

# Maternal depression: postnatal or perinatal?

**Maternal depression and anxiety are common antenatally and postnatally. Both can affect child development and long-term maternal wellbeing. Being aware of risk factors, engaging carefully and treating assertively are important to improve long-term outcomes.**

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Both antenatal and postnatal maternal depression present risks to the mother and developing child. So that the mental health of pregnant women is not overlooked, the focus of maternal depression has shifted from postnatal to perinatal depression. Research has suggested that in many women postnatal depression begins antenatally, with potential adverse outcomes for the developing fetus, although further research is needed to clarify this.<sup>1</sup> Postnatal maternal depression can also impair child attachment and the mother–infant interaction. Long-term risks of cognitive and behavioural delays and difficulties in children have also been well documented.<sup>2,3</sup>

Antenatal depression affects at least 12% of women and a higher percentage have symptoms of anxiety.<sup>4</sup> Postnatal depression affects between 10 and 20% of mothers.<sup>5</sup> Some women will have both antenatal and postnatal depression. Although perinatal anxiety receives less attention than

perinatal depression, it is possibly more common either in its own right or in association with depression, and may also have effects on the developing child.<sup>1</sup> Women with perinatal anxiety respond to similar management approaches, in particular psychological techniques, as women with perinatal depression.

During pregnancy and the early postpartum stage, most women visit their GP for obstetric and paediatric review, yet few present for their own mental health.<sup>6</sup> The challenge for health professionals is early identification and early intervention in women who have or are at a high risk of developing perinatal depression and anxiety. GPs are well placed to identify and care for such women.

## Making the diagnosis

### Risk factors

Women at high risk for maternal depression do not always develop depression and the ability of

## IN SUMMARY

- Postnatal depression often begins antenatally and there can be as many anxiety symptoms as there are depressive symptoms.
- Maternal depression and anxiety can have significant effects on the development of the child and on the long-term wellbeing of the mother.
- Women often do not recognise the signs of maternal depression and delay asking for help.
- Early intervention is critical; therefore, it is important for GPs to have a high index of suspicion in women who may be at risk of depression.
- The risks and benefits to both the mother and the child need to be taken into consideration when making decisions on which medication to use for treating patients with maternal depression.
- Patients should be referred or specialist advice sought if risk factors are high, the depression is severe or primary care options fail.

healthcare professionals to accurately predict who will suffer is poor.<sup>7</sup> Multiple stresses may increase the likelihood that a woman will struggle in her transition to parenthood or with the arrival of a new baby and might therefore benefit from assistance.

Women with genetic vulnerability may be particularly at risk. Antenatal depression and a past or family history of depression or anxiety disorders are the best predictors of future episodes of depression (Table 1). A woman with a family history of bipolar disorder is of particular concern as she will be at a higher risk of postpartum psychosis. A family history of suicide with unclear reasons why may also reflect a family history of bipolar disorder or major depression.

### Symptom profile

Anxiety during pregnancy is not uncommon as many women are concerned about the health of their unborn child. These anxieties can be incorrectly passed off as 'normal' although the woman may have deeper concerns, not just about the health of her child but also about her living circumstances, relationships and how she will cope with the child. Postnatally, anxiety is likely to continue and will focus on the baby, in particular on breastfeeding and the child's sleep patterns, despite the infant's behaviour usually being within the normal range. If a



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woman is anxious about different things, either in a particular interview or over time, more consideration is needed over whether this is within the range of normal. Asking about panic attacks, fear of leaving home or being alone may give useful information.

Physical symptoms of depression, such as poor sleep and weight change, are not uncommon during pregnancy or the early postpartum stage and can make diagnosis difficult. Although the mother's sleep is likely to be affected by the child, nondepressed mothers are able to get back to sleep after night feeds, whereas depressed, anxious mothers often do not. Although breastfeeding can affect appetite, depressed mothers often eat because they know they have to, not because they are enjoying food. Cognitive symptoms such as worthlessness, guilt or an inability to enjoy life can be more useful indicators and often centre around the woman's negative evaluation of her ability as a mother. Patients are often not forthcoming about these symptoms due to their nonrecognition and the stigma associated with depression.<sup>6</sup> Asking about stress is a good way to assess how a patient is feeling. Determining how much stress the woman has each day and whether it is impacting on her life is also useful information.

Thoughts of not wishing to wake up in the morning are common in women with postnatal depression, but suicide is not common in these women. Suicide is, however, a significant risk in women with postpartum psychosis, and is a leading cause of maternal death.<sup>13-15</sup> Women with

**Table 1. Risk factors for perinatal depression<sup>5,8,9</sup>**

Past or family history of depression*
Unplanned pregnancy or negative attitude to pregnancy
A first-time pregnancy
Stressful life events*
Lack of support from partner or family*
Marital discord
Indigenous background
Poverty
A history of childhood abuse or deprivation with little or poor experience of good parenting
Personality factors (e.g. neuroticism, perfectionism, high interpersonal sensitivity)

\*There is most evidence for these risk factors.

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**Table 2. Effects of medication use during pregnancy and lactation<sup>10-12</sup>**

Medication*	Use in first trimester	Use in second/third trimester	Use in lactation
<b>Antidepressants</b>			
Tricyclics	No clear evidence of teratogenicity (reasonable data base)	Risk of sedation of infant at birth (isolated case reports) Risk of transient withdrawal symptoms	Risk of sedation of infant if accumulates (isolated case reports); data in children up to 4 years of age suggest no neurodevelopmental or IQ problems
Selective serotonin reuptake inhibitors (SSRIs)	No clear evidence of teratogenicity except for paroxetine and fluoxetine – Paroxetine may cause a probable increased risk of congenital malformations and cardiovascular defects – Fluoxetine may cause a probable increased risk of minor congenital malformations (large evidence base)	Persistent pulmonary hypertension of the newborn; small overall risk in a single study Increased risk of prematurity and small size for gestational age Withdrawal or toxicity symptoms in infant at birth, most often mild transient symptoms	Higher levels in breast milk than plasma but little absorption by infant Most data is on fluoxetine, followed by cipramil and sertraline
Serotonin noradrenaline reuptake inhibitors (SNRIs)	Usually considered with the SSRIs (little available data)	Withdrawal or toxicity symptoms in infant at birth, most often mild transient symptoms, but reports also of more serious symptoms such as convulsions	High levels in breast milk for venlafaxine, but little data available
<b>Moodstabilisers</b>	All teratogenic (lithium is the least) Sodium valproate has the highest risk and should be avoided	Risk of toxicity/side effects in infant at birth Risk of developmental delay with sodium valproate	Not recommended in lactation, but sodium valproate would be the best choice
<b>Antipsychotics</b>			
First generation	No evidence of teratogenicity	Risk of sedation/side effects in infant at birth; isolated case reports Potential extrapyramidal side effects with higher potency agents	Most evidence for chlorpromazine (up to five years); however, data for other antipsychotics are lacking
New generation	Possible evidence of slight increase in teratogenicity; however, good data are lacking	Risk of sedation/side effects in infant Possible metabolic dysregulation with olanzapine	Concern with clozapine and blood dyscrasias (isolated case reports) Olanzapine and risperidone are not actively excreted in milk
<b>Benzodiazepines</b>	Increased risk of cleft palate with higher doses	Risk of sedation in infant at birth (isolated case reports) Withdrawal symptoms if mother is a chronic user	Sedation and learning difficulties if long-term or high dose (poor database)

\*Review product information before prescribing.

postpartum psychosis may have a family history of bipolar affective disorder and present with marked lability of mood. These women usually deteriorate rapidly, have delusions and hallucinations and are a risk to their children, particularly if the child is involved in their delusions. It is important to always ask about thoughts of harm to themselves and to their infants.

A number of issues need to be taken into account in the overall and ongoing management of a woman with perinatal depression. These include:

- the number and severity of symptoms
- the length of time that the woman has been experiencing these symptoms
- whether the symptoms are improving.

## Biological management

### Pharmacological

Women with perinatal depression and anxiety respond to antidepressants although the response may be a little slower than in patients with depression at other times. To prescribe antidepressants the patient must be in agreement and her symptom profile should be of sufficient severity and duration (several symptoms should be present for most of each day and for a duration of about two weeks, although the duration can be shorter if depression is more severe).

A woman's previous response to antidepressants (if any), symptom profile and any other specific patient factors, such as fear of gaining weight, should be taken into consideration when choosing an antidepressant. Selective serotonin reuptake inhibitors (SSRIs) are usually first-line therapy as they are mostly well tolerated, effective and do not sedate women who need to be alert at night to feed their child. Serotonin noradrenaline reuptake inhibitors (SNRIs) would be a likely second choice. Mirtazapine might also be considered as first-line therapy if sleep deprivation was significant and there was another adult able to wake at night to attend to the child. Mirtazapine,

## Useful online resources for maternal depression

### The Department of Health. Delivering a Healthy WA

[www.health.wa.gov.au/health\\_topics/m/mental\\_health.cfm](http://www.health.wa.gov.au/health_topics/m/mental_health.cfm)

### Australian Infant, Child, Adolescent and Family Mental Health Association Ltd

[www.aicafmha.net.au/index.htm](http://www.aicafmha.net.au/index.htm)

### Beyondblue

[www.beyondblue.org.au](http://www.beyondblue.org.au)

### National Child Protection Clearinghouse

[www.aifs.gov.au/nch/index.html](http://www.aifs.gov.au/nch/index.html)

### Zero to three. A parenting resource

[www.zerotothree.org](http://www.zerotothree.org)

### PostpartumDads – helping families overcome postpartum depression

[www.postpartumdads.org](http://www.postpartumdads.org)

### Australian Association for Infant Mental Health

[www.aaimhi.org](http://www.aaimhi.org)

### The Marcé Society – an international society for the understanding, prevention and treatment of mental illness related to childbearing

[www.marcesociety.com](http://www.marcesociety.com)

### Motherisk. Treating the mother – protecting the unborn

[www.motherisk.org/prof/index.jsp](http://www.motherisk.org/prof/index.jsp)

however, is not always well tolerated. Tricyclics are effective antidepressants but they are often poorly tolerated and can be lethal in overdose; they therefore should be used with caution and not as a first-line therapy.

Antipsychotics and mood stabilisers have a role in postpartum psychosis and bipolar disorder but are rarely indicated in depression. If benzodiazepines are ineffective, antipsychotics with sedating properties may be useful in the short term for women with sleep deprivation.

### Medication in pregnancy and lactation

Although there are numerous reports of the effects of psychotropic medication in women during pregnancy and lactation (Table 2), information is constantly being revised so it is important for GPs to be up to date when prescribing medication to women with maternal depression. Information can be obtained from a perinatal psychiatrist or from an expert registry, such as provided by some obstetric services (see box on useful online resources on this page).

Studies investigating the effects of medications in maternal depression differ in their methodology, ranging from

cohort studies and case reports to data from birth registries, with the problems of bias, inadequate or no controls and confounding variables. The risks of treatment versus no treatment must be considered for the child as well as the mother.

Research has shown that depressed and/or anxious expectant mothers may be a risk to their developing child because of poor self-care and higher levels of stress hormones during pregnancy.<sup>1</sup> In these situations there tend to be increased rates of pre-eclampsia, low birthweight, small size for gestational age and prematurity, as well as the impact of impaired postnatal parenting on attachment to the child and child development.<sup>2,3</sup> Therefore, although psychological treatments are preferred, if they are not effective or the woman is too ill, treatment with medication is more effective than no treatment at all.

## Psychosocial management

### Support

Lack of support is one of the key risk factors for difficulties in the transition to parenthood. Many mothers feel they must parent alone and perfectly. This is a common thought that needs to be challenged. Start by explaining that no

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other job is 24 hours a day, seven days a week.

Childcare (paid or family) and time out, even if only for short periods of time, are crucial for women to survive this transition. Mothers groups can be helpful, but a woman may feel that she is the only one in the group who is not coping and this can further worsen her self-esteem. Groups exist specifically for women with postnatal depression and can be more supportive. Talking with the patient to encourage the extended family to visit can also be beneficial.

### The couple

As well as forming their own relationships with the baby, many men are also dealing with their partner's illness and the same, or some of the same, risk factors (e.g. financial difficulties). These men are at a higher risk of minor mood changes and if they are the key support to the mother then it is important to address their wellbeing also. If one parent is looking after the child so the other can continue a hobby or sport then this should be reciprocated to the other parent. Time together as a couple is also important and is often overlooked.

Previous difficulties within the relationship can worsen after having a baby, and if this is a significant source of stress, marital counselling is worth considering. The patient's partner can be reluctant to engage in counselling if he feels he is being blamed, but is usually open to having his side of the story heard. In this setting there can be a gentle discussion of the relationship and how things could be improved for them both.

### Individual issues

The increasingly older age of primigravida has brought particular problems as these women are often career focused and are used to being in control and doing a job well. It is important to encourage them to reconsider their high expectations and explain to them that good mothers do

not always have to do everything.

Other common individual issues include the reawakening of childhood traumas and fears that they will turn out like their own parents. Generally it is not necessary to delve into childhood traumas at this time. Encourage a 'here and now' practical approach, using problem-solving, anxiety management and cognitive behavioural therapy techniques. Inter-

personal therapy has also been shown to be of use, but there is less evidence for other interventions such as light therapy and exercise (e.g. pram walking).<sup>16</sup>

### Mother-infant relationship

Research suggests that children of women with perinatal depression are at a higher risk of cognitive, emotional and behavioural difficulties.<sup>2,3</sup> This is particularly the

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case if postpartum depression is chronic, the child is male and there are socio-economic difficulties within the family. Although studies in this area are lacking, early intervention and assertive treatment of perinatal depression could be an effective means to reduce adverse childhood outcomes.

During interaction with their infants, depressed mothers may be anxious and

overinvolved or depressed, withdrawn and underinvolved. They may also be poor at reading their infant's cues, resulting in the infant becoming frustrated or giving up. There may be a lack of synchronicity as evidenced by an absence of turn taking during the interaction. The child, depending on his or her temperament, may present with problems such as settling and feeding in the first

instance. The GP should be alert to difficulties in the mother–infant interaction and should consider referral of the patient to a mother–infant therapy specialist if there are concerns. Given their limited availability, access to such specialists may be difficult, and it may only be in extreme cases that referral is possible through involvement of the child protective services (as provided in a number of States and Territories).

New training programs for GPs such as 'Feeling Attached' (which originated in South Australia but is available in several States), aim to improve GP awareness of when the mother–infant relationship is problematic and basic skills in assessment and intervention.<sup>17</sup>

### When to refer?

Many women with perinatal depression can be effectively managed in general practice. There are five key points to consider in regards to referral of patients, which are listed below.

- Consider referral of the patient, preferably to a specialist mother–infant unit, if there are concerns regarding risk to the mother or the child, in complex cases and if support is limited. Australia now has units in all State capital cities and in one regional city (Albury); however, some cities have access to private units only. (GPs can contact their local mental health services for details of mother–infant units in their area.)
- Consider referral of the patient to a psychiatrist, preferably one with specialist training in perinatal psychiatry, for a comprehensive assessment and management plan, shared care or primary management. Referral to a psychiatrist should be considered if there has been no response or an inadequate response to at least one antidepressant medication and psychosocial management, or if there are complex psychodynamic issues or comorbid

### Special suggestions in treating maternal depression for rural GPs

- Women living in rural areas generally prefer not to be admitted into the city; however, if there are serious issues of risk, admission to a mother–infant unit in the city should be considered.
- Rural GPs should know what perinatal mental health services/supports are available in their area.
- Rural GPs should make themselves known to the local maternal child health nurse as good communication can aid early intervention. These nurses are often aware of current programs or supports.
- Rural GPs should undergo training in cognitive behavioural therapy if they are unable to refer patients to a psychologist in their area (see, for example, the SPHERE national mental health project, [www.spheregp.com.au](http://www.spheregp.com.au)).

disorders (e.g. women with a history of abuse or with personality disorders).

- Consider referral of the patient to a clinical psychologist if a patient has mild to moderate depression, particularly if she has high levels of anxiety and/or she has chosen not to take medication.
- Consider referral of the patient to a mother–infant therapist, if available, if there are issues in attachment to the child.
- GPs should notify the child protective services if they believe the child is at risk. Protective services may be less likely to act if the child is not at risk from physical or sexual danger, unless

GPs stress to them the emotional risks to the child.

### Summary

Postnatal depression or anxiety often begins antenatally and there can be as many anxiety symptoms as there are depressive symptoms. Given the need for early intervention to minimise poor outcomes for the mother and infant, the disorder is best considered as perinatal depression or anxiety. GPs should consider risk factors during pregnancy, monitor pregnant women and mothers closely and have a high index of suspicion. Special suggestions in treating maternal depression for rural GPs are listed in the box on this page. Management needs to

be assertive; consider the risks to the baby and mother and address psychosocial stresses. Specialist advice should be sought or the patient referred if risk factors are high, the depression is severe or primary care options fail. Useful online resources for maternal depression are listed in the box on page 41. MT

*A list of references is available on request to the editorial office.*

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## References

1. O'Connor T, Heron J, Golding J, Beveridge M, Glover V and ALSPAC Study Team. Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years. Report from the Avon Longitudinal Study of Parents and Children. *Br J Psychiatry* 2002; 180: 502-508.
2. Murray L, Cooper PJ. Postpartum depression and child development. *Psychol Med* 1997; 27: 253-260.
3. Murray L, Cooper P. Effects of postnatal depression on infant development. *Arch Dis Child* 1997; 77: 99-101.
4. Ross L, Evans SEG, Sellers EM, Romach MK. Measurement issues in postpartum depression. Part 1: anxiety as a feature of postpartum depression. *Arch Womens Ment Health* 2003; 6: 51-57.
5. O'Hara M, Swain A. Rates and risks of postpartum depression – a meta-analysis. *Int Rev Psychiatry* 1996; 8: 37-54.
6. Buist A, Speelman C, Hayes B, et al. Impact of education on women with perinatal depression. *J Psychosom Obstet Gynaecol* 2007; 28: 49-54.
7. Austin MP, Lumley, J. Antenatal screening for postnatal depression: a systematic review. *Acta Psychiatr Scand* 2002; 106: 1-8.
8. Robertson E, Grace S, Wallington T, Stewart DE. Antenatal risk factors for postpartum depression; a synthesis of recent literature. *Gen Hosp Psychiatry* 2004; 26: 289-295.
9. Milgrom J, Gemmil A, Bilszta JL, et al. Antenatal risk factors for postnatal depression: a large prospective study. *J Affect Disord*. In press.
10. Sivertz K, Kostaras X. The use of psychotropic medication in pregnancy and lactation. *BC Med Journal* 2005; 47: 135-138.
11. Cohen LS, Rosenbaum JF. Psychotropic drug use during pregnancy: weighing the risks. *J Clin Psychiatry* 1998; 2 Suppl 59: 18-28.
12. Kalra S, Born L, Sarkar M, Einarson A. The safety of antidepressant use in pregnancy. *Expert Opin Drug Saf* 2005; 4: 273-283.
13. Appleby L, Mortensen PB, Faragher EB. Suicide and other causes of mortality after post-partum psychiatric admission. *Br J Psychiatry* 1998; 173: 209-211.
14. Appleby L. Suicide during pregnancy and in the first postnatal year. *BMJ* 1991; 302: 137-140.
15. King JF, Slaytor EK, Sullivan EA. Maternal deaths in Australia 1997-1999. *Med J Aust* 2004; 181: 413-414.
16. Dennis CL. Treatment of postpartum depression: Part 2. A clinical review of nonbiological interventions. *J Clin Psychiatry* 2004; 65: 1252-1265.
17. Williams AS, Thiele W. Feeling attached: parent and infant mental health. Adelaide: Australian Infant, Child, Adolescent and Family Mental Health Association, 2005.