



POLICY BRIEF 1

Maternal depression

Translating evidence from the Maternal Health Study to inform policy and practice

This policy brief summarises findings from the Maternal Health Study: an Australian longitudinal study of over 1500 first time mothers. Almost one in three women in the study reported depressive symptoms between pregnancy and four years postpartum. Counter to the prevailing view that the perinatal period is a peak time of vulnerability to depression, the prevalence of depressive symptoms was higher at four years postpartum than at any point in the first 12 months after birth.

Depression is the leading contributor to the global burden of disease and is responsible for more years of life lived with a disability, reduced productivity, increased health expenditure, impact on families and caregivers, and premature mortality, than chronic heart disease and cancer.¹

Severe perinatal depression, anxiety and exposure to intimate partner violence are among the leading causes of maternal death.²⁻⁴ Maternal depression during pregnancy is associated with preterm birth, low birthweight and early cessation of breastfeeding.^{5,6} Children of mothers experiencing mental health problems during and after pregnancy are more likely to experience internalising and externalising behavioural problems and there is evidence to suggest that maternal mental health has long term effects on child, adolescent and adult health outcomes.^{7,8}

The accumulating evidence demonstrating the effect of early life stress and trauma on health across the life course has led to calls for increased investment in the 'early years' as the most effective strategy for reducing inequalities in health outcomes and breaking intergenerational cycles of social adversity.⁹

The Maternal Health Study

The *Maternal Health Study* is a multi-wave, prospective cohort study investigating the health and well-being of over 1500 first-time mothers and their firstborn children. Women participating

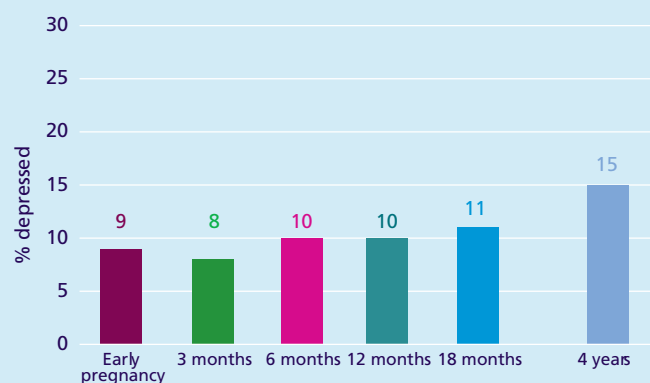
in the study completed questionnaires in early pregnancy, and at 3, 6, 12, and 18 months postpartum, and were followed up again when their first child was 4 years of age.¹⁰

Depression from pregnancy to 4 years

Maternal depression was assessed using the Edinburgh Postnatal Depression Scale (EPDS), with a score of ≥ 13 indicating probable clinical depression. 31% of women in the study reported depressive symptoms (EPDS ≥ 13) at least once over the period from early pregnancy to 4 years after the birth of their first child.

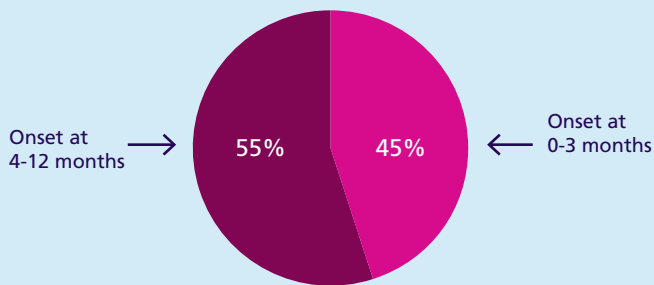
The prevalence of maternal depression was higher when the first child was 4 years of age than at any point in the first 18 months postpartum.

Figure 1 Maternal depression from pregnancy to 4 years postpartum



One in 5 women reported depressive symptoms in early pregnancy and/or the first 12 months postpartum (i.e. during the perinatal period). The onset of depression in the first year after childbirth was more common in the period 4-12 months postpartum, than in the first 3 months after the birth.

Figure 2 Onset of depression in first 12 months



Intimate partner abuse

Intimate partner abuse was assessed using the Composite Abuse Scale – an 18-item scale that assesses physical and emotional abuse by an intimate partner.¹¹

One in 5 women (20%) in the study reported that they had experienced emotional and/or physical abuse by an intimate partner in the first 12 months postpartum. A similar proportion of women (21%) reported emotional and/or physical abuse by an intimate partner in the 12 months preceding the 4-year follow-up.

Emotional and/or physical abuse by an intimate partner was associated with a 4-fold increase in odds of reporting depressive symptoms at 4 years postpartum.

Figure 3 Depression and intimate partner abuse



Recurrences of depression

Amongst the women reporting depressive symptoms over the period from early pregnancy to 4 years postpartum:

- 54% scored ≥ 13 on the EPDS on a single occasion,
- 20% on 2 occasions,
- 12% on 3 occasions, and
- 15% on 4 or more occasions.

Thus, for many women depression was a recurring and/or episodic condition.

Impact of second and subsequent children

Almost three-quarters of women in the study (72%) had had a second child by the time their first child was aged 4.

At 4 years postpartum, 23% of women with one child reported depressive symptoms (EPDS ≥ 13) compared with 11% of women with two or more children. The birth of a second or subsequent child is **not** the explanation for the high prevalence of depression amongst women with 4-year old children.

Interestingly, women in the study with one child at the time of our 4-year follow-up tended to have had more relationship transitions, and were more likely to have experienced intimate partner abuse and a greater number of stressful life events and social health issues in the preceding 12 months. They were also more likely to have a low income, and to have experienced depression in pregnancy and the first 12 months postpartum.

Figure 4 Depression by number of children



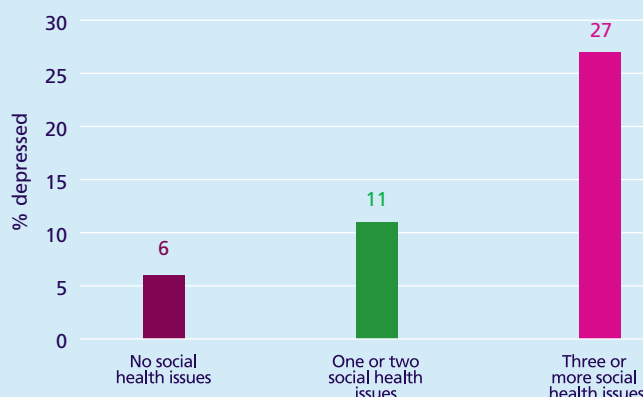
What predicts depression at 4 years?

The strongest predictor of depressive symptoms at 4 years postpartum was having previously reported depressive symptoms either in early pregnancy, or in the first 12 months postpartum.

Other factors associated with maternal depression at 4 years postpartum were:

- being under 25 at the time of a first birth
- intimate partner abuse
- having a low income
- experiencing multiple stressful life events and social health issues, such as housing problems, separation or divorce, losing your job, or a close family member having a major illness or passing away.

Figure 5 Depression and social adversity



About the maternal health study

All women in the study were pregnant with their first child when they joined the study. 1507 women were recruited to the study from six metropolitan public maternity hospitals in Melbourne, between 2003 and 2005.

The study provides a comprehensive picture of women's health during pregnancy, and after first and subsequent births. Data are being collected on common maternal physical and psychological health problems, including urinary and faecal incontinence, sexual health problems, depression, anxiety and intimate partner abuse, and on a range of child health and developmental outcomes at age 4 and age 10. This has resulted in a rich data set with unique data on trajectories of mothers and first-born children.

The mean age of women in the study when their first baby was born was 31 years (range 19-50).

62% of women had 2 children by the time their first child was 4 years of age, and 10% had three or more children.

To assess the representativeness of the sample, we compared data on the social characteristics of study participants with routinely collected Victorian perinatal data for women giving birth as public patients in the study period. The women in the study are largely representative in relation to obstetric characteristics, including the method of birth for their first baby. Younger women (under 25 years) and women born overseas of non-English speaking background are under-represented.

Participation in follow-up to 18 months postpartum was excellent, ranging from 95% at 3 months postpartum to 90% at 18 months postpartum. 83% of women consenting to follow-up at 4 years took part in this stage of the study.

For a list of publications from the study, please visit the study website: <https://www.mcri.edu.au/research/research-projects/maternalhealthstudy/>

Considerations for policy and practice

Screening for perinatal depression

- Universal screening for depression in pregnancy and the first few months postpartum is recommended in UK and Australian guidelines for routine perinatal care. ^{12,13}
- Findings from the *Maternal Health Study* show that the majority of women experiencing depression in the first 12 months postpartum first reported postpartum symptoms at 6 months or later. This means that programs focusing on identifying women with depression in the first 3 months postpartum will miss the majority of women who experience depression in the first postpartum year. ¹⁴

Safeguarding maternal health

- Currently the emphasis of maternal health surveillance is predominantly on women's health in pregnancy and the immediate postpartum period.
- Findings from the *Maternal Health Study* show that many common maternal health issues extend well beyond this period.
- It is striking that maternal depression was more common at 4 years postpartum than at any time in the first 12 months postpartum.
- When depression is most prevalent (4 years postpartum), women have no structured contact with primary care practitioners, and there is a high risk that depression may go untreated.

Social adversity and intimate partner abuse

- Many women in the study experienced emotional and/or physical abuse by an intimate partner or other kinds of social adversity.
- Social adversity and intimate partner abuse markedly increase the likelihood of women being depressed after having a baby.

Key challenges

In order to improve maternal and child health outcomes, there is an urgent need to re-think current models of maternal health surveillance and primary health care support.

Key challenges are:

- Ensuring that women experiencing depression beyond the first 3 months postpartum are identified by primary care services and offered appropriate support
- Ensuring that primary care services remain attentive to the high prevalence of maternal depression among women with pre-school age children
- Targeting of resources to women at higher risk of mental health issues, such as those experiencing intimate partner abuse or other kinds of social adversity
- Ensuring that women who have only one child, and/or have a long gap between pregnancies, receive appropriate primary health care and support in the early years of parenting.

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References

References for the policy brief, and a link to peer-reviewed publications from the Maternal Health Study can be accessed at the study website: <https://www.mcri.edu.au/research/research-projects/maternalhealthstudy/>

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