

Policy on Perinatal Depression

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SCOPE OF THE ISSUE

Perinatal depression (PND), which includes Prenatal and Postnatal depression of caregivers, impacts the health and wellbeing of children and families. It can break down family relationships, affect the long-term health of children and result in costly increases to healthcare use (Rafferty et al., 2018). PND is prevalent in Australian communities, yet it is reported to be under identified (Khanlari et al., 2019; Smith et al., 2019). Chiropractors seeing infants and toddlers play an important role in the early identification and management of maternal and paternal PND.

Anxiety and depressive disorders are the most common complication of pregnancy and the first postnatal year, affecting 10–15% of women, although this figure ranges from 4-64% and varies considerably between countries (Khanlari et al., 2019). The reported prevalence of antenatal and postnatal depression in Australia is 6–17% and 3–11% respectively (Khanlari et al., 2019). However, researchers believe these rates underestimate the prevalence, as many women with symptoms during pregnancy do not seek help (Roshaidai et al., 2018; San Martin Porter et al., 2019). Two Australian population-based surveys found that 45% and 66% of pregnant women had been asked about their mental health by a health care professional (Reilly et al., 2013, Yelland & Brown, 2014). Only 37% of women had completed formal depression questionnaires during pregnancy (San Martin Porter et al., 2019).

Paternal PND and anxiety has received less attention than maternal mental health problems (O'Brien et al., 2016). A 2012 report identified paternal PND prevalence of 10% in 3,219 Australian fathers (Giallo et al., 2012). These results were replicated in a 2016 meta-analysis that estimated the prevalence of paternal PND at 8.4% (Cameron et al., 2016). Although these rates of depression are significant, the reported rates have been higher in the US and in other countries (Glasser & Lerner-Geva, 2018). It is likely that these rates under represent the true prevalence in fathers given there may be a gendered context in men underreporting depressive symptoms (Chhabra et al., 2020). Additionally, depression in men may be masked by interpersonal conflict, somatic complaints, drug and alcohol use, and avoidance behaviour (O'Brien et al., 2016).

RISK FACTORS FOR PND

A history of psychiatric disorders, particularly depression and anxiety, is the strongest risk factor for PND (Kiewa et al., 2021). However, many women without such history experience their first depressive episode perinatally, whilst other women with a history of depression may not experience any episodes during the perinatal period (Kiewa et al., 2021).

Antenatal maternal distress was associated with probable postnatal depression (Khanlari et al., 2019). This means that mothers with poor obstetric history, poor social support, history of childhood violence, low economic status and maternal and newborn health issues were more likely to have depression (Dadi et al., 2020). However, some studies have indicated there is no



evidence to support an association between demographic and social support factors (Chojenta et al., 2016). It is often difficult to distinguish confounding factors and co-morbidities (Rafferty et al., 2018).

Research has also identified a significant association of low levels of serum vitamin D in the second trimester of pregnancy and a higher risk of developing PND (Jani et al., 2020). One significant and independent risk factor for maternal postnatal depression is infantile colic. Excessive crying both 2 and 6 months after birth may be a risk factor for depressive symptoms and even if symptoms of colic have resolved the risk still may be relevant (Vik et al., 2009). Specific to Australia, we find that Indigenous and culturally/linguistically diverse women and their babies have greater risks of adverse perinatal outcomes, including depressive symptoms (Ogbo, et al, 2018; San Martin Porter et al., 2019).

The primary risk factors for fathers are a history of depression or anxiety and a partner suffering perinatal depression (Glasser & Lerner-Geva, 2018). Depressive symptoms reduce people's capacity to support others, this is detrimental when men rely heavily on their spouses for support (as men often have limited support networks) (Baldoni & Giannotti, 2020; Cockshaw et al., 2014). Gender role, stress, domestic violence, and mismatched expectancies from pregnancy and childbirth are other risk factors which are unique to fathers in the perinatal period. Marital distress was also linked to a two-fold increase in the likelihood of paternal depression in the postnatal period (Chhabra et al., 2020).

EFFECTS OF PND

In Australia, the broader impact of perinatal depression is under-researched (Eastwood et al., 2017). The general conclusions support that PND can disrupt the development of parent/child interaction and challenge family relationship patterns (Maxted et al., 2005). It also leads to the increased cost of healthcare services for a family (Chhabra et al., 2020).

Children of parents suffering from PND have a higher risk of psychiatric disorders, school absences, poor academic performance and decreased social functioning in adolescence and adulthood (Eastwood et al., 2017). Mothers experiencing low mood use less infant-directed speech and less exaggerated pitch with prelinguistic infants (Lam-Cassettari & Kohlhoff, 2020). Infants who are not exposed to highly intonated speech engage less in sustained social interaction and show poorer language development by the second year of life (Lam-Cassettari & Kohlhoff, 2020). The poor relationship creates an environment that adversely affects the infant's development. These infants are at increased risk of failure to thrive, attachment disorders, developmental delays, and other negative effects on cognitive development, social-emotional development, and behaviour (Avalos et al., 2019).

Maternal PND has been shown to contribute to the amplification of premature births, low birth weights, decreased breastfeeding initiation and less likely to engage in healthy feeding and sleep practices with their child (Eastwood et al., 2017; Edward et al., 2019; Khanlari et al., 2019). Further effects of PND may include non-adherence to antenatal care schedule, insomnia, poor appetite and weight gain, poor social-emotional interaction with other family members and higher rates of depression later in life. (Eastwood et al., 2017; Ogbo et al., 2019). Unfortunately, an estimated 53% of women with PND have self-harming thoughts and "high suicidality" (Kiewa et al., 2021).

Fathers experiencing PND are more likely to be isolated, to have few effective interpersonal supports, and adopt coping strategies which could be harmful to themselves and their families (O'Brien et al., 2016). Depressed fathers are less likely to be engaging with their infants and



toddlers which may affect a child's behaviour, mental health and learning or cognitive development (Chhabra et al., 2020; Edward et al., 2019). More specifically there is an increase in emotional and behavioural control problems at 21 and 42 months and childhood psychiatric disorders and oppositional behaviours at 7 years (Baldoni & Giannotti, 2020). Depressed fathers are four times more likely than non depressed fathers to spank their 1 year old child, and only half as likely to read to them (Davis et al., 2011; O'Brien et al., 2016).

Chiropractic care of the infant has been associated with reduced maternal anxiety and depression possibly due to reduced infant crying, increased infant sleep time and improved infant feeding from breast and/or bottle (Miller et al.; 2019).

SCREENING FOR PND

Since 2011, the Australian National Perinatal Depression Initiative and Beyond Blue have endorsed the use of the Edinburgh Post-natal Depression Scale (EPDS) as part of a universally delivered psychosocial assessment for women receiving maternity care in the public health care system (Khanlari et al., 2019; San Martin Porter et al., 2019). The EPDS is recommended for use in the pregnancy period because it does not include somatic symptoms associated with pregnancy that may produce incorrectly high scores (Eastwood et al., 2017). Screening for and treating PND has shown to be a cost-effective element of postnatal care (Glasser & Lerner-Geva, 2018).

The Australian Clinical practice guideline on Mental health care in the perinatal period was updated by the Centre of Perinatal Excellence (COPE) in 2017 and the Australian Government department of health clinical practice guidelines in 2019 (Austin et al., 2017; Department of Health, 2018). Both organisations recommend that all health care practitioners use the EPDS to screen women as early as practical in the pregnancy and repeat at least once later in pregnancy. Elevated symptoms of PND can persist for at least 3 years postpartum. Extending the postpartum screening period to at least 2 years of age and assessing mothers multiple times early and late in the postpartum period is necessary (Putnick et al., 2020).

Women scoring between 10 and 12 on the EPDS should be monitored and followed up with retesting in a 4-6 week period and the EPDS repeated further if clinically indicated. Further assessment for women who score 13 or more should be arranged with their general medical practitioner or psychologist (Department of Health, 2018). Immediate action is necessary if question 10 is positive (indicating possible suicidality) or if the mother expresses concern about her or her infant's safety, via referral to emergency mental health services (Earls et al., 2019).

Although the Government policy neglects to mention the screening of fathers and birthing partners, current research recommends that fathers also be screened for mood disturbance in the perinatal period, especially in the recognised high-risk circumstance of the mother experiencing depression (Edward et al., 2019; Khanlari et al., 2019). The use of the EPDS with fathers has been validated and recommended (Baldoni & Giannotti, 2020; Edward et al., 2019).

While considerable progress has been made in the detection of PND in Australia, 16.9% of women reported not being asked about their mental health during the perinatal period. Screening rates continue to lag in the private sector, with the EPDS completed by only 28.8% of women in 2015 (Queensland), compared to 91.1% of public patients (Lequertier et al., 2022). Women born outside Australia, and indigenous women were also less likely to be screened (San Martin Porter et al., 2019).



Globally, the EPDS is the most widely accepted screening tool in the perinatal period, with a reported sensitivity of 68–86%, and specificity of 78–96% (Currò et al., 2009; Eastwood et al., 2017). In an Australian sample of 4,148 women, the reported sensitivity was 100% and specificity was 89% (Eastwood et al., 2017). An EPDS score of 12 or more showed a positive predictive value (PPV) for clinical depression, with a consistent PPV of approximately 70% in a number of studies (Earls et al., 2019).

Although the EPDS was developed as a screening measure for mothers, it has since been validated for fathers, using a lower cut off scores to detect depression and anxiety (Baldoni & Giannotti, 2020; Edward et al., 2019). Edmondson et al. reported an optimum cut-off score for fathers was greater than 10, with a reasonable specificity (78.2%) and sensitivity (89.5%) to identify cases of major depression when applied to fathers seven weeks postnatally (2010). This result is similar to other Australian studies who found a cut off score for men of greater than 10 was suitable for depression (Currò et al., 2009; Edward et al., 2019).

However, other studies still disagree on the optimal cut-off scores for depression and anxiety (Baldoni & Giannotti, 2020). Some find women with high scores may not have clinical depression, while those with low scores may underestimate or overestimate their symptoms (Ogbo et al., 2019). Validation studies of the EPDS in the antenatal period have justified higher cut-offs due to concern that transient heightened distress in pregnancy will be captured and misclassified. On the other hand, heightened anxiety during pregnancy has been linked with poor perinatal outcomes and contributes significantly to the symptom burden (Khanlari et al., 2019). Lower cut-off values can be used if the intention is to avoid false negatives and identify most patients who meet diagnostic criteria (Levis et al., 2020).

A 2022 literature review performed by by El Den et al., found that further clarity is needed for individual healthcare professionals to be able to use these recommendations to guide their clinical practice and for the development of a comprehensive approach to early detection of PND based on current evidence (El-Den et al., 2022).

In Australia, Matthey and Ross-Hamid screened 164 pregnant women, and regardless of which EPDS cut-off score was used, found that 50% of women improved to an acceptable or lower score 2 weeks later (2012). This relationship may be due to the validating and supportive environment in which screening may serve as an opportunity to discuss stress or concerns surrounding pregnancy and childbirth. These stressors are often temporary situations that can be resolved by the accompanying consultation with a health care professional (Khanlari et al., 2019). This information should encourage the Chiropractor to utilise EPDS screening for mother and fathers.

RECOMMENDATIONS

1. All health professionals providing care to women in the perinatal period should screen women using the EPDS at least once antenatally and postnatally (Austin et al., 2017).
2. All chiropractors involved in the care of neonates, infants and toddlers (0 to 2 years of age) ensure that both parents, where possible, have within the preceding 6 week period completed an EPDS. Including the EPDS as one of the standard intake forms for the parents of new patient's aged 0 to 2 years of age is recommended.
3. Women scoring between 10 and 12 on the EPDS should be monitored and followed up with retesting in a 4-6 week period and the EDPS repeated further if clinically indicated.
4. Men scoring 10 or less may be retested periodically as part of routine screening or when clinically indicated.
5. Women who score 13 or more and men who score 11 or more should be referred to a general medial practitioner as soon as possible for further assessment.
6. Immediate action is necessary if question 10 is positive (indicating possible suicidality) or if the mother or father expresses concern about their or their infant's safety, via referral to emergency mental health services (Earls et al., 2019).
7. Repeating the EPDS 2-4 weeks after initiation of chiropractic care is warranted and recommended to monitor maternal and paternal depression as their depression and/or anxiety may improve during chiropractic care of the infant due to improved infant sleep and feeding along with reduced crying, whilst ensuring appropriate referrals have been made.

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