

# Perinatal Depression and Anxiety

Evidence relating to infant cognitive and emotional development



## INFORMATION FOR HEALTH PROFESSIONALS

### SUMMARY:

Managing perinatal depression and anxiety is important for maternal, as well as infant, well-being.<sup>1</sup> Persistent maternal stress, depression and anxiety can result in detrimental effects on infant development, both during pregnancy and postnatally. However, on average, many individual children are unaffected and can differ in vulnerability and resilience to these problems.

- Severe and prolonged maternal antenatal stress is associated with higher rates of emotional and cognitive problems in children.
- A likely mechanism, whereby maternal stress during pregnancy influences foetal, brain and general development, is through changes in the mother's physiological state.
- Postnatal depression and anxiety have also been found to be associated with compromised cognitive, emotional, social and behavioural development of children.
- Postnatal depression and anxiety are thought to impact on child development by interfering with the mother's capacity to provide consistent, nurturing care to her infant. Low mood, loss of interest and motivation, fatigue, and feelings of guilt and worthlessness can all contribute to this problem.
- The early mother-infant relationship provides the building blocks for future social and emotional development of children.
- Infancy is marked by periods of rapid brain development. Infants develop optimally when they feel secure, nurtured and have their needs met quickly and predictably.
- Re-establishing a healthy mother-infant interaction postnatally can have beneficial effects in reducing the impact of perinatal stress on infants.

### A COMPREHENSIVE PERINATAL MANAGEMENT PLAN

Targeting barriers to maternal care-giving includes managing maternal depression and anxiety, and other psychosocial stressors, as well as considering both the partner and mother-infant relationships.

#### Maternal mood symptoms

- Consider depression and anxiety in all mothers perinatally and ask about it.
- Screen using the EPDS<sup>2</sup> and conduct further assessment as needed.
- Encourage stress management in pregnancy.
- Actively treat depression and anxiety.



- Consider other risk factors during pregnancy and after birth that may also require management.
- Support the mother's efforts by adding practical and emotional supports from the immediate and extended family, friends and others.
- Consider the partner relationship and the partner's own need for support.
- Discuss issues and barriers to accessing treatment.

#### The mother-infant relationship

- Postnatally, maternal depression may be effectively treated, but the mother-infant relationship may need additional support.
- Observe interactions between mother and infant, and also consider the availability of other family members to supplement and support the mother's care-giving.
- Provide psychoeducation about needs of newborns and development (motor, cognitive, emotional).
- Skill acquisition, modelling, sleep and settling programs may be a first step; for others, this is not the entire answer and there may be some underlying reason for not being able to respond to the infant's needs.
- Consider specific programs targeting mother-infant interaction including playgroups, mothers' groups, and more specialised therapeutic programs to optimise the care of babies following postnatal depression.
- Individual approaches to the mother-infant relationship antenatally may include exploring feelings of attachment and tuning in to her developing child (e.g. imagining her baby, talking to her baby).
- Maternal and Child Health Nurses working collaboratively with community agencies and General Practitioners to support parenting are often the first point of contact.



## EFFECTS OF ANTENATAL STRESS ON INFANT DEVELOPMENT

### How does antenatal stress impact on infant development?

- Increasingly, research is finding a clear association between severe maternal antenatal stress/anxiety, as well as depression, on both foetal and later child development.
- One likely way this could occur is the transfer of maternal stress hormones, such as cortisol, across the placenta.
- The developing human brain is vulnerable during the rapid brain growth and foetal nerve tissue development of a normal pregnancy.
- Additionally, depression has been linked with poor maternal self-care and nutrition in pregnancy, as well as adverse obstetric outcomes, all of which may affect infant outcomes.
- The effect of severe and/or prolonged stress in pregnant women on child neuro-behavioural development has been found, even after accounting for potential postnatal episodes of depression, anxiety and stress.
- Long-term effects on children can include an increased risk of attention deficit/hyperactivity, anxiety or language delay.

### Putting findings in context

- While severe antenatal maternal stress may roughly double the chances of child developmental problems, the risk to individual families is still a relatively small one – most children whose mothers experience antenatal stress are not affected. Maternal antenatal mood is therefore one of numerous factors contributing to the population-level risk of behavioural and cognitive problems.
- There is also emerging evidence that the potential effects of antenatal maternal stress on children's development can be moderated by a positive and nurturing postnatal environment.
- More needs to be understood about specific mechanisms and whether different levels and different periods of stress in pregnancy influence vulnerability.

## What can health professionals do antenatally?

- Seeking help for emotional problems can be hard for pregnant women, so monitor mood during pregnancy. Screening tools such as the EPDS<sup>2</sup> can be useful for detecting mood symptoms. For more information see **Edinburgh Postnatal Depression Scale: A *beyondblue* Guide for Health Professionals** at [www.beyondblue.org.au](http://www.beyondblue.org.au)
- Be prepared to intervene early and treat depression and anxiety if indicated, as in other stages of life, using evidence-based treatments (psychological approaches may be a first-line approach in pregnancy).
- Raise pregnant women's awareness of the value of reducing stress and encourage relaxation and self-care strategies.
- Where active treatment is necessary, spend time talking through barriers to accessing care with women. Barriers may include being tired, working, or a woman finding it difficult to accept she is depressed, and concerns over treatment.
- Prepare parents for the challenge of parenting and the importance of getting help early.
- In the postpartum, a mutually responsive mother-infant relationship may improve resilience in the infant and potentially reverse effects of antenatal stress. Therefore, keep in mind that the information in the section 'What health professionals can do postnatally' may also be helpful.

**Summary:** The emotional health of women during pregnancy requires attention both for the well-being of the woman and the development of her child. Effective treatment of depression, anxiety and stress during pregnancy may reduce negative effects.

## EFFECTS OF POSTNATAL DEPRESSION AND ANXIETY ON INFANT DEVELOPMENT

### How do postnatal depression and anxiety impact on infant development?

- We are unsure how this effect is transmitted, but it is likely to be a consequence of the changed mother-infant individual interaction. Infants are very sensitive to the quality of care they receive.
- The symptoms of postnatal depression, such as lowered and non-reactive mood as well as anxiety, make it difficult to engage in joyful parenting.
- Other risk factors for postnatal depression which may also impact on a mother's capacity to care for her infant include poor social and partner support, a mother's own childhood experiences of being parented, low self-esteem and life stress, such as lack of finances, education and poor housing.
- The foundations for healthy self-esteem, capacity to trust, capacity to regulate emotions and the processing of information are established through early relationships.



### Short-term effects of postnatal depression and anxiety

- When mothers and babies engage in a 'good enough' interaction, there is a lot of eye contact and sensitive, responsiveness by the mother, which is tuned in to the infant's immediate needs.
- Infants thrive when warm responsive experiences create an expectation that their physical and emotional needs will be met.
- Depressed mothers' interaction with their infants has been shown to differ from non-depressed mothers: often a mother is less able to demonstrate warm acceptance of her infant, shows more lowered mood and also less well-timed responsiveness to her infant's demands. Depressed mothers may be more withdrawn and less available to their infant or more anxious, irritable and/or intrusive. Infants may react to their mother's lack of emotional availability and responsiveness with gaze aversion or irritability.
- These infant behaviours can further confirm the mother's feelings of sadness, anxiety, guilt and rejection, setting up a vicious interactional cycle.

### Longer-term effects of postnatal depression and anxiety

- Longer-term negative influences of mothers' postnatal depression and anxiety in the first year of life have been reported showing significant effects on infants' emotional and cognitive development.
- Effects may persist into later childhood with more attentional problems, greater difficulty with language, social and emotional development (particularly in boys).
- Ongoing attachment difficulties between mother and infant may also occur following persistent maternal depression and anxiety postnatally. Securely attached infants are more socially competent and can express a wide range of emotions, confident of a sensitive response from their mother. Insecurely attached infants may avoid closeness or may be highly anxious, lacking confidence that their mother will be there for them.

## Parenting and postnatal depression and anxiety

### Protective factors for infants

- Impaired development in children of postnatally depressed or anxious women is not universal.
- Not all children are equally vulnerable.
- Infant temperament plays a role.
- The effect of depression may be greater for children whose mothers find it difficult to maintain sensitive and active engagement with their infant. While a substantial proportion of depressed women experiences parenting stress, re-establishing a joyful mother-infant connection may limit effects of postnatal depression and anxiety.
- Children who have other carers who can meet their needs, such as fathers or grandparents are less likely to be impaired in their development.
- A good social network, maternal education and supportive partner relationship have been shown to reduce the impact on children through supporting the mother in her care-giving.

### The need for early identification, screening and support postnatally

- Many women are reticent to seek help for postnatal mood disorders, so it is important to screen women to identify mood symptoms and the need for further assessment.
- Postnatally, it is important not only to treat depression and anxiety, but to assess whether women are having difficulties with their infants.
- Interactional problems, such as not understanding and responding to infant cues in an appropriate and timely fashion, can also lead to infant management difficulties such as poor sleeping and feeding routines, as well as relationship difficulties in the longer-term.
- Many postpartum women find it easier to get help for infant management difficulties rather than for difficulties coping, so it is also important to check how they are coping.
- Treating maternal symptoms of depression and anxiety does not necessarily repair the interaction between mother and baby, and specific parent-infant intervention may be needed. (This may also increase resilience in infants exposed to maternal antenatal stress).
- Parent-infant interventions are often conducted in group settings with both mothers and babies and aim to re-establish emotional engagement, responsiveness and attachment in the context of understanding infant development.



## What health professionals can do postnatally

### Observing interaction and listening to mothers' concerns (infants three to 12 months)

#### 'Good enough' interactions\*:

- Mother is physically attentive and responsive to infant
- Some eye contact between mother and infant
- Empathy for and ability to reflect infant's feeling
- Sensitivity to infant through immediate and appropriate responses
- Mother's response is paced to infant's cues
- Emotional engagement with the infant and enjoyment – e.g. infant mirrors facial expressions
- Environment that creates the expectancy of interaction
- Balanced stimulation and soothing in their interaction
- Infant is interactive, responsive, engaging, cries when distressed and settles when comforted.

#### Recognising concerning interactions:

- Mothers who are unable to soothe or comfort their infant
- Infants who are difficult to settle, irritable
- Infants and mothers who avoid looking at each other
- Mothers who state they do not know what their infant wants or needs and cannot understand their infant's experience
- Mothers who are intrusive with their infants, poking, too close, too loud, frightening, too rough
- Infants who struggle or arch their backs when held or comforted
- Infants who are experiencing feeding problems or are failing to thrive
- Relationships where there is no joy or mutual reciprocity
- Mothers who have difficulty keeping their baby's needs at the forefront of their mind.



To order *beyondblue's* information materials on depression and anxiety in pregnant women and new mums (including those specific to your state or territory) visit [www.beyondblue.org.au](http://www.beyondblue.org.au) or call the *beyondblue* info line on **1300 22 4636**.

- Edinburgh Postnatal Depression Scale - A guide for health professionals
- Edinburgh Postnatal Depression Scale – Checklist for pregnant women and new mothers
- Progress on the implementation of the National Perinatal Depression Initiative 2008-2013 (October 2009) (summary briefing document)
- Postnatal depression (Fact sheet 22)
- Emotional Health during Pregnancy and Early Parenthood (standard booklet)
- Emotional Health during Pregnancy and Early Parenthood (booklet for parents of multiple birth children)
- Helpline cards for all states and territories
- *beyondblue Guide for Carers* – Supporting and caring for a person with depression, anxiety and/or a related disorder (booklet)
- *Carers' Stories of Hope and Recovery* DVD (personal accounts of caring for a family member or friend with depression, anxiety or a related disorder)
- *Stories of Hope and Recovery* DVD (interviews with *beyondblue's* Ambassadors)

## HELPLINES

<i>beyondblue</i> info line	1300 22 4636
Lifeline	13 11 14
Maternal and Child Health Line (Victoria)	13 22 29
Post and Antenatal Depression Association (PaNDa) (9.30am to 4.30pm Mon-Fri)	1300 726 306
<u>Parent Lines</u>	
13 22 89 (VIC)	1800 654 432 (WA)
1300 30 1300 (QLD & NT)	1300 364 100 (SA)
1300 1300 52 (NSW)	(02) 6287 3833 (ACT)
1300 808 178 (TAS)	

## REFERENCES

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Center on the Developing Child at Harvard University (2009). Maternal Depression Can Undermine the Development of Young Children: Working Paper No. 8. Available at <http://www.developingchild.harvard.edu>
  - 2 See Edinburgh Postnatal Depression Scale: A *beyondblue* Guide for Health Professionals.
- \* Remember that what is important is 'good enough' mothering, whereby the infant has a sufficiently consistent experience of positive interaction.

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03/10