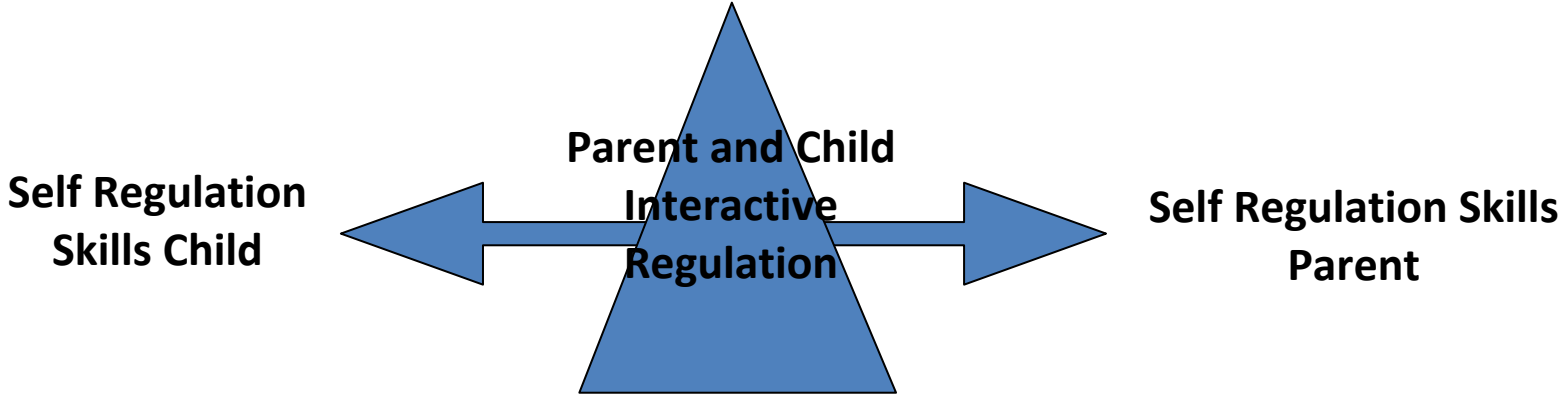
Self Regulation

- Capacity of each to regulate their own
respective states

Regulation



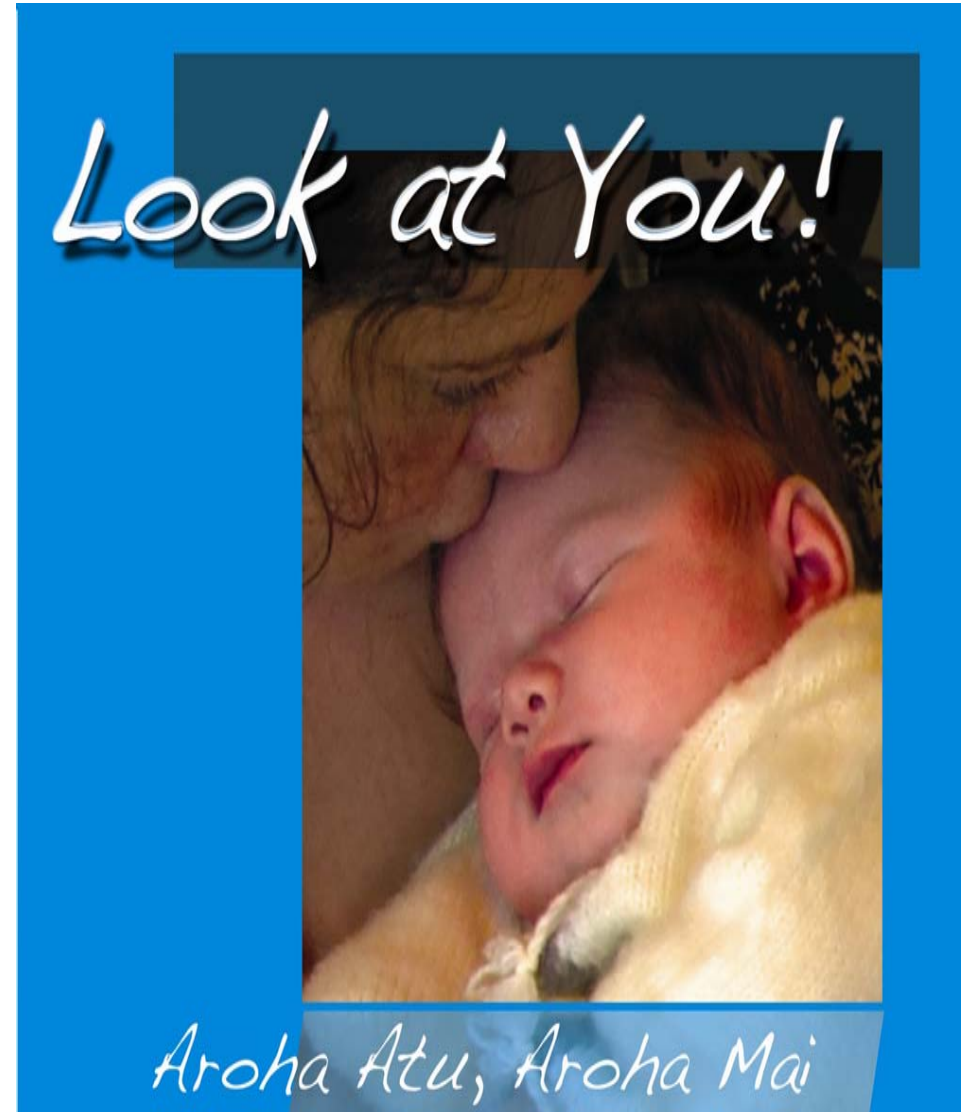
Regulation



Look at You, Aroha Atu, Aroha Mai

AUT/CMDHB Infant
Interaction DVD

Qualitative Evaluation
2010



From 4 months

- Infant becomes interested in the world beyond their parents/siblings/whanau
- Supporting exploring, play and early speech becomes important.
- Give information about child development and parenting and promoting secure attachment.
- Observe and problem solve with parents who are anxious about parenting, may be rejecting at times or struggling to deal with their own feelings.

- Treat parent
- Promote observation of infant
- Promote infant/child-led interaction
- Resources in community for example SPACE programme with Playcentre [for parents with infants from 0-12 months]
- Plans for improving knowledge and skills of WellChild providers
- MSD programmes – limited evidence of effectiveness / lack of IMH knowledge and skills

Interventions: Directed to the [attachment] relationship

- **Child Parent Psychotherapy CPP** [includes infant PP, toddler PP and targeted CPP for exposure to violence, to loss, & to a parent with depression]
- **Watch, Wait and Wonder™** Intervention
- **Interaction Guidance**
- **Circle of Security™**
- **Hoki ki te Rito Group Parenting Programme // Mellow Parenting group programme**

Watch, Wait, and Wonder™ Intervention



**A Child-Led Dyadic Approach to
Problems in Infancy and Early
Childhood**

From Two Years

- Parenting programmes - Group
 - Incredible Years: Toddler, BASIC, ADVANCE
 - Triple P
- Parent-Child Interaction Therapy PCIT
 - Child-Directed Interaction (CDI) [strengthens the relationship via teaching play skills]
 - Parent-Directed Interaction (PDI) [structured and consistent approach to discipline].

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