

## SIGN 169

# Perinatal mental health conditions

A national clinical guideline

December 2023



#### Key to recommendations

This guideline has been produced using methodology to adopt and adapt recommendations from other high-quality guidelines (see section 9). The majority of recommendations are adapted from the Centre of Perinatal Excellence (COPE): Mental Health Care in the Perinatal Period: Australian Clinical Practice guideline, 2023. The types of guidance included are:

**EBR Evidence-based recommendation** – formulated after a systematic review of the evidence, with a clear linkage from the evidence base to the recommendation using Grading of Recommendations Assessment, Development and Evaluation (GRADE) methods.

Consensus-based recommendation – formulated in the absence of quality evidence, after a systematic review of the evidence was conducted and failed to identify sufficient admissible evidence on the clinical question

**GPP** A good practice point – provides advice on a subject that is outside the scope of the search strategy for the systematic evidence review, based on expert opinion and formulated by a consensus process.



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Scottish Intercollegiate Guidelines Network

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December 2023

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### 1 Introduction

#### 1.1 The need for a guideline

#### 1.1.1 Background

It is well recognised that perinatal mood disorders are common conditions affecting pregnancy and the postnatal period, and are associated with significant maternal, fetal and infant morbidity and mortality. Inequality in maternal morbidity and mortality is recognised across a number of socioeconomic indicators, with Black women and those from minority ethnic groups being at significantly greater risk of maternal death. Maternal suicide remains one of the leading causes of maternal death, with an increase in suicide amongst teenage mothers in the United Kingdom (UK).

Women/birthing parents, their partners, fathers and families in Scotland are emerging from a unique time in history, namely the global COVID-19 pandemic, the recovery from which has coincided with marked rising costs of living and increasing socioeconomic pressures. Risk factors for mental illness, such as domestic violence, caring responsibilities and financial vulnerability, increased during the pandemic. At the height of the pandemic, women and birthing parents were restricted in the support they received during labour and in the early postnatal period. The early parenting experience was significantly affected by restrictions on social contact and guidance, such as mask wearing, and loss of other natural peer support networks.<sup>3-6</sup> The longer-term impact of these changing circumstances on the experience of mothers, parents, infants and families remains to be fully understood, particularly with the effect of birth trauma in future pregnancies, and infant emotional, social and cognitive development.

There is increasing recognition of the needs of infants, the parent-infant relationship and fathers, partners and other caregivers, including the value of family-focused approaches. Early and timely intervention to ensure these conditions are assessed and treated appropriately is important to improve outcomes and support recovery. The majority of women/birthing parents their infants and families will have their needs met by universal services including maternity, health visiting, primary care and voluntary sector services. A smaller proportion of women/birthing parents, infants and families with more complex needs will require additional input from specialist services, such as community perinatal mental health services, maternity and neonatal psychological interventions or infant mental health services in Scotland.

Perinatal mental illnesses range from adjustment disorders to postpartum psychosis. Prevalence rates may be underestimated, as not all those who experience them present to secondary care. A study in South London estimated prevalence of those presenting with depression, anxiety disorders, post-traumatic stress disorder (PTSD), obsessive-compulsive disorder, eating disorders or self harm of 45.1% in pregnant women under the age of 25 and 15.5% in pregnant women aged 25 or over.<sup>7-9</sup> Prevalence of perinatal mental illness is rising in the UK, particularly amongst younger cohorts of women, with higher numbers of children living with maternal mental illness.<sup>10</sup> Rates are higher amongst parents of children experiencing greater socioeconomic disadvantage, with the highest incidence reported amongst mothers of infants 0–3 months.<sup>10</sup> This suggests that demand for perinatal mental health services is likely to continue to rise over time in Scotland.

Psychiatric admission data has long highlighted the increased risk of psychiatric admission for women in the postpartum period. Analysis of admission rates to psychiatric hospitals in Scotland found admissions were highest among women from the more deprived quintiles of social deprivation, although there was also an increase in relative risk for admission for

women in the most affluent quintiles in the early postpartum period. <sup>12</sup> Data suggests this increased risk of readmission continues into the second postpartum year. <sup>12</sup> Prospective admissions data from Denmark reported a first-time inpatient admission rate of 0.25 per 100 births in the postpartum period. <sup>14</sup> For every inpatient episode, a larger number of women received outpatient review (2.5 per 100 births) and a greater number management in primary care (pharmacological intervention in primary care reported as 12 per 100 births), highlighting the importance of primary care and universal services in detecting, assessing and managing perinatal mental illness. <sup>14</sup>

This guideline updates and replaces the Scottish Intercollegiate Guidelines Network (SIGN) Guideline 127: Perinatal mood disorders, published in 2012, addressing perinatal mental health conditions including depression, anxiety and postpartum psychosis. It extends to include a wider range of mental health conditions that women and birthing parents may experience at this unique time, to cover the assessment and management of conditions including psychological birth trauma and personality disorder (see section 1.4). It provides recommendations for screening and interventions to support recovery from perinatal mental illness, including those focusing on the mother-infant relationship.

#### 1.1.2 Terminology

The guideline recognises that people have diverse gender and sexual identities. Gender and sexual diversity refers to diversities of sex characteristics, sexual orientation and gender identity and includes people identifying as lesbian, gay, bisexual, trans, intersex, queer, non-binary, asexual and pansexual.

This guideline uses the terms 'woman' or 'mother' or 'birthing parent' throughout. This should be taken to include people who do not identify as women, or who identify as gestational fathers or birthing parents or have given birth. The term birthing parent refers to the parent who has given birth. This guideline uses the terms 'breastfeeding' throughout. This should be taken to include people who are chest feeding.

This guideline is based on published research from the population of women who have undergone pregnancy and childbirth. The evidence base has limited information about the experience of gestational or birthing parents that do not identify as women, with therefore limited information about whether these guidelines are equally applicable. Where the guideline is quoting directly from a study, the population description used by the study, usually women, is used. However, the editorial team, by including diverse parents in our guideline definition acknowledged the importance of inclusive approaches to ensuring mental health needs are assessed, identified and treated appropriately, while recognising the limited and absent evidence base in this field.

While the guideline may also be generally relevant to adoptive parents with an infant under the age of one, it does not include separate specific recommendations for this population, which may have additional needs. Readers are recommended to look at other sources of relevant information for this population.

#### 1.1.3 Service provision

It has been over 10 years since the publication of SIGN 127: Management of perinatal mood disorders (2012). SIGN 127, and reports by Galloway and Hogg and the Mental Welfare Commission in 2016 influenced the need for community perinatal mental health services. 15,16

A Perinatal Mental Health Clinical Managed Network (PMHCN) was established in 2017. In collaboration with the Scottish Government it recommended an increase in mother and baby beds and three models of community care based on yearly live birth rates within each health board.<sup>17</sup> This changed the Scottish landscape for care provision for women/birthing parents with

mental health wellbeing needs through to specialist secondary care. The development, delivery, and sustainability of perinatal and infant mental health services within mother and baby units (MBU), community and third sector services were overseen by the newly founded Perinatal and Infant Mental Health Programme Board in 2019.

The Women's and Families Maternal Mental Health Pledge was coproduced by the Change Agents from Maternal Mental Health Scotland (now known as Parent Infant Mental Health Scotland (PIMHs)) and people with lived experience and has eight asks. The Pledge ensured that lived experience was not only at the heart of new and expanding services but also that a holistic family approach would be sustained by informing outcome measures for service delivery.<sup>18</sup>

While all Scottish health boards now have perinatal community services these developments have gone beyond perinatal services with the inclusion of maternity neonatal psychological interventions and infant mental health services.

The perinatal managed clinical network has developed five national pathways:19

- 1. Preconception advice for women with pre-existing severe or complex mental health problems.
- 2. Psychological interventions for women with common or mild-to-moderate mental health problems. Referral can be to the Maternal and Neonatal Psychological Interventions service, primary care or third sector organisations.
- 3. Specialist assessment and intervention for women with severe or complex mental health problems (such as community mental health services).
- 4. Admission to a mother and baby unit.
- 5. Specialist assessment and intervention for mother-infant relationship difficulties.

There has been a growth in infant mental health services in Scotland. The scoping paper Wellbeing for Wee Ones highlights the importance of the infant and helped shaped the Scottish landscape for infant mental health services.<sup>20</sup> The Infant Pledge is written from the perspective of the infant and puts emphasis on what the infant can expect to ensure the infant is seen as an individual, what is expected from their important adults and what is everyone's responsibility towards the infant.<sup>21</sup> The Scottish Model of Infant Participation is based on Article 12 of the United Nations Convention on the Rights of the Child with a focus on space and voice, to allow the infant to express their views, and audience and influence, which relate to the right to have their views given due weight.<sup>21</sup>

Within Scotland professionals have a corporate parenting responsibility to all children. During the perinatal period women/birthing parents will come into contact with universal, third sector, primary and secondary care services providing the opportunity for collaboration between professional groups, and allowing a focus on early intervention and prevention. While extending beyond the perinatal period, the Scottish Framework, which includes Getting it Right for Every Child (GIRFEC), My World Triangle and the Safe, Healthy, Achieving, Nurtured, Active, Respected, Responsible and Included (SHANARRI) indicators, ensure a shared language between all professionals working with children. In response to the known failures of the Scottish care system, The Promise has been built on five foundations: family, voice, care, people and scaffolding. The Promise aims for care-experienced children and young people to grow up to be loved, safe and respected. 22

To address the educational needs of a newly developing and expanding workforce NHS Education for Scotland (NES), the managed clinical network, and PIMHS have coproduced a perinatal curricular framework, with a training plan covering third sector to specialist services, including perinatal and infant mental health.<sup>23,24</sup>

The development of these new services, trauma-informed care, self management, Realistic Medicine and the Nursing 2030 Vision have reinforced the need to review the SIGN guideline to reflect the developing evidence base and best practice in this field.<sup>25</sup>

The Scottish mental health and wellbeing strategy (2023) endorses the life-stage model. Preconception and perinatal mental health care are embedded within the model with recognition that life stages can have a significant impact on relationships, physical and mental health. The strategy highlights the need for good mental health before birth and during the perinatal period embedding the importance of early intervention and preventative care.<sup>26</sup>

#### 1.2 Core principles of provision of care in the perinatal period

The <u>women and families maternal mental health pledge</u> sets out eight core principles that women and their families can expect of care in NHSScotland:<sup>27</sup>

#### I expect that:

- 1. I am fully involved, and at the centre of my care, so that I have the information I need to make the best decisions for me, my pregnancy and my infant's future health
- 2. I can be confident that staff who assess and care for me will have the appropriate level of knowledge and skills
- 3. I will receive preconception and pregnancy advice and care if I have a pre-existing mental health problem
- 4. I will receive expert advice and care about my maternal mental health when I require it, wherever I live in Scotland
- 5. I will have rapid access to talking therapies during my pregnancy and postnatal period
- 6. I can openly discuss my maternal mental health without fear of stigma or of being judged
- 7. My family are given the information and support they need to help me and to get help for themselves
- 8. I can be confident that my baby will have parents who are supported with their mental health.

#### 1.3 Remit of the guideline

#### 1.3.1 Overall objectives

This guideline updates SIGN 127: Perinatal mood disorders. It includes screening and treatment for women/birthing parents at risk of, or experiencing, a mental health condition during or in the 12-month period after pregnancy. It covers women/birthing parents with a history of, or experiencing, one or more of the following:

- anxiety disorders, including generalised anxiety disorder, obsessive-compulsive disorder (OCD), psychological birth trauma and PTSD
- mood disorders, including depression and bipolar affective disorder
- postpartum psychosis and management of psychosis in the perinatal period
- borderline personality disorder.

The guideline follows the Centre of Perinatal Excellence (COPE) evidence review and grouping of disorders into anxiety and depressive disorders, psychological birth trauma, and women with severe mental illnesses: schizophrenia, bipolar disorder and postpartum psychosis, borderline personality disorder.<sup>28</sup> Professionals may wish to refer to published diagnostic classification systems, such as the International Classification of Diseases, 11<sup>th</sup> edition (ICD-11), for detailed information about diagnostic categories and criteria.<sup>29</sup>

The remit does not include the management of pregnancy loss, miscarriage, stillbirth or neonatal death. Advice on this is available in guidance from the National Institute for Health and Care Excellence (NICE)<sup>30</sup> and the National Bereavement Care Pathway.

The needs of fathers, non-birthing parents and partners are increasingly recognised, both in terms of the need to improve understanding of how their role can impact perinatal mental health and infant outcomes and to consider their own mental health needs during the perinatal period.<sup>31</sup> While the scope of this guideline is to focus on the needs of birthing parents, increasingly services are recognising their role in signposting fathers, non-birthing parents and partners where additional support is required and the importance of their role in wider care planning and the provision of family-focused care and family-based interventions.<sup>31,32</sup> Signposting to organisations that can offer support is available in the <u>shared decision-making toolkit</u>.

The evidence review supporting the recommendations is based on a definition of the postnatal period as up to 12 months after pregnancy. Some people require and receive support from perinatal mental health services for longer than the 12-month postnatal period, and in some areas of the UK services are extended to 24 months. Other services, such as infant mental health and third sector services, may work with women and their families within different time frames.

#### 1.3.2 Target users of the guideline

This guideline will be of interest to people working in primary care, maternity, health visiting, family nurse partnerships, community health settings, mental health services and the third sector. It is relevant to perinatal mental health services, maternity and neonatal psychological services, infant mental health services and specialist MBUs. It will be useful to women/birthing parents and other parents, carers and the full range of professionals that may have contact with women/ birthing parents and their families during the perinatal journey. This may include family nurse practitioners, general practitioners (GPs), health visitors, midwives, nursery nurses, nurses, obstetricians, occupational therapists, pharmacists, psychiatrists, psychologists, psychotherapists, social workers, and people with a perinatal mental health disorder and their partners. This is not designed to be an exhaustive list, but illustrative of the range of relevant professionals and individuals that may find this guideline useful.

Users of this guideline will find it useful to cross-reference to the Centre of Perinatal Excellence (COPE) guideline, Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline (2023) on which the recommendations are based and adapted to the Scottish context (see section 9.1).<sup>28</sup>

#### 1.3.3 Lived experience perspective

People with lived experience may have different perspectives on healthcare processes and outcomes from those of healthcare professionals. The involvement of people with lived experience in guideline development is therefore important to ensure that guidelines reflect their needs and concerns and address issues that matter to them.

Common themes raised by groups and organisations as part of this process included:

- equity of access to services for people living in remote and rural areas and people who require information in another language
- the mental health of fathers and birth partners as well as mothers and birthing parents
- · the needs of people who are neurodivergent

- the need for preconception and antenatal care, particularly for people who have experienced perinatal mental health conditions in the past, have bipolar disorder, or are experiencing tokophobia
- advice to support an informed choice on breastfeeding and support if breastfeeding needs to stop.

#### 1.3.4 Equality

An equality impact assessment for the development of this guideline is available in the supporting material section for this guideline on the SIGN website, <a href="https://www.sign.ac.uk">www.sign.ac.uk</a>

#### 1.3.5 Shared decision-making toolkit

A <u>shared decision-making toolkit</u> based on the recommendations in this guideline is available from the SIGN website, <u>www.sign.ac.uk</u> and to download as an app from <u>https://rightdecisions.scot.nhs.uk</u>.

The toolkit provides an interpretation of the recommendations into plain language for use by healthcare professionals, pregnant women/birthing parents and their partners to support shared decision making and self help with perinatal mental health conditions. Sources of further information and organisations who provide support for pregnant women/birthing parents and their partners with perinatal mental wellbeing are signposted in the toolkit.

#### 1.4 Mental health conditions in the perinatal period

This section provides a brief summary of relevant definitions, conditions and disorders that may arise in the perinatal period. It does not aim to summarise all the relevant epidemiological evidence, which is continually evolving and readers are recommended to refer to the literature referenced throughout this guideline and elsewhere, and other relevant diagnostic coding tools where appropriate.

#### 1.4.1 Antenatal, postnatal and perinatal period definitions

In this guideline the antenatal period is defined as the time from conception to childbirth, the postnatal period as that from childbirth to the end of the first postnatal year, and the perinatal period as an overarching term encompassing both. Although for disorders arising later in the first postnatal year, childbirth is less likely to act as a direct precipitant, our understanding of the importance, to both parent and infant, of early detection and intervention justifies the broad time period.

#### 1.4.2 Baby blues and baby pinks

'Baby blues' describes the emotionally labile state experienced by the majority of women following childbirth. Commonly presenting on the second or third postnatal day, it normally resolves by the fifth day with regular professional support and reassurance.

Some women experience transient experiences of elated mood or 'baby pinks', with features in common with hypomania, defined as 'transient subclinical phenomenon, distinct from the blues which frequently occurs in the first postpartum week and may be related to later depression'. 33,34 In a small group of women, these features may herald the onset of more significant illness, such as postpartum psychosis. 33,34

#### 1.4.3 Anxiety disorders

Anxiety disorders during the perinatal period (including generalised anxiety disorder (GAD), OCD, panic disorder, and PTSD) are as prevalent as depression, ranging from 4.5–15%. Prevalence rates for anxiety are higher during pregnancy (15–20% compared with 10% in the

postnatal period).¹ Prevalence increases across trimesters, with a mean prevalence of 25% in the third trimester.¹

#### Obsessive-compulsive disorder

Prevalence of OCD is higher during the perinatal period with rates during the antenatal period estimated as 2.07% and slightly higher postpartum (2.43%) compared to the general population (1.08%).<sup>36</sup> Obsessional thoughts (unwanted intrusive thoughts) are more likely to focus on concern about harm occurring towards the infant, particularly in the postpartum period.<sup>37</sup> Fears of contamination may be more prominent during pregnancy, and cleaning and checking compulsions may dominate.<sup>38</sup> Obsessions may also occur as part of other perinatal mood disorders, such as anxiety and depression, and may present as part of relapse of pre-existing OCD or for the first time during the perinatal period.

#### Post-traumatic stress disorder and birth trauma

Childbirth is known to be associated with increased risk of PTSD.<sup>39,40</sup> While one in three women report a traumatic childbirth experience, a smaller number will go on to experience difficulties in keeping with a clinical condition.<sup>41</sup> Prevalence studies have indicated about 3% of women during pregnancy and 4% of women postpartum have PTSD, with rates up to 18.5% being reported in high-risk groups, such as women who experience serious complications during pregnancy or childbirth, including premature birth, emergency Caesarean section, or after stillbirth.<sup>39,40</sup> Post-traumatic stress disorder may be childbirth-related, associated with other stressors, or be present in the context of previous childhood trauma or complex PTSD.<sup>42-44</sup> Comorbidity with other conditions such as anxiety and depression is high.<sup>39</sup>

While only a small number of women reach the full diagnostic criteria for PTSD, others experience birth trauma where they are affected by partial symptomology which can have a considerable impact on their quality of life. The term psychological birth trauma captures a wider definition of experience, outside of a specific clinical disorder such as PTSD, and recognises that psychological birth trauma is related to a number of factors including experience of care rather than medical complexity of childbirth (see section 5).

#### 1.4.4 Mood disorders

#### Depressive disorders

Depressive disorders range from mild to severe and symptoms are similar in the perinatal period to those at other times, although it is important to distinguish symptoms from normal physiological changes during pregnancy.<sup>28,45</sup> Depression is less likely to be detected and treated in pregnancy, although a significant proportion (33%) of postpartum depression starts antenatally.<sup>1,35</sup> Prevalence rates for depression vary between the antenatal and postnatal periods, with international studies reporting rates ranging from 5–33% and 10–15% respectively.<sup>35,46</sup> Persistence of depression beyond the first postnatal year has been found in about 30% of women, and there are high risks of relapse in future both within and outwith the perinatal period, highlighting the importance of timely intervention.<sup>35</sup>

#### Bipolar affective disorder

The risks of relapse for women or birthing parents with a pre-existing bipolar affective disorder vary according to their subtype of the disorder. Bipolar affective disorder type I and schizoaffective disorder carry the greatest risk of postpartum psychosis. Bipolar affective disorder type II carries a lower, but still increased, risk. There is also a significantly elevated risk of postpartum depression.<sup>47</sup> Cessation of mood-stabilising treatments, such as lithium, in the early stages of pregnancy is known to increase risk of relapse in pregnancy and the postpartum period.<sup>48</sup> For a small group of women, experiencing an episode of a major psychiatric illness (requiring specialist support) for the first time in the first 14 days postpartum may lead to later onset of bipolar affective disorder.<sup>49</sup>

#### 1.4.5 Complex and severe mental illness

Complex or severe mental illnesses may be associated with significant disability, duration of illness, impact and vulnerability to relapse. While there is variation in how these disorders are defined as a group, in this guideline they refer to the complex group of mental illnesses including bipolar affective disorder and psychotic illnesses including schizophrenia and schizoaffective disorder. Readers are recommended to consult international diagnostic criteria, such as the ICD-11, for specific diagnostic criteria.<sup>29</sup>

Women/birthing parents experiencing these conditions require access to preconceptual review by specialist services and careful multidisciplinary care planning.<sup>50</sup>

#### Postpartum psychosis

Postpartum psychosis is the most serious mental health complication that may start for the first time after childbirth, affecting about 1 in 1,000 women after childbirth.<sup>51</sup> While women/birthing parents with pre-existing bipolar affective disorder and schizoaffective disorder are at particular risk of this postpartum complication, for a significant minority it may be their first episode of major mental illness. Understanding regarding the aetiology of postpartum psychosis, and the neurobiological factors involved, including hormonal changes, immunological dysfunction, circadian rhythm disruption (eg prolonged sleep deprivation during labour) and predisposing genetic factors, including specific chromosomal associations, is growing.<sup>51-53</sup>

In the majority of cases postpartum psychosis is a severe affective psychosis of acute onset, temporally linked to the postnatal period, and typically presenting in the early postnatal period, usually within the first month.<sup>53</sup> It often presents as a mixed-affective, schizoaffective or manic state, with prominent confusion and fluctuating symptoms, but depressive and schizophrenia-like presentations may also occur. There is increasing evidence of a close link with bipolar affective disorder.<sup>51</sup> This guideline has chosen to adopt the term 'postpartum' rather than 'puerperal'.

#### Other psychotic illnesses, including schizoaffective disorder and schizophrenia

Women with complex mental illnesses, such as other psychotic disorders, including schizophrenia and schizoaffective disorder, may have a number of vulnerabilities that require consideration in the perinatal period.<sup>50</sup>

Women who experience affective psychosis as part of an illness, including schizoaffective disorder may be similarly at higher risk of postpartum psychosis.<sup>47,53</sup>

Hospital readmission in the postpartum period for women with schizophrenia appears less immediately temporally related to childbirth, although has been found to increase over time, and may be more consistent with the impact of adaptation to parenthood, compared to bipolar affective disorder. Cohort data suggests that women with schizophrenia, may be at higher risk of adverse obstetric and neonatal outcomes.<sup>50,54</sup>

#### 1.4.6 Borderline personality disorder

Borderline personality disorder (BPD) is a complex psychiatric disorder marked by significant affective instability and difficulties with interpersonal functioning. It is a diagnosis that can be surrounded by stigma, and is often underdiagnosed in the general population.<sup>55</sup>

Terminology relating to personality disorders varies with classification system and approach used. This guideline uses the terminology used by the COPE review, borderline personality disorder. Other classification systems have included terms such as emotionally unstable personality disorder (ICD-10), revised to borderline personality disorder (ICD-11).<sup>29</sup>

Women with BPD have been found to be less likely to engage with antenatal care services.<sup>56</sup> They are at greater risk of a wide range of adverse physiological and psychosocial outcomes in the perinatal period compared to those without BPD.<sup>57</sup> Among non-clinical populations in international studies, prevalence rates of borderline personality features (BPF) during pregnancy ranged from 6.9–26.7%, while rates of BPD across the perinatal period ranged from 0.7–1.7%.<sup>58</sup> Among clinical or treatment-seeking populations, rates of BPF and BPD across the perinatal period spanned 9.7–34% and 2.0–35.2%, respectively, with a pooled prevalence rate of BPD in clinical populations during the perinatal period of 14%.<sup>58</sup>

Women or birthing parents with BPD are at increased risk of other perinatal mental illnesses, such as anxiety and depression, and may have an increased risk of experiencing higher rates of parenting stress. There may be increased risk of impact on the parent-infant relationship and infant outcomes, and of intergenerational transfer of mental health difficulties.<sup>50,59</sup>

#### 1.4.7 Eating disorders

The prevalence of disordered eating based on screening tools has been estimated as 5% antenatally and 12.8% postpartum with a smaller number of women experiencing a specific eating disorder, such as binge eating disorder (5%), bulimia nervosa (0.95%) or anorexia nervosa (0.09%). Eating disorders during the perinatal period have been associated with increased risk of intrauterine growth restriction, maternal anaemia, and infant feeding difficulties.

Management of women or birthing parents with eating disorders during the perinatal period is addressed in <u>SIGN 164: Eating disorders</u>.

#### 1.4.8 Maternal suicide and other risks

Maternal suicide remains the leading cause of direct deaths occurring within a year after the end of pregnancy in the UK. Suicide rates have increased three-fold since 2017, particularly amongst younger mothers.<sup>2</sup> Risk factors for suicide are discussed in section 2.6.

#### 1.4.9 The parent-infant relationship, perinatal mental illness and infant mental health

An infant's emotional life begins in pregnancy. The UK-wide 1,001 Days Critical Manifesto demonstrates that the early days in an infant's life are critical for optimal biological, emotional and social development. Relationships with caregivers and the environment are crucial to shape this stage of development. There is a complex relationship between maternal mental illness, the maternal-infant relationship and infant outcomes with a number of mediating and moderating influences in the antenatal and postnatal period. Protective factors and good relationships may help protect against biological stress responses to early adversity. Early mother-infant relationships are foundational for the development of an infant's early emotional regulation and adaptive functioning. They serve as a blueprint for future relationships. Impaired attachment can predispose a child to future mental health problems. In isolation. They are dependent upon consistent and attuned caregiving from their caregivers. Their early experience of being cared for will also influence their caregiving style once they are adults.

#### Infant welfare and child protection

While working with women or birthing parents who are experiencing perinatal mental illness it is important that all agencies work together and that families are listened to and consulted and given the necessary information, support and help required. Professionals working with, or who come into contact with, children have an ethical, professional and statutory responsibility to safeguard and promote their welfare, ensuring that they are healthy, happy and protected from harm. Children and their families should receive help and support to ensure that the child is appropriately cared for and protected.

Perinatal mental illness, in some cases, may also be associated with concern relating to the welfare of the unborn child or infant, with a small but significant number of women who experience perinatal mental illness being at direct risk of adverse outcomes, such as neonaticide and infanticide.<sup>67</sup> A wider number of families may face a range of adversities that may compromise child welfare, such as domestic violence and substance misuse, necessitating additional support from children's services and safeguarding supports.

Health and social care professionals should be alert to signs of abuse and neglect and follow procedures to ensure that children receive effective support and protection, in line with the National Guidance for Child Protection in Scotland.<sup>68</sup>

This guideline does not consider the risks relating to pregnancy denial, which is associated with health consequences for both mother and infant, or the specific risks relating to neonaticide.<sup>69,70</sup>

#### 1.5 Sociocultural considerations

Perinatal mental health services serve diverse communities in Scotland, which may have distinct cultural or religious beliefs and traditions relating to pregnancy, childbirth and the early postpartum period as well as child rearing, with a need for services to provide culturally informed and competent care that respects and works collaboratively with diverse parents and their families.<sup>50</sup>

Stigma remains a significant barrier to women/birthing parents and families reaching for help and may be increased in some populations, such as amongst racialised, gender and sexual minority families.<sup>71</sup>

Racialised minorities (people who are an actual or perceived member of a group subject to a racialisation process, being affected by racism or discrimination, including people of colour, Black and Brown persons and non-white persons) are at increased risk of experiencing racism including within the healthcare setting, which may contribute to mental health difficulties directly, delays in accessing care and response to treatment, requiring the delivery of antiracist mental healthcare which requires redress at individual, strategic and systemic levels.<sup>72</sup> Migrants including refugees and asylum seekers may have particular needs that require specific support and are at increased risk of mental illness.<sup>73</sup>

UK service-use data has highlighted that minoritised and racialised groups had less access to community mental health services and were more likely to receive inpatient care under the Mental Health Act.<sup>74</sup> Barriers to care may include lack of awareness of services, under-reporting of difficulties and missed opportunities for intervention, language barriers, different cultural explanatory models of illness, expectations of help as well as a lack of understanding of the health care system.<sup>74</sup>

Gender and sexual diversity refers to diversities of sex characteristics, sexual orientation and gender identity and includes people identifying as lesbian, gay, bisexual, trans, intersex, queer, non-binary, asexual and pansexual.

There is increasing awareness of the need to understand the experiences of families where there is sexual and gender diversity, yet this remains an under-researched area that requires further attention.<sup>75-78</sup>

#### 1.5.1 Intimate partner violence

The Lancet Commission on Intimate Partner Violence and Mental Health in 2022 highlighted the high prevalence of intimate partner violence experienced by women, with a global estimate that 27% of women and girls aged 15 years or over have experienced physical or

sexual intimate partner violence. These rates are increased amongst those women who access mental health services and other vulnerable groups, such as sexual and gendered minorities, people with disabilities, migrants and people from marginalised ethnic or indigenous groups.<sup>79</sup> Exposure to intimate partner violence (IPV) increases the likelihood of developing mental health problems, suicidality and attempting suicide across the life course.<sup>79</sup> While IPV is endemic, it is not inevitable and particular points within the life course, such as the perinatal period, may present opportunities for identification, intervention and prevention.<sup>79</sup> Support from health and social care professionals may help break the silence, with the need for gender-sensitive, trauma-informed and coproduced services that consider intersectional needs in the context of cumulative vulnerability, alongside wider societal and cultural change and legal protections.

#### 1.6 Comorbidities

There are common comorbidities and coexisting health issues which should be considered when managing people with perinatal mental health disorders. Specific recommendations on these conditions have not been included in this guidance, but should follow other relevant guidelines.

#### 1.6.1 Attention deficit hyperactivity disorder

The overall prevalence of attention deficit hyperactivity disorder (ADHD) in the general population is estimated at 5%, with about 2.5% of adults affected, with a rise in the number of women of childbearing age being treated for ADHD.<sup>80-82</sup> The evidence regarding the safety of treatments for ADHD during the perinatal period is not yet established, with a small number overall of women taking these medications.<sup>83,84</sup> This guideline does not include the management of ADHD during the perinatal period. Guidance regarding the management of ADHD in adults is available from the NICE guideline, NG87: <u>Attention deficit hyperactivity disorder: diagnosis and management</u>.<sup>85</sup>

#### 1.6.2 Intellectual disability

People with intellectual disability may experience perinatal mental illness and have specific parenting needs. While this guideline may be relevant to this population, it does not make specific recommendations for this population group.

#### 1.6.3 Autism spectrum disorder

The identification of autism spectrum disorder (ASD) in women and girls is gaining increasing attention. Women and birthing parents with ASD report challenges with social interaction and heightened sensory perception, which may pose particular difficulties during pregnancy, childbirth and in parenting.<sup>86,87</sup> This guideline does not include management of ASD during the perinatal period. National guidance is available from SIGN 145: <u>Assessment, diagnosis and interventions for autism spectrum disorders</u>.<sup>88</sup>

#### 1.6.4 Substance misuse

Women with pre-existing mental health and substance misuse disorders are also more likely to experience obstetric and neonatal complications and adverse outcomes including maternal death as a result of non-psychiatric causes.<sup>2</sup> Management of people with substance abuse during pregnancy is addressed in NICE guideline 110: Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors, <sup>89</sup> Service provision is addressed in the Perinatal Mental Health Network Scotland report Supporting Women Reducing Harm.<sup>90</sup>

#### 1.7 Prescribing in the perinatal period

Globally, prescribing in the perinatal period is rising, with a significant increase in the number of women taking antidepressants recorded in the past decade, particularly amongst younger mothers.<sup>91</sup> The overall prevalence rate for use of selective serotonin reuptake inhibitors, the most common antidepressant class, is about 3%, with significant regional variation.<sup>91</sup> About half of women choose to stop the use of antidepressant therapy during pregnancy.

Optimal dose management of psychotropic medication during pregnancy can significantly reduce the risk of relapse of mood disorders such as bipolar affective disorder.<sup>92</sup>

Careful consideration relating to the benefits and risks of medication is required during pregnancy and for breastfeeding parents. There are inherent challenges to assessing the evidence base relating to the use of prescribed medication during the perinatal period and this evidence base continues to evolve, with a need for clinicians to be kept updated regarding new information relating to potential impact on the developing fetus or newborn infant.

See section 3.7 for information on the general principles of prescribing.

#### 1.7.1 Neonatal adaptation syndrome

Neonatal adaptation syndrome refers to a cluster of symptoms in the neonate including irritability, sleep disturbance, persistent crying, tachypnoea, hypoglycaemia, poor thermal regulation, and occasionally seizures, which has been related to the use of psychotropic medication in pregnancy.<sup>54,55</sup> The condition is varyingly referred to as poor neonatal adaptation, neonatal withdrawal or neonatal abstinence syndrome. There is uncertainty whether it is, in all cases, caused by withdrawal, or whether it may be related to excess of the relevant drug in the neonate. For this reason, the guideline has chosen a term which does not ascribe causality.

#### 1.8 Statement of intent

This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results.

The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at through a process of shared decision making with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be documented in the patient's medical records at the time the relevant decision is taken.

#### 1.8.1 Influence of financial and other interests

It has been recognised that financial or academic interests may have an influence on the interpretation of evidence from clinical studies.

It is not possible to completely eliminate any possible bias from these sources, nor even to quantify the degree of bias with any certainty. SIGN requires that all those involved in the work of guideline development should declare all financial and academic interests, whether direct or indirect, annually for as long as they are actively working with the organisation. By being explicit about the influences to which contributors are subjected, SIGN acknowledges the risk of bias and makes it possible for guideline users or reviewers to assess for themselves how likely

it is that the conclusions and guideline recommendations are based on a biased interpretation of the evidence.

Signed copies of declaration of interests forms are retained by the SIGN Executive and are available on request.

#### 1.8.2 Prescribing of licensed medicines outwith their marketing authorisation

Recommendations within this guideline are based on the best clinical evidence. Some recommendations may be for medicines prescribed outwith the marketing authorisation (MA) also known as product licence. This is known as 'off-label' use.

Medicines may be prescribed 'off label' in the following circumstances:

- for an indication not specified within the MA
- · for administration via a different route
- · for administration of a different dose
- for a different patient population.

An unlicensed medicine is a medicine which does not have MA for medicinal use in humans.

Generally 'off-label' prescribing of medicines becomes necessary if the clinical need cannot be met by licensed medicines within the MA. Such use should be supported by appropriate evidence and experience.<sup>93</sup>

"Prescribing medicines outside the conditions of their MA alters (and probably increases) the prescribers' professional responsibility and potential liability".93

The General Medical Council (GMC) recommends that when prescribing a medicine 'off label', doctors should:94

- be satisfied that there is no suitably licensed medicine that will meet the patient's need
- be satisfied that there is sufficient evidence or experience of using the medicine to show its safety and efficacy
- take responsibility for prescribing the medicine and for overseeing the patient's care, including monitoring the effects of the medicine, and any follow-up treatment, or ensure that arrangements are made for another suitable doctor to do so
- make a clear, accurate and legible record of all medicines prescribed and, when not following common practice, the reasons for prescribing an unlicensed medicine.

Non-medical and medical prescribers should ensure that they are familiar with the legislative framework and the <u>Royal Pharmaceutical Society's Competency Framework for all Prescribers</u>.95

Prior to any prescribing, the licensing status of a medication should be checked in the summary of product characteristics (<a href="https://www.medicines.org.uk/emc">https://www.medicines.org.uk/emc</a>). The prescriber must be competent, operate within the professional code of ethics of their statutory bodies and the prescribing practices of their employers.<sup>96</sup>

## 2 Screening and assessment

Early intervention and prevention of mental illness are core to antenatal and postnatal care.

There is no overall certainty that screening tools detect mental illness as the evidence for all screening tests is rated as low quality. Screening for mental health problems in the antenatal or postnatal period is not currently recommended in the UK, but screening tools can support the decision-making process. Fealth for All Children (Hall 4) advises that the Edinburgh Postnatal Depression Scale (EPDS) may be used as a checklist as part of a mood assessment for ante and postnatal mothers/birthing parents, alongside professional judgement and clinical interview. While a barrier to screening is stigma associated with mental health treatment during the perinatal period, screening may help to begin discussions about perinatal mental health, especially for members of racialised and minority ethnic groups who experience significant healthcare disparities.

The recommendations in the COPE guideline are based on the use of the EPDS and Antenatal Risk Questionnaire (ANRQ) as an opportunity to understand the mother-infant and partner relationship. Women/birthing parents should also be screened for birth trauma in the perinatal period. Before screening and psychosocial assessment clinicians need to consider acceptability, mode, and environment in which screening for women/birthing parents takes place, including safety, if others are present. Women/birthing parents should also be made aware of confidentiality, sharing of information and informed consent.

The aim of initial screening undertaken by GPs, maternity services, family nurse practitioners, health visitors or other non-secondary care services is to identify women/birthing parents who may benefit from help with their distress or symptoms, or who need further assessment for a possible psychiatric condition. They are not diagnostic and all screening tools should be used along with clinical judgement. Before using any screening tool, the clinician must ensure that the tool is validated and that they possess the correct knowledge and skills to provide appropriate ongoing care. NHS Education for Scotland provides publicly available education for anyone working with women/birthing parents in the perinatal period, and health boards and services should determine their own training needs. Clinical supervision for professionals administering screening tools is recommended and should be implemented as per each organisation's policy.

There should be robust pathways for any follow up and support required as a consequence of screening. In Scotland, services should follow the five national pathways (see section 1.1.3). Pathways or referral to services to support a pregnant woman/birthing parent with comorbidities, such as an eating disorder, should also be considered.

Screening and support for fathers and non-birthing partners was not part of the remit of this guideline. A <u>directory of organisations</u> that can provide support is available through the Father's Network Scotland.

See section 3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

CBR All health professionals providing care in the perinatal period should receive training in parent-centred communication skills, psychosocial assessment and inclusive care.

CBR The administration of a screening tool is part of a multicomponent approach that must involve clinical judgement, clear protocols for further assessment of women who screen positive and appropriate care pathways.

Good practice point based on the expert opinion of the guideline development group:

GPP Clinical supervision of healthcare professionals administering the tool is recommended, as part of standard supportive clinical supervision, until the healthcare professional gains confidence and expertise.

See section 8 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- GPP At every antenatal or postnatal visit, enquire about the woman/birthing parent's emotional wellbeing, and the wellbeing of their partner if appropriate.
- GPP Provide parents in the perinatal period with support for integrating healthy behaviours in their daily lives, and where appropriate access to evidence-based physical activity, healthy eating and/or sleep programmes. For birth partners this may entail signposting to sources of further support. See the shared decision-making toolkit.

See section 10.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- CBR Provide all women/birthing parents with information about the importance of enquiring about and seeking support with any mental health problems that might arise across the perinatal period.
- GPP If a woman/birthing parent agrees, provide information to and involve their significant other(s) in discussions about her/their emotional wellbeing and care throughout the perinatal period.

#### 2.1 Screening for depressive disorders

See section 4.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- EBR Administer the EPDS to screen women/birthing parents for a possible depressive disorder in the antenatal and postnatal period.
- EBR Arrange a further assessment of perinatal women/birthing parents with an EPDS score of 13 or more.
- CBR For women/birthing parents with a positive score of 1 or above for Question 10 on the EPDS, undertake or arrange further assessment and if there is any disclosure of suicidal ideation, take further action in accordance with local policy.
- CBR Complete the first antenatal screening as early as practical in pregnancy and repeat screening at least once later in pregnancy.
- CBR Complete the first postnatal screening 6–12 weeks after birth and repeat at least once in the first postnatal year.
- CBR For a woman/birthing parent with an EPDS score of 10-12, monitor and repeat assessment with the EPDS in 2-4 weeks' time. Use clinical judgement in planning, monitoring and further care.
- CBR Repeat assessment with the EPDS at any time in pregnancy and in the first postnatal year if clinically indicated.

CBR Use appropriately translated versions of the EPDS. Consider the language and cultural appropriateness of any tool used to assess psychosocial risk.

#### 2.2 Screening for anxiety disorders

See section 4.3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

CBR Be aware that anxiety disorder is very common in the perinatal period and should be considered in the broader clinical assessment.

CBR As part of the clinical assessment, use anxiety items from the EPDS or other validated tools that include anxiety items and relevant items in structured psychosocial assessment tools.

#### 2.3 Screening for birth trauma

See section 14.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

In a consensus-based recommendation the COPE guideline suggests using the Postnatal Risk Questionnaire to screen for birth trauma. The SIGN guideline development group considered that this tool is for psychosocial risk factors known to be associated with the onset of perinatal mental disorders, in particular perinatal depression and anxiety disorders, not birth trauma or PTSD. It was considered that the <u>City Birth Trauma Screening Tool</u> would be more appropriate. It is available free of charge for clinical use and in multiple languages.

While it was agreed that 3 months from the onset of post-traumatic symptoms was a reasonable time to wait before referral to mental health professionals for further assessment and care, this should involve good supportive conversations and monitoring in case there is a rapid deterioration in the women/birthing parent's mental health and earlier referral is required.

- CBR Use the City Birth Trauma Screening Tool to gain knowledge about a woman/birthing parent's risk of experiencing birth as traumatic.
- CBR If post-traumatic symptoms persist beyond 3 months, consider referral to appropriate mental health professionals for further assessment/care.

Good practice points based on the expert opinion of the guideline development group:

- GPP All health professionals providing ongoing care should use watchful waiting during the 3-month period, as there can be rapid deterioration, and refer earlier if necessary.
- GPP Consider whether the birthing partner may also be traumatised and a holistic approach to care is needed.

#### 2.4 Screening for postpartum psychosis/predicting severe mental illness

The following risk factors are associated with postpartum psychosis:

- pre-existing psychotic illness (especially bipolar disorder)<sup>13,100</sup>
- personal history of postpartum psychosis<sup>100</sup>
- family history of affective psychosis. 101,102

The following recommendations were agreed by the guideline development group:

EBR Ask pregnant women/birthing parents about personal history of postpartum psychosis, other psychotic disorders (especially bipolar affective disorder and schizophrenia), and severe depressive disorder.

EBR All pregnant women/birthing parents should be asked about family history of bipolar or postpartum psychosis.

GPP Any significant and unexpected change in mental state in late pregnancy or the early postnatal period should be closely monitored and should prompt referral to mental health services and prioritisation for further assessment.

#### 2.5 Awareness of borderline personality disorder

Borderline personality disorder is a long-term, complex condition. There is no validated screening tool for identifying BPD. Women/birthing parents may have contact with a range of professionals and may be managed in primary care or other services, such as community mental health teams. Women/birthing parents with emotional dysregulation may experience particular difficulties with the parent-infant relationship and early assessment of the mother-infant interaction and relationship may be advisable where indicated, with appropriate early intervention as required (see section 2.7).

#### 2.6 Assessment of risk of suicide

See section 7.2 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

Advice on risk reduction of suicide is available in Scotland's Suicide Prevention Strategy. 103

Following a review of lessons learned from maternal deaths in the UK, red flags were developed to prompt referral for urgent specialist psychiatric assessment. These are reviewed regularly as new evidence emerges and reported by <u>Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries</u> across the UK (MBRACCE-UK).<sup>2</sup>

If a mother/birthing parent is at risk of suicide it is recommended to have a safety plan in place to support them. Developing a safety plan involves assisting the woman/birthing parent to identify:

- warning signs that she/they may be at risk of imminent suicide (eg feeling trapped, worthless or hopeless)
- actions to protect herself/themself and the infant
- internal coping strategies that decrease the level of risk
- people within the her/their network who can assist in times of need
- health professionals and agencies that can be contacted for help.<sup>28</sup>

When a woman/birthing parent is identified as at risk of suicide, manage immediate risk, arrange for urgent mental health assessment and consider support and treatment options.

GPP

Refer to the MBRACCE-UK red flag signs for severe maternal mental illness to identify women/birthing parents who require urgent senior psychiatric assessment, for example:

- recent significant change in mental state or emergence of new symptoms
- new thoughts or acts of violent self harm
- new and persistent expressions of incompetency as a mother or estrangement from the infant
- · severe difficulties with sleeping.

#### 2.7 Assessment of psychosocial factors

See section 5 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- GPP Assess psychosocial risk factors as early as practical in pregnancy and again after the birth.
- EBR | Administer the ANRQ to assess a woman/birthing parent's psychosocial risk.
- CBR Undertake psychosocial assessment in conjunction with a tool that screens for current symptoms of depression, anxiety or birth trauma (eg the EPDS) in early pregnancy and 6-12 weeks after the birth.
- GPP Discuss with the woman/birthing parent the possible impact of psychosocial risk factors (she/they have endorsed) on their mental health and provide information about available assistance.
- CBR Use appropriately translated versions of the ANRQ. Consider language and cultural appropriateness of any tool used to assess psychosocial risk.
- GPP Ensure that health professionals receive training in the importance of psychosocial assessment and use of a psychosocial assessment tool.
- GPP Ensure that there are clear guidelines around the use and interpretation of the psychosocial tool or interview in terms of threshold for referral for psychosocial care from third sector organisations, online psychological or self management interventions, and/or ongoing monitoring. See the shared decision-making toolkit for resources.

#### 2.8 Assessment of mother/birthing parent-infant interaction

Many factors can impact on mother/birthing parent-infant interactions. These can include psychosocial risk factors, relationship factors, infant factors, maternal factors, infant behaviours and protective factors. Practitioners should give consideration to these areas of functioning when undertaking assessments and considering if further specialist support is required.

See section 7 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

GPP Assess the mother/birthing parent-infant interaction as an integral part of perinatal care and refer to the infant mental health or parent and infant relationship service as available and appropriate.

- GPP Seek guidance and support from multicultural health workers, if available, when assessing mother/birthing parent-infant interaction in migrant, refugee and culturally and linguistically diverse women, to ensure that assessment is person and culturally appropriate, and not informed by unconscious bias.
- GPP Consider the potential additional needs of young mothers/birthing parents when assessing mother/birthing parent-infant interactions to ensure that assessment is person and age appropriate, and not informed by unconscious bias.
- GPP Assess the risk of harm to the infant if significant difficulties are observed with the mother/birthing parent-infant interaction, the woman/birthing parent discloses that they are having thoughts of harming their infant and/or there is concern about the mother/birthing parent's mental health.

## 3 Care planning

#### 3.1 General principles of care

Principles of care in the perinatal period include: 28,30

- the importance of establishing a therapeutic relationship
- acknowledging the woman/birthing parent's role in caring for their baby and supporting them to do this in a non-judgemental and compassionate way
- involving the woman/birthing parent, and if they agree, their partner, family or carer, in all decisions about them and the care of their baby
- ensuring care co-ordination and continuity of care where possible, such as using integrated
  care plans, effective sharing of information with all services involved and the woman/
  birthing parent, delivering interventions in a timely manner, taking into account the stage
  of pregnancy or age of the baby
- providing care that is recovery oriented and trauma informed
- providing culturally relevant information and advice including treatment and prevention options and any particular concerns a woman/birthing parent has relating to pregnancy, the unborn baby or infant
- ensuring that information and support is adapted according to need including considerations
  relating to health literacy, sensory impairment, disability and relevant social, cultural and
  linguistic needs and other vulnerabilities, such as digital exclusion, socioeconomic adversity
  and IPV
- awareness and consideration of child protection risks, including a focus on infant welfare and safety.

Care planning for a woman/birthing parent with a mental health condition in the perinatal period includes consideration of the care and treatment required for the mental health condition. Relevant healthcare professionals include maternity providers (eg community midwife, obstetrician, specialist midwife), mental health professionals (eg adult mental health or perinatal mental health team), health visiting, family nurse partnership, primary care and voluntary sector professionals where appropriate. Other professionals may also be relevant to involve depending on the package of care provided, availability of services and individualised assessment of need for the mother/birthing parent and unborn baby.

Care planning includes identifying who is responsible for:28,30

- co-ordinating the integrated care plan in the antenatal and postnatal periods
- the schedule of monitoring
- providing the interventions and agreeing the outcomes with the woman/birthing parent.

The healthcare professional responsible for co-ordinating the care plan should ensure that:

- everyone involved in the care is aware of their responsibilities and any risk to be considered
- there is effective sharing of information with all services involved and with the woman/ birthing partner, including voluntary and statutory services. Consent should be obtained where possible.
- mental health (including mental wellbeing) is taken into account as part of all care plans
- all interventions for mental health conditions are delivered in a timely manner, taking into account the stage of the pregnancy or age of the infant.<sup>28</sup>

Management of risk to the infant is essential and GIRFEC principles should be followed. If concerns about adult welfare and protection are raised, other relevant frameworks should be considered, such as those relating to adult support and protection legislation, gender-based violence policy and protocols, as appropriate to the individual situation and assessment of need.

#### 3.2 Providing information and advice

All women/birthing parents should be given culturally-relevant information on mental health problems in pregnancy and the postnatal period, including their prevalence, risk factors and symptoms.<sup>28,30</sup>

CBR Provide all women/birthing parents with information about the importance of enquiring about, and attending to, any mental health problems that might arise across the perinatal period.

Provide additional information for women/birth parents experiencing mental health conditions and, where appropriate, their partner, family or carer, including:<sup>30</sup>

- potential benefits of psychological interventions and pharmacological treatment
- the possible consequences of no treatment
- the possible harms associated with treatment
- what might happen if treatment is changed or stopped, particularly if pharmacological treatments are stopped abruptly.

PP If a woman/birthing parent agrees, provide information to and involve their significant other(s) in discussions about her/their emotional wellbeing and care throughout the perinatal period.

#### 3.3 Preconception planning

Preconceptual advice and information should be considered for women of childbearing age, where relevant, to allow informed decisions about pregnancy. Lifestyle advice including advice relating to nutrition, smoking and alcohol use, illicit substance use, benefits and risks of medication in pregnancy, immunisation and cervical screening, can help improve short- and long-term outcomes for women/birthing parents and their children, allowing both physical and mental health, and social needs to be addressed and managed prior to pregnancy.<sup>104</sup>

Specialist preconceptual review by mental health services is required for women/potential birthing parents with a history of complex mental illness, particularly where there is a history of postpartum psychosis or bipolar affective disorder.

Preconception planning should start at diagnosis of a significant mental illness among women /people of childbearing age. She/they should receive clear explanations of the importance of contraception if she/they are not planning a pregnancy, the effects of some medications on fertility, the risk of relapse in pregnancy or after the birth (particularly if medications are stopped) and parenting considerations.

Preconception planning should include discussion of pharmacological treatments to be used during pregnancy and after birth, and include consideration of breastfeeding preference and any implications for treatment choices.<sup>28</sup>

For women/potential birthing parents who have a new, existing or past mental health condition, NICE recommends that preconception planning advice should include:<sup>28,30</sup>

- the use of contraception (where relevant) and any plans for a pregnancy
- how pregnancy and childbirth might affect a mental health condition, including the risk of relapse
- how a mental health condition and its treatment might affect the woman, fetus and the infant
- how a mental health condition and its treatment might affect issues, such as feeding and parenting.

A range of online resources are available to support women/potential birthing parents and families and professionals to develop a care plan, such as through the voluntary sector (see the shared decision-making toolkit).

GPP

Provide advice about the risk of relapse during pregnancy and especially in the first few postpartum months to women/potential birthing parents who have a new, existing or past mental health condition and are planning a pregnancy.

#### 3.4 Planning for breastfeeding

There is evidence that breastfeeding improves long-term health outcomes for both the parent and their infants. 105-107 Mothers/birthing parents should be made aware of the benefits of breastfeeding and supported to do so exclusively for the first six months, if they wish. 108, 109 This includes keeping the mother/birthing parent and baby together where possible. In the situation where a parent is unable to, or chooses not to breastfeed they should be supported to alternatively feed their infant responsively. 109 All staff working with mothers/birthing parents and infants should receive training to ensure best practice around breastfeeding is established.

Women and birthing parents need to be given information about the safety of medication use during breastfeeding. Information for practitioners is available from the UK Breastfeeding Medicines Advice Service (UK Drugs in Lactation Advisory Service (UKDILAS).

See section 10.3.2 in the COPE guideline for further information.

GPP

Discuss treatment (medication and psychological) options that would enable a woman/ birthing parent to breastfeed if they wish to and support those who choose not to breastfeed.

#### 3.5 Planning care for women/birthing parents with complex mental illness

Co-ordinated care planning involving maternity services, primary care, mental health services, health visiting and other agencies where appropriate, is required for women/birthing parents with complex mental illness. This is to ensure that the mental health professionals involved in their care take into account the complexity of these conditions, the challenges of living with severe mental illness and the transitions into parenthood and impact on parenting. Where available, involvement of specialist perinatal mental health services is advisable.<sup>19</sup>

Pregnancy planning should be co-ordinated to take into consideration particular needs as pregnancy progresses:

- required changes in medication
- psychosocial supports
- psychological intervention

- warning signs of relapse and any risks associated with relapse or other psychosocial vulnerabilities
- support during childbirth (for example additional support from midwifery, sleep protection, support with infant feeding and support from partners or significant others)
- infant feeding preferences and considerations
- support for the mother/birthing parent-infant relationship
- support in the postnatal period
- postnatal wellbeing ensuring physical health monitoring, contraception, etc.

It may also be relevant to consider use of an advanced statement (a personal statement witnessed by a relevant professional stating future preferences relating to care and treatment), the right to which is enshrined in the Mental Health (Care and Treatment) (Scotland) Act 2003. 110,111

Other antenatal considerations highlighted by COPE include education regarding nutrition, monitoring gestational weight gain and providing other healthy lifestyle interventions, such as cessation of smoking, alcohol and illicit substances.

Postnatal monitoring and support is particularly important as early signs of relapse may present early in the immediate postpartum period. Support with sleep protection and the early parent-infant relationship and infant feeding are likely to be helpful, with early access to additional interventions as needed.

See sections 12, 10.2.1, 10.2.2, 10.4.2 and 10.4.3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- GPP For women/birthing parents with schizophrenia, bipolar disorder or borderline personality disorder, a multidisciplinary team approach to care in the perinatal period is essential, with clear communication, a documented care plan and continuity of care across different clinical settings.
- GPP Wherever possible, assessment, care and treatment of the mother/birthing parent should include the infant.
- GPP Where possible, health professionals providing care in the perinatal period should access training to improve their understanding of care for women/birthing parents with schizophrenia, bipolar disorder and borderline personality disorder.
- GPP In planning postnatal care for mothers/birthing parents with schizophrenia, bipolar disorder, severe depression or borderline personality disorder, take a co-ordinated team approach to parent and infant mental health care and relevant interventions.
- GPP When caring for mothers/birthing parents with severe mental illness, including borderline personality disorder, it is important to ensure that child protection risks are understood and addressed, if necessary.

Good practice points based on the expert opinion of the guideline development group:

- GPP Support families to access relevant statutory and third sector services, which could help to reduce any stress or adversity and/or provide practical and social support.
- GPP Infant mental health and the potential impact of maternal mental illness needs to be considered when treating both a mother/birthing parent and their baby.

#### 3.6 Women/birthing parents requiring hospital care in the perinatal period

A small but significant number of women/birthing parents require inpatient psychiatric care for their mental health condition during the antenatal or postnatal period. From 32 weeks' gestation until the end of the first postnatal year women/birthing parents and their infant(s) should be offered specialist MBU admission in Scotland. These are specially designed units to treat acute mental illness as well as supporting the mother-infant relationship and preventing avoidable separation, with benefits for both parent and baby.

The right for admission to a specialist MBU is enshrined in the Mental Health Act (Scotland) (2015). MBU admission is appropriate for women/birthing parents who are the primary carer of their baby and where risks are manageable within the MBU ward environment. The MBU Families Fund can cover out-of-pocket travel and accommodation expenses required to support admission.

In exceptional cases, where a mother or birthing parent is admitted to a general adult ward they should be supported to maintain contact with their baby, supported with infant feeding and access to family-friendly spaces for visiting and therapeutic interventions. Mother and baby unit admission should continue to be offered if appropriate.

The Mental Welfare Commission has published recommendations for services to follow in cases of admission to general adult wards. 16

CBR

Where possible, if a mother/birthing parent with a severe postnatal episode requires hospital admission, avoid separation from her infant with co-admission to a specialist mother-baby unit where facilities are available and appropriate.<sup>28</sup>

#### 3.7 Use of pharmacological treatments

While approaches to the pharmacological prophylaxis and treatment of mental health conditions during the perinatal period are not likely to differ from approaches at other times, the potential for harm to the fetus and the breastfed infant must be carefully balanced with the potential harm to the mother/birthing parent and fetus or infant if the mother/birthing parent remains untreated. Medications should only be prescribed after careful deliberation with the woman/birthing parent (and their significant other(s)).

The evidence base for pharmacological treatments is limited. Few studies on the benefits of pharmacotherapy in pregnant and postpartum women/birthing parents have been conducted and, while many studies report on harms, they are of low quality. For safety alerts, clinicians should seek the most up-to-date information available from the Medicines and Healthcare products Regulatory Agency (MHRA), the UK Teratology Information Service (TILAS) and UKDILAS.

In keeping with the expert opinion of the guideline development group, and advice in the NICE and COPE guidelines, the following principles should be applied when prescribing medication during pregnancy or breastfeeding:

Take a collaborative approach to:

- involve the woman/birthing parent, and their family (where appropriate), in all decisions about treatment, including an individualised assessment of benefit versus risk
- ensure that information is provided in plain language
- take into consideration factors that may support relapse prevention or potential barriers to care, including stigma, and plan accordingly.

Ensure information is provided on:

- potential benefits of psychological interventions and pharmacological treatment
- the possible consequences of no treatment
- the possible harms associated with treatment
- what might happen if treatment is changed or stopped, particularly if pharmacological treatments are stopped abruptly.

Use absolute risk values based on a common denominator (eg numbers out of 100 or 1,000) rather than relative risk.

Use high-quality decision aids in a variety of numerical and pictorial format that provide a personalised view of the risks and benefits.

Consider providing a record of the consultation (verbal, audio or written) to the women or birthing parent, significant other and relevant professionals.

Have a clear rationale for treatment to:

- establish a clear indication for drug treatment (ie the presence of significant illness in the absence of acceptable or effective non-pharmacological alternatives). Not treating mental illness in pregnancy or the postpartum period may in itself be associated with adverse outcomes for the woman/birthing parent, their pregnancy, and their infant.
- clarify the diagnosis and ensure the treatment provided follows the relevant guidance, including consideration of differing risks of relapse with different illnesses.
- GPP Discuss the potential risks and benefits of pharmacological treatment in each individual case with the woman/birthing parent and, where possible, their significant other(s), if consent is given to do so. Document the discussion.
- Ideally, treatment with psychoactive medications during pregnancy involves close liaison between a treating psychiatrist or where appropriate the woman/birthing parent's GP, and their maternity care provider(s). In more complex cases, it is advisable to seek a second opinion from a perinatal psychiatrist and other relevant members of the multidisciplinary team if needed, such as a pharmacist, neonatologist, or non-medical prescribers.

#### Consider risk of relapse:

- for the individual, taking into consideration the severity of illness, risk of perinatal relapse specific to the illness, risks associated with relapse particular to the individual (eg suicidal ideation), time since last relapse, whether previous perinatal relapse has occurred, current mental state and protective factors that may support wellbeing and prevent relapse.
- if a woman/birthing parent decides to stop their usual medication monitoring for change in mental state is needed as stopping medication may lead to relapse of illness.
- GPP Ensure that women/birthing parents are aware of the risks of relapse associated with stopping or changing medication and that, if a medication is ceased, this needs to be done gradually and with advice from the treating clinician.
- GPP Plan for pharmacological review in the early postpartum period for women/birthing parents who cease psychotropic medications during pregnancy.

Consider infant feeding preferences:

• for parents wishing to breastfeed, discussions regarding the safety of drugs in breastfeeding should occur as early as possible in pregnancy to avoid the need to alter treatment later.

GPP Discuss treatment (medication and psychological) options that would enable a woman/birthing parent to breastfeed if they wish to and support those who choose not to breastfeed.

When choosing medication:

- choose treatments with the lowest known risk, at the lowest effective dose for the shortest period necessary
- aim for monotherapy, particularly with non-psychotropic therapies, to avoid potential drug interactions
- if there is no clear evidence that one drug is safer than another, the safest option is not to switch. The only drug with a clear indication for switching on safety grounds is valproate (see section 6.4.1)
- be aware of the potential effects of pregnancy and childbirth on drug pharmacokinetics and pharmacodynamics, which may require dose adjustments as pregnancy progresses, and the specific risks during labour and following birth (see medication specific information in sections 4–7)
- be aware that although knowledge of the teratogenic effects of psychotropic drugs is increasing, understanding of the long-term neurodevelopmental effects of such medications in pregnancy and breastfeeding is extremely limited. Consult sources such as MHRA or the local medicines information service for the most up-to-date information.

Fetal and neonatal monitoring:

Where there is known risk of fetal or neonatal complication ensure that women/birthing parents are offered appropriate fetal screening and monitoring of the neonate for adverse effects. This may include involvement of neonatal or paediatric services. Be aware that premature or ill babies are more at risk of harmful drug effects.

Monitor the infant for specific drug side effects as well as feeding patterns, growth and development.

When exposure to psychoactive medications has occurred in the first trimester (especially with anticonvulsant exposures) pay particular attention to the 11–14 week or 18–20 week ultrasound scan because of the increased risk of major malformation.

GPP Consider that infants exposed to medication in pregnancy may be at risk of neonatal adaptation syndrome and may require additional monitoring after birth. Monitoring should be individualised and considered as part of multidisciplinary birth planning taking into consideration the medication dose, polypharmacy, infant feeding and infant vulnerability, such as risk of preterm delivery, low birth weight and any obstetric complications.

GPP Advise women/birthing parents against sleeping in bed with their infant, particularly if they are taking sedative drugs. Parents should be encouraged to follow safe sleep advice, Safer Sleep for babies a guide for parents and carers. 113

## 4 Depression and anxiety disorders

COPE reviewed the evidence for a range of psychosocial, psychological, pharmacological and electroconvulsive therapies aimed at preventing and treating anxiety and mood (depression) disorders in the perinatal period. Interventions included psychoeducation, social support, home visits, physical activity and a range of psychological therapies. These recommendations summarise those therapies that have been found to be effective.

#### 4.1 Psychosocial and psychological therapies

Psychological interventions considered include cognitive behavioural therapy (CBT) and interpersonal therapy (IPT), online interventions (CBT, including internet- and app-based, self directed or clinician guided), directive counselling (including supportive listening, problem solving and goal setting), other-infant relationship interventions and mindfulness.

#### 4.1.1 Tokophobia

Tokophobia is an extreme fear of childbirth. It is more common in those who have experienced abuse, or have had anxiety or depression, had a previous experience of a traumatic birth and in people who are lesbian, bisexual, transgender or queer.<sup>114</sup>

No recommendations were included in COPE for women/birthing parents with tokophobia. The following recommendations have been adapted from NICE guideline 192: Antenatal and postnatal mental health:clinical management and service guidance.<sup>30</sup>

CBR

Offer a woman/birthing parent with tokophobia an opportunity to discuss their fears with a healthcare professional with expertise in providing perinatal mental health support. Support may be provided by a specialist midwife in perinatal mental health or maternity and neonatal psychological intervention service, where available.

#### 4.1.2 Anxiety disorders

NICE guidance recommends that women with persistent subthreshold symptoms of anxiety in pregnancy or the postnatal period should be offered facilitated self help, such as CBT-based self-help materials with facilitated support.<sup>30</sup>

For women with an anxiety disorder in the antenatal or postnatal period, NICE recommends a low-intensity psychological intervention, in line with treatment recommended for the specific condition (ie type of anxiety disorder). Progress should be monitored closely and a high-intensity psychological intervention provided if there is no improvement within 2 weeks.<sup>30</sup> High-intensity psychological interventions are recommended for social anxiety disorder.<sup>30</sup>

Low-intensity interventions are defined as an intervention delivered by a trained coach or facilitator (rather than a therapist) to enable use of self-help materials. High-intensity therapies are delivered by specialists.<sup>30</sup>

The following recommendations for treatment are adapted from <u>NICE guidance</u>.<sup>30</sup> Due to limited evidence in the perinatal period the NICE recommendations were based on evidence from anxiety in the general population.

EBR

Offer women/birthing parents with persistent subthreshold symptoms of anxiety in pregnancy or the postnatal period facilitated self help, such as CBT-based self-help materials with facilitated support.

EBR Offer women/birthing parents with anxiety a low-intensity psychological intervention, in line with treatment recommended for the specific type of anxiety disorder they have. Progress should be monitored closely and if there is no improvement within 2 weeks offer referral for a high-intensity psychological intervention.

EBR Offer women/birthing parents with social anxiety disorder high-intensity treatment.

See section 11.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- EBR Advise women/birthing parent with depression or anxiety disorder in the postnatal period of the possible benefits of directive counselling.
- CBR Depending upon the woman/birthing parent's post-traumatic stress symptoms, consider the use of adjunctive pharmacological treatments.

#### 4.1.3 Depression

For women with persistent subthreshold depressive symptoms or mild-to-moderate depression in pregnancy or the postnatal period, NICE recommends facilitated self help.<sup>30</sup>

CBR Offer facilitated self help to women/birthing parents with persistent subthreshold depressive symptoms or mild-to-moderate depression in pregnancy or the postnatal period.

See section 11.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- EBR Provide structured psychoeducation to women/birthing parents with symptoms of depression in the perinatal period.
- EBR Advise women/birthing parents with symptoms of depression in the postnatal period of the potential benefits of a social support group.
- **EBR** Recommend individual structured psychological interventions (cognitive behavioural therapy or interpersonal psychotherapy) to women/birthing parents with mild-to-moderate depression in the perinatal period.
- CBR Consider online approaches for delivery of cognitive behavioural therapy. This needs to be appropriate and acceptable to the service user.
- EBR Advise women/birthing parent with depression in the postnatal period of the possible benefits of directive counselling.
- CBR For women who have or are recovering from postnatal depression and are experiencing mother/birthing parent-infant relationship difficulties, consider provision of, or referral for, individual mother/birthing parent-infant relationship interventions.

Further information on psychological therapies and implementation support for services is available from the NES website <a href="https://www.matrix.nhs.uk">www.matrix.nhs.uk</a>115

There is some evidence of the benefit of yoga, exercise and mindfulness to reduce the risk of stress and depression in the perinatal period, but it is insufficient to support a recommendation.<sup>28</sup> Other therapies, such as art or music therapies, are available, particularly through third sector organisations, but were not included in this evidence review.

#### 4.2 Pharmacological therapies

It is recommended that prescribing practitioners follow the general principles of prescribing during the perinatal period (see section 3.7). Particular considerations include the importance of discussing:

- potential benefits of psychological interventions and pharmacological treatment
- the possible consequences of no treatment
- the possible harms associated with treatment
- what might happen if treatment is changed or stopped, particularly if pharmacological treatments are stopped abruptly.

Women/birthing parents and their families should be provided with information about the benefits and risks of their treatment options including pharmacological and non-pharmacological options. This should include written information that is in accessible format (eg translated if required).

#### 4.2.1 Antidepressants

See section 11.3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

Use of antidepressant medication in the perinatal period should be guided by severity of illness and previous response to treatment.

#### Mild-to-moderate depression

The following recommendations have been adapted from NICE guidance:30

For women/birthing parents with persistent subthreshold depressive symptoms, mild or moderate depression in pregnancy or the postnatal period, consider alternatives to medication, such as facilitated self help or psychological intervention (see section 4.1.3).

EBR Women/birthing parents with a history of mild-to-moderate depression who are currently taking a selective serotonergic reuptake inhibitor (SSRI), tricyclic antidepressant (TCA) or serotonin-norepinephrine reuptake inhibitor (SNRI) who become pregnant should consider stopping the medication gradually and engaging with facilitated self help.

EBR For women/birthing parents with a history of moderate depression who become pregnant while taking an SSRI, TCA or SNRI, consider their previous response to treatment, risk of relapse, benefits, risks associated with medication and preference, and consider treatment options of switching to high-intensity psychological intervention or changing medication if there is a drug that is effective for her/them with a lower risk of adverse effects.

#### Severe depression

The following recommendations have been adapted from NICE guidance:30

EBR For women/birthing parents with a history of severe depression who present with initially mild symptoms of depression in pregnancy or the postnatal period, consider treatment with an SSRI, TCA or SNRI if they have expressed a preference for medication, decline psychological intervention or have symptoms that have not responded to a psychological intervention.

#### EBR

For pregnant women/birthing parents with severe depression, who are taking a TCA, SSRI or SNRI, consider:

- continuing their current treatment
- changing medication if there is a drug that is effective with a lower risk of adverse effects
- combining medication with high intensity psychological intervention such as CBT, or
- switching to high intensity psychological intervention if they decide to stop medication.

#### Benefits and risks of antidepressant treatment

There is a lack of randomised controlled trials (RCT) of the benefits of antidepressants in the perinatal period, but there is observational evidence of benefit (eg improved mother-infant interaction), and evidence of harm associated with abrupt cessation of treatment due to pregnancy (eg suicide, adverse effects on physical activity and nutrition).<sup>28</sup>

The COPE Harms Expert Subcommittee of the guideline review group found that, overall, confounding was an issue across studies. A meta-analysis of pharmacotherapy found low-quality evidence of increased risk of postpartum haemorrhage, persistent pulmonary hypertension, childhood depression, and ASD, in children exposed to SSRIs in utero.<sup>116</sup>

The COPE Harms Expert Subcommittee noted serious issues regarding residual confounding around risk of ASD and depression in the child. There was insufficient evidence on comparisons to make judgements (see Table 24 in the COPE quideline).

The COPE Harms Expert Subcommittee agreed that the potential harms of failure to use medication where indicated for moderate-to-severe depression and/or anxiety in pregnancy and postnatally may affect mother-infant interaction, parenting, maternal health and wellbeing, and infant outcomes (see Table 24 in the COPE guideline).

#### Neonatal adaptation syndrome

Maternal use of antidepressants during the later stages of pregnancy has been associated with a neonatal adaptation syndrome and respiratory distress. Neonatal adaptation syndrome refers to a cluster of symptoms in the neonate including irritability, sleep disturbance, persistent crying, tachypnoea, hypoglycaemia, poor thermal regulation, and occasionally seizures, which has been related to the use of psychotropic medication in pregnancy.<sup>62,63,117</sup>

Neonatal adaptation syndrome is thought to occur in 20–30% of neonates exposed to SSRIs and has been described with other antidepressants, such as SNRIs.<sup>118</sup> Most cases of this are mild and transient, however, some affected infants require closer monitoring or neonatal intensive care.<sup>119</sup> Risks of poor neonatal adaptation are dose-related and related to exposure in late pregnancy.<sup>120</sup> While there are significant limitations to the evidence base, predelivery dose reduction (tapering of dose) may be associated with reduced adverse neonatal outcome, such as neonatal intensive care admission. This must be balanced with the risks of relapse and any related risks for the woman/birthing parent, as an increased risk of depressive symptoms during dose tapering is reported.<sup>120</sup>

Symptoms in the neonate usually begin within the first few minutes or hours of life and generally resolve within 48 hours. There are inadequate data to state whether the risk of neonatal withdrawal varies for each individual SSRI, and with length of in utero exposure or SSRI dose. Risk of neonatal withdrawal syndrome is likely to be increased with concomitant use of other centrally acting medications in pregnancy, such as benzodiazepines or antiepileptic agents. Page 122

An individualised approach is required, considering risks to both neonate and parent and parent choice. Where dose tapering is considered, clinical tolerability should be monitored so that those women/birthing parents who report resurgent depression or anxiety on tapering do not have their doses reduced below the minimum tolerable dose. 120

#### Choice of medication

Treatment with SSRIs is recommended as the first-line choice for women/birthing parents being prescribed antidepressant therapy for the first time in the perinatal period. For example, sertraline has good tolerability and is excreted in breastmilk in low levels.<sup>123</sup>

If SSRIs are prescribed, consider the woman/birthing parent's past response to SSRI treatment and whether they have risk factors for obstetric complications, such as miscarriage or preterm birth, as well as the half life of the treatment.<sup>28</sup> Where breastfeeding is preferred SSRIs with longer half life, such as fluoxetine, which may accumulate in breastmilk, should be used with caution, although this is not a contraindication to breastfeeding.<sup>124</sup>

Where there has been poor response to SSRI treatment or benefit from an alternative, it may be preferable to choose the medication that the patient has previously responded to, taking into consideration fetal wellbeing and infant feeding preference (eg breastfeeding) and any adjustments required.

- GPP Before choosing a particular antidepressant for pregnant women/birthing parents, consider their past response to antidepressant treatment, obstetric history and any factors that may increase risk of adverse effects.
- GPP Before prescribing antidepressants to women/birthing parents who are breastfeeding, consider the infant's health and gestational age at birth.
- EBR When prescribing antidepressants to women/birthing parents in the perinatal period consider SSRIs as first line pharmacological treatment for depression and/or anxiety.
- GPP Be aware that failure to use medication where indicated for moderate-to-severe depression and/or anxiety in pregnancy or postnatally may affect mother/birth parent-infant interaction, parenting, maternal/birthing parent health and wellbeing, and infant outcomes.
- GPP Consider that infants exposed to medication in pregnancy may be at risk of neonatal adaptation syndrome and may require additional monitoring after birth. Monitoring should be individualised and considered as part of multidisciplinary birth planning taking into consideration the medication dose, polypharmacy and infant vulnerability, such as risk of preterm delivery, low birth weight and any obstetric complications.

#### 4.2.2 Anxiolytics and hypnotics

Management of anxiety during the perinatal period requires practitioners to identify the form of anxiety disorder and commence treatment according to existing guidelines for that disorder, with adaptations made according to the perinatal period. For example, NICE recommends a stepped care approach to management of OCD with adaptations to the perinatal context, and considerations of the parent-infant relationship and infant care. <sup>125,126</sup> In general non-pharmacological interventions (psychosocial) are recommended as first-line treatment.

Benzodiazepine use in the perinatal period requires careful consideration of the risks and benefits and where possible use non-pharmacological interventions as first-line treatment.

Particular consideration relating to neonatal wellbeing may be required around the time of birth, including risk of respiratory depression, floppy baby syndrome and neonatal abstinence syndrome.<sup>127</sup>

While other medications may be used for the management of symptoms of anxiety, this review did not comment on the safety or efficacy of the use of other medications during the perinatal period. Practitioners should remain alert to safety warnings relating to the use of other medications.

Pregabalin may increase the risk of major congenital malformations if used in pregnancy.<sup>128</sup> Women/birthing parents should continue to use effective contraception during treatment and avoid use in pregnancy unless clearly necessary. Prescribers should follow guidance from MHRA where relevant.<sup>129</sup> Those who are planning to become pregnant and continue to take pregabalin should be offered folic acid, 5 mg daily, before any possibility of pregnancy.<sup>130</sup>

See section 11.3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- GPP Use caution in prescribing non-benzodiazepine hypnotics (z-drugs) to pregnant women for insomnia. Non-pharmacological measures, such as sleep hygiene, should be tried first.
- GPP Use caution in prescribing benzodiazepines in the perinatal period due to the risk of dependence, withdrawal in the neonate and sedation with breastfeeding.
- CBR Consider the short-term use of benzodiazepines for treating moderate-to-severe symptoms of anxiety while awaiting onset of action of an antidepressant in pregnant or postnatal women/birthing parents.
- GPP Use caution in repeated prescription of long-acting benzodiazepines around the time of the birth.

Good practice points based on the expert opinion of the guideline development group.

- GPP In women/birthing parents taking benzodiazepines the need for continued use in pregnancy should be reviewed and use should be restricted to short term and low dose where possible. Consideration should be given to tapering the dose prior to childbirth.
- GPP Women/birthing parents prescribed pregabalin for anxiety should continue to use effective contraception during treatment and avoid use during pregnancy and breastfeeding unless clearly necessary.

#### 4.2.3 Herbal therapies

See section 11.2 of the <u>COPE guideline</u> for the evidence and rationale supporting this recommendation.

CBR Advise pregnant women/birthing parents that the evidence on potential harms to the fetus from St John's wort is limited and uncertain and its use during pregnancy is not recommended.

There is a lack of evidence on the effectiveness of cannabidiol for alleviating depression in the perinatal period.

#### 4.2.4 Other pharmacological therapies

The COPE review did not identify sufficient evidence to support a recommendation on the safety and efficacy of ketamine, ADHD medications or zuranolone for treating women/birthing parents with depression in the perinatal period.

NICE refer to the use of promethazine for women with severe or chronic sleep problems where first-line interventions, such as sleep hygiene, avoiding caffeine and reducing activity before sleep, have been ineffective, although it is noted this is off-label prescribing.<sup>30</sup>

Allopregnanolone and other progesterone metabolites change significantly during pregnancy and abruptly decrease after childbirth and have been implicated in the aetiology of postpartum depression. Synthetic neuroactive steroids and their analogs, such as allopregnanolone (a GABA A receptor positive allosteric modulator), have been identified as novel treatments for postpartum depression. Compared to placebo, women treated for postpartum depression with IV brexanolone had a statistically significant early treatment response with early remission, lasting up to 7 days. Limitations including discontinuation due to tolerability were identified. Oral preparations (zuranolone) are also under investigation. The evidence base relating to longer-term remission is limited. There is therefore a lack of evidence to support a recommendation regarding the use of these medications for postpartum depression. These medications are not yet licensed in the UK.

#### 4.3 Electroconvulsive therapies

Electroconvulsive therapies (ECT) may be considered for women/birthing parents with severe depression in the postnatal period, who have not responded to several trials of medications. See section 15.1 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- CBR Consider electroconvulsive therapies when a postnatal woman/birthing parent with severe depression has not responded to one or more trials of antidepressants of adequate dose and duration.
- CBR Consider electroconvulsive therapies as first-line treatment for postnatal women/ birthing parents with severe depression especially where there is a high risk of suicide or high level of distress, when food or fluid intake is poor, and in the presence of psychotic or melancholic symptoms.
- GPP In pregnant women/birthing parents, electroconvulsive therapies should only be undertaken in conjunction with close fetal monitoring (using cardiotocography to monitor fetal heart rate), specialist pregnancy anaesthetic care and access to specialist maternal-fetal medical support.

## 5 Birth trauma

Following a psychologically traumatic birth, women/birthing parents and partners may experience symptoms of distress, which occur on a continuum. This can range from acute distress to post-traumatic stress symptoms or PTSD. Births may be experienced as traumatic even when they are obstetrically straightforward.<sup>30</sup>

Factors that contribute to experiencing birth as traumatic include:28

- previous experience of trauma, including childhood abuse, domestic violence, rape and migrant trauma
- unplanned intervention (including emergency Caesarean section or instrumental birth)
- · giving birth to an unwell or stillborn baby
- child removal
- birth, social and cultural expectations
- fear of birth or a pregnancy requiring increased monitoring
- a history of vaginismus
- having a strong desire to adhere to a birth plan
- co-occurring or history of a mental health condition
- other predisposing factors to experiencing birth as traumatic include:
  - lack of social support
  - poor coping strategies
  - feelings of powerlessness
  - extreme pain
  - perception of hostile or uncaring staff
  - loss of control
  - medical interventions
  - lack of information
  - past traumatic birth.

Standard care should include individualised support, ongoing monitoring and the provision of information to support help seeking should symptoms persist. Providing parent-centred, trauma-informed opportunities for review of what happened during the birth shortly afterwards and again at 6 weeks is an important aspect of postnatal care.<sup>28</sup> Symptoms extending beyond 3 months may be indicative of more serious disorder and require appropriate referral to mental health teams for assessment and monitoring.<sup>28</sup>

See section 14 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

#### 5.1 Psychosocial and psychological therapies

Offer women/birthing parents who have post-traumatic stress disorder resulting from a traumatic birth a high-intensity psychological intervention (trauma-focused cognitive behavioural therapy or eye movement desensitisation and reprocessing).

CBR Do not offer single-session high-intensity psychological interventions with an explicit focus on 're-living' the trauma to women/birthing parents who experience a traumatic birth.

Good practice point based on the expert opinion of the guideline development group:

GPP Offer women/birthing parents, who have a subsequent pregnancy following a traumatic birth experience, the opportunity to speak with a member of their multidisciplinary team (eg midwife, anaesthetist, obstetrician) prior to and/or after delivery.

Further information on psychological therapies and implementation support for services is available from the NES website <a href="https://www.matrix.nhs.uk">www.matrix.nhs.uk</a>.

#### 5.2 Pharmacological therapies

Pharmacological treatments are in line with those for people with anxiety disorders (see section 4.2). See section 3.7 for general principles of prescribing during the perinatal period.

CBR Depending upon the woman/birthing parent's post-traumatic stress symptoms, consider the use of pharmacological treatments, alongside a psychological therapy.

## 6 Bipolar affective disorder, postpartum psychosis, schizophrenia and related conditions

#### 6.1 Introduction

This section covers prevention and treatment of complex or severe mental illness in the perinatal period, including bipolar affective disorder, postpartum psychosis and schizophrenia (psychotic illness).

Women/birthing parents with a complex mental illness require additional multidisciplinary support during the perinatal period and may benefit from psychological therapies to manage secondary anxiety, depression or other related difficulties such as trauma.<sup>28</sup>

Women with bipolar affective disorder are at particular risk of relapse during the perinatal period, relating both to the risk of postpartum psychosis, antenatal relapse and postpartum depression. Severity of illness (bipolar I disorder compared to bipolar II disorder) is associated with a varying degree of relapse risk.<sup>47</sup>

Postpartum psychosis presents a potentially life-threatening emergency that requires specialist intervention and often inpatient care to a MBU.<sup>111</sup> Women/birthing parents, families and services need to be aware of the predisposing risk factors for this condition, identify warning signs and have access to preconceptual care and support during pregnancy to reduce risks of relapse, including avoidance of prolonged sleep disruption.

Women who experience affective psychosis as part of an illness, including schizoaffective disorder, may be similarly at higher risk of postpartum psychosis.<sup>47,53</sup>

Hospital readmission in the postpartum period for women with schizophrenia appears less immediately temporally related to childbirth, although has been found to increase over time, and may be more consistent with the impact of adaptation to parenthood, compared to bipolar affective disorder.<sup>50,54</sup>

Individualised multidisciplinary care planning is required in collaboration with specialist perinatal mental health services, starting preconceptually where possible.

#### 6.1.1 Preconceptual review

Prior to conception, there may be an opportunity to rationalise medication to reduce polypharmacy while maintaining effective treatment and minimising risk of relapse. Where there are safety concerns about a medication during pregnancy, alternative treatments should be considered, including antipsychotic therapy, where appropriate.

#### 6.1.2 Folic acid supplementation

Use of high-dose folic acid (5 mg/day), particularly in the first trimester, should be encouraged to reduce the risk of fetal malformation, particularly where an anticonvulsant medication is prescribed. Supplementary folate does not mitigate the increased risk of neural tube defects and other major malformations attributed to in utero exposure to valproate or other anticonvulsant mood stabilisers but protects against the risk of neural tube defects associated with low folate. 122

#### 6.1.3 Psychological interventions

The following recommendations for treatment are adapted from NICE guidance.30

## EBR | Consider psychological interventions for women/birthing parents with bipolar disorder. This includes:

- CBT, IPT and behavioural couples therapy for bipolar depression
- structured individual, group and family interventions designed for bipolar disorder to reduce the risk of relapse, particularly when medication is changed or stopped.

# EBR For women/birthing parents with a diagnosis of psychosis or schizophrenia, who become pregnant and are at risk of relapse (eg arising from stress associated with pregnancy or the postnatal period or a change in medication including stopping medication), consider a psychological intervention, such as CBT or family intervention.

#### 6.2 Choice of medication

Prescribing practitioners should follow the general principles of prescribing during the perinatal period (see section 3.7). Particular considerations include the importance of discussing:

- potential benefits of psychological interventions and pharmacological treatment
- the possible consequences of no treatment
- the possible harms associated with treatment
- what might happen if treatment is changed or stopped, particularly if pharmacological treatments are stopped abruptly.

Women/birthing parents and their families should be provided with information about the benefits and risks of their pharmacological and non-pharmacological treatment options, including written information that is in accessible format (eg translated if required).

Antipsychotic medications have a more favourable risk/benefit ratio than valproate and carbamazepine, a larger evidence base and possibly better safety profile for use in people with reproductive potential than lamotrigine and lithium. Where they have been proven effective in treating illness and preventing relapse, it is advisable to continue treatment with antipsychotic therapy (see section 6.3).<sup>123</sup>

For women/birthing parents established on lithium therapy, stopping treatment during pregnancy is associated with an increased risk of relapse and it may be advisable to continue treatment during pregnancy and in the postnatal period.<sup>48</sup> A number of considerations are required including the low but increased risk of congenital abnormality, need for closer monitoring of lithium levels and dose during pregnancy, risks of toxicity and breastfeeding preference (see section 6.4.2).

The use of anticonvulsant medication as mood stabilisers in women and potential birthing parents of childbearing age is associated with a number of reproductive safety concerns relating to small but increased risk of congenital fetal abnormality and impact on the developing fetus and child (see section 6.4.2). The risk profile varies between different anticonvulsant medications, with lamotrigine being associated with a smaller degree of risk (see section 6.4).

The use of anticonvulsant mood stabilisers during pregnancy should therefore be limited to where alternative treatments have been ineffective or not tolerated. Use during breastfeeding requires specific consideration for each medication.

#### 6.3 Antipsychotic medication

If a pregnant woman/birthing parent is stable on an antipsychotic and likely to relapse without medication, it is preferable to continue with the antipsychotic.<sup>30</sup> Switching medication is generally not advised due to the risk of relapse. Consider using the antipsychotic that has worked best for the woman/birthing parent, after discussion of benefits and risks.<sup>123</sup>

There is insufficient evidence on benefits and harms of antipsychotic use in the antenatal period for conclusions to be drawn, however evidence from the general population supports the use of antipsychotics to treat people with psychosis. Untreated psychosis is associated with relapse and adverse effects on pregnancy, such as stillbirth or poor antenatal attendance.<sup>28</sup>

Because antipsychotics have a better risk/benefit ratio than valproate and carbamazepine, a larger evidence base and possibly better safety profile for use in people with reproductive potential than lamotrigine and lithium, antipsychotics are generally the mainstay for treatment of women/birthing parents with a diagnosis of bipolar affective disorder in the perinatal period.<sup>123</sup>

Cohort studies show that some antipsychotics have metabolic-inducing effects and increase the risk of gestational diabetes and large-for-gestational age infants.<sup>28,123</sup> Antipsychotics with the greatest metabolic effects include clozapine, olanzapine and quetiapine. Antipsychotics with the least metabolic side effects include arpiprazole.<sup>134</sup>

Adverse side effects, such as extrapyramidal and withdrawal symptoms, have been described in neonates following late pregnancy exposure to antipsychotic medication.<sup>123</sup>

Physiological changes during pregnancy can affect the pharmacokinetics of some antipsychotics, for example aripiprazole and quetiapine, especially during the third trimester, leading to subtherapeutic concentrations and poorer symptom control. Therapeutic drug monitoring throughout pregnancy can guide any necessary dose adjustment. Conversely, to avoid toxicity, drug doses may need to be re-adjusted in the postpartum period, when pregnancy-related physiological changes return to normal.<sup>135</sup>

Good practice point based on the expert opinion of the guideline development group:

GPP Choice of antipsychotic should be based on the pregnant woman/birthing parent's previous response to treatment, risk of relapse from switching treatment and their preference (including their wish to breastfeed or not).

Recommendations adapted from the British Association for Psychopharmacology: 123

- CBR Do not offer depot injection antipsychotics to a woman/birthing parent who is planning a pregnancy, pregnant or considering breastfeeding, unless they are responding well to a depot, there is a high risk of relapse and they have had a previous history of non-adherence with oral medication.
- GPP Consider that infants exposed to medication in pregnancy may be at risk of adverse effects and may require additional monitoring after birth. Monitoring should be individualised and considered as part of multidisciplinary birth planning taking into consideration the medication dose, polypharmacy, infant feeding and infant vulnerability, such as risk of preterm delivery, low birth weight and any obstetric complications.

Recommendations from the **COPE** guideline (section 12.4.1):

EBR Use antipsychotics to treat psychotic symptoms in pregnant women/birthing parents.

CBR Use caution when prescribing metabolic-inducing antipsychotics to pregnant women/birthing parents, due to the increased risk of gestational diabetes.

CBR If women/birthing parents commence or continue metabolic-inducing antipsychotic treatment during pregnancy, such as olanzapine, clozapine, quetiapine, consider screening and monitoring for gestational diabetes (as per local protocols).

CBR If considering use of clozapine in pregnant women/birthing parents, seek specialist psychiatric consultation.

#### 6.4 Mood stabilisers

See section 12.4.2 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

Prior to conception, there may be an opportunity to rationalise medication to reduce polypharmacy while continuing to ensure effective treatment and minimisation of risk of relapse. Given the safety concerns during pregnancy, alternative treatments should be considered, including antipsychotic therapy (see section 6.1), where possible.

Where a mood stabiliser is used, closer fetal monitoring is required. Use of high-dose folic acid (5 mg/day), particularly in the first trimester, should be encouraged to reduce the risk of fetal malformation (see section 6.1.2). <sup>130</sup>

In 2021 the Commission on Human Medicines reviewed the safety information on the risk of major congenital malformations and neurodevelopmental outcomes from use of anticonvulsants during pregnancy. The review focused on anticonvulsants used for the treatment of epilepsy, but the findings are relevant to those who may be prescribed these medications for other indications, including psychiatric illness.<sup>128</sup> Anticonvulsants are sometimes used as mood stabilisers or in the treatment of anxiety.

Use of sodium valproate is contraindicated in women and potential birthing parents of childbearing age (see section 6.4.1).

A large amount of data on lamotrigine did not find an increased risk of major congenital malformation when used at usual maintenance doses. Conflicting evidence was, however, reported in studies examining a dose-related relationship. One study reported a statistically increased risk of major congenital malformation with doses >325 mg per day compared to ≤325 mg per day.<sup>128</sup>

Data for carbamazepine demonstrated an increased risk of major congenital malformation compared to the general population and a dose-dependent relationship.<sup>128</sup>

Emerging data for pregabalin suggests it may be associated with increased risk of major congenital malformation and further evaluation is required. 128

Risks remain uncertain with respect to the use of gabapentin, due to data limitations. The possibility of an increased risk of congenital malformation cannot be confirmed nor ruled out.<sup>128</sup>

Given this context, prescribing of anticonvulsants as mood stabilisers or anxiolytics should generally only be with the addition of effective contraception, such as long-acting contraception. The use of anticonvulsants in women and potential birthing parents of childbearing age should be limited to where alternative treatments have been ineffective or not tolerated.

Healthcare professionals should access updated information available from the MHRA and local medicines information services regarding updated safety alerts and information (see section 3.7).

- Use great caution in prescribing anticonvulsants as mood stabilisers for pregnant women/birthing parents and seek specialist psychiatric consultation when doing so.

  Consider alternatives to mood stabilisers, such as antipsychotic therapy (see section 6.3).
- GPP Given their teratogenicity, only consider prescribing anticonvulsants (especially valproate) to women/people of childbearing age if other options are ineffective or not tolerated and effective contraception is in place.
- GPP Provide high-dose folic acid (5 mg/day) to all women/people on anticonvulsant mood stabilisers who are planning pregnancy, including before any possibility of pregnancy.
- GPP If a women/birthing parent is taking a mood stabiliser or anticonvulsant during pregnancy provide high-dose folic acid (5 mg/day), particularly in the first trimester.
- When exposure to psychoactive medications has occurred in the first trimester (especially with anticonvulsant exposures) pay particular attention to the 11–14 or 18–20 week ultrasound because of the increased risk of major malformation.
- GPP Where a mood stabiliser is provided, ensure women/birthing parents and their families are provided with up-to-date information regarding the safety of their use during pregnancy and in breastfeeding. Provide relevant written information, including the risks relating to fetal anticonvulsant syndrome.

#### 6.4.1 Sodium Valproate

Use of sodium valproate during pregnancy is associated with a high risk of congenital abnormality (11%) and neurodevelopmental disability (30-40%) with long lasting effects, impact on male fertility and potential transgenerational effects. Birth defects include spina bifida, facial and skull malformations, malformations of the limbs, heart, kidney, urinary tract and sexual organs. Neurodevelopmental difficulties include delayed motor and language development, reduced IQ and memory difficulties, ASD and ADHD. 136

In 2022, the MHRA and the Commission on Human Medicines issued a strengthened regulatory position that sodium valproate is not to be initiated to any person under the age of 55 years unless two specialists independently consider and document that there is no effective or tolerated alternative. Valproate should not be used in women of childbearing potential or would-be birthing parents. Where an exception is made, women should be on a pregnancy prevention programme, which is designed to ensure women are fully aware of the risks and the need to avoid becoming pregnant.<sup>136</sup>

- EBR Do not prescribe sodium valproate to pregnant women/birthing parents.
- GPP If a woman/birthing parent is on valproate and becomes pregnant wean them off this over 2-4 weeks, while adding in high-dose folic acid (5 mg/day) which should continue for the first trimester.
- EBR Valproate must not be initiated in any individual under the age of 55 years unless independent review by two specialists to consider and document that there is no effective or tolerated alternative.

EBR

For exceptions where women are already on sodium valproate, women of childbearing potential/potential birthing parents must be enrolled in the pregnancy prevention programme with long-acting contraception in place to avoid pregnancy and be aware of the risks and reasons to avoid pregnancy: <a href="Valproate use by women and girls-GOV.UK">Valproate use by women and girls-GOV.UK</a> (www.gov.uk).

#### 6.4.2 Lithium

For women established on lithium therapy, stopping treatment during pregnancy is associated with an increased risk of relapse.<sup>48</sup> Lithium is an evidence-based treatment for bipolar affective disorder and has a role in the management of postpartum psychosis including prophylaxis.<sup>137,138</sup>

Lithium treatment is associated with risks during pregnancy for both mother and infant.<sup>139</sup> Lithium use has been associated with spontaneous preterm labour, large-for-gestational age infants and neonatal hypoglycaemia.<sup>139</sup> Changing physiology during pregnancy and postpartum affects drug metabolism and excretion requires close monitoring and dose adjustment where required as well as hypervigilance for signs of lithium toxicity.<sup>140-142</sup> Pregnancy complications, such as pre-eclampsia affecting renal function, may significantly alter lithium metabolism and increase the risk of toxicity.

Use of lithium during the first trimester is associated with an increased risk of congenital cardiac malformation, although these risks have been found to be lower than originally estimated.<sup>141</sup> Tapering of lithium or dose reduction may be considered, but needs to be weighed against the risk of relapse. Lithium blood levels vary during pregnancy, require closer monitoring and dose adjustment as appropriate.<sup>140,142</sup>

- CBR If lithium is prescribed to a pregnant women/birthing parents, ensure that maternal blood levels are closely monitored and that there is specialist psychiatric consultation.
- GPP If lithium is prescribed to a pregnant woman/birthing parent, monitor lithium levels carefully and adjust individual dose prior to and after delivery.
- CBR Where possible, avoid the use of lithium in women/birthing parents who are breastfeeding.

#### 6.4.3 Lamotrigine

Where a decision has been made to continue lamotrigine therapy during pregnancy, dose adjustment (increase) may be required, due to changing metabolism as pregnancy progresses, with significant variation in serum-level-to-dose ratios in pregnancy compared to postpartum. Caution regarding breastfeeding is required, with significant variations in levels reaching breastmilk, with relatively high infant exposure described (average 18%, varying 3-33%). While the majority of breastfed infants were not reported to have adverse outcomes, occasional adverse reactions have been described and it is recommended infants are monitored for apnoea, rash, drowsiness, poor sucking, and serum levels are considered if toxicity is a concern. In some instances, monitoring of platelet count, liver function and serum levels in the neonate may be appropriate. If a rash occurs, it is suggested breastfeeding should be discontinued until the cause of the rash is established. Use of lamotrigine is not contraindicated during breastfeeding.

CBR If prescribing lamotrigine to a woman/birthing parent who is breastfeeding, arrange close monitoring of the infant and specialist neonatologist consultation where needed.

## 7 Borderline personality disorder

Borderline personality disorder often co-exists with depression, anxiety and substance use disorders. It is associated with high risk of self harm and suicide.<sup>28</sup>

COPE evaluated a range of psychological and pharmacological therapies for women/birthing parents with BPD. See section 13 of the <u>COPE guideline</u> for the evidence and rationale supporting the recommendations. The SIGN guideline development group have reworded the good practice points to reflect inclusive language and the services available to people with BPD in Scotland.

#### 7.1 Psychosocial and psychological therapies

GPP Healthcare professionals working with mothers/birthing parents with borderline personality disorder should have access to support and/or training in managing the symptoms and behaviours associated with borderline personality disorder that may pose a risk to the mother, baby or pregnancy, or to the mother's engagement with healthcare professionals and services offered.

CBR Provide trauma-informed care for women/birthing parents with borderline personality disorder.

GPP Advise women/birthing parents with borderline personality disorder, who are planning a pregnancy, of the additional challenges of parenting associated with their emotional dysregulation and symptoms of borderline personality disorder, and the importance of ongoing support during and after pregnancy.

Where possible and appropriate, provide perinatal women/birthing parents with borderline personality disorder the opportunity to develop a shared formulation of the impact of pregnancy and parenthood on them, and their symptoms of borderline personality disorder. Where indicated this should facilitate access to individualised support and/or access to structured psychological therapies either specifically designed for borderline personality disorder, or for current comorbid mental health conditions, such as substance misuse disorders, anxiety or depression.

GPP Encourage pregnant or postnatal women/birthing parents with borderline personality disorder to develop and practice positive emotion regulation strategies. This could include access to psychoeducation, and/or training in emotion regulation techniques, such as relaxation, mindfulness exercises, or grounding practices.

#### 7.2 Pharmacological therapies

Overall, pharmacological treatments do not appear to be effective in altering the nature and course of BPD. They may be useful in the short term in controlling more acute symptoms.<sup>28</sup>

The risks associated with the use of pharmacological treatments in the perinatal period are discussed in section 3.7. When prescribing for a woman/birthing parent with BPD consideration should be given to avoiding medications that may be lethal in overdose (because of the high risk of suicide) or are associated with substance dependence.

See section 13.3 of the <u>COPE guideline</u> for the evidence and rationale supporting these recommendations.

- CBR As far as possible, do not use pharmacological treatments as the primary therapy for borderline personality disorder, especially in pregnant women/birthing parents.
- GPP Consider pharmacological treatment for comorbidities in women/birthing parents with borderline personality disorder.

## 8 Implementing the guideline

#### 8.1 Implementation

Implementation of national clinical guidelines is the responsibility of each NHS board, including health and social care partnerships, and is an essential part of clinical governance. Mechanisms should be in place to review care provided against the guideline recommendations. The reasons for any differences should be assessed and addressed where appropriate. Local arrangements should then be made to implement the national guideline in individual hospitals, units and practices.

Quality improvement methodologies can be used locally to implement the guidelines. The <u>Quality Improvement Journey</u> contains generic advice and tools to use quality improvement methods to support local implementation. NHS Education for Scotland also delivers the <u>Scottish Improvement Leaders</u> programme and <u>Scottish Quality and Safety Fellowship</u> programme to develop individuals to lead local implementation projects to improve the quality of care.

Areas identified at peer review that could help support implementation of the guideline include:

- consideration of the resource implications in the context of the national maternity strategy and the national maternity workforce tool
- a review of how statutory, community and third sector services align and are funded
- the development of best practice care plans
- consideration of how electronic records can be adapted to accommodate different screening tools
- a review of the provision of services to support women/birthing parents with BPD, and embed practice into local perinatal mental health referral pathways
- education and awareness raising to reduce stigma around perinatal mental health. This should include input from diverse people with lived experience.

The ANRQ screening tool is not widely used in NHSScotland at the moment. Training is required to equip healthcare professionals with the skills required to administer the tool and identify psychosocial risk factors.

NHS Education for Scotland provides the <u>Perinatal Mental Health Training Framework</u> and training plan,<sup>23</sup> training on identifying suicide risk and developing a safety plan, and <u>The National Trauma Training Programme</u>. Staff training in these modules can support the implementation of the guideline.

#### 8.2 Resource implications of key recommendations

No recommendations are considered likely to reach the £5 million threshold which warrants resource impact analysis.

## 9 Guideline development

#### 9.1 Methodology

This guideline has been produced using methodology to adopt and adapt recommendations from other high-quality guidelines.

A search was conducted for other guidelines, published since 2019, which were selected against the following criteria:

- research questions aligned to the remit of this guideline, and
- an evidence review that included primary literature.

The guideline, Mental Health Care in the Perinatal Period: Australian Clinical Practice guideline, published by COPE, was the only guideline identified which matched the criteria. It scored highly when assessed using the Appraisal of Guidelines Research And Evaluation (AGREE II) tool.<sup>28</sup>

The research questions relevant to the remit were adopted and a multidisciplinary guideline development group addressed each recommendation to consider whether it could be adopted verbatim or adapted, based on:

- the applicability of the recommendation to NHSScotland: for example, alignment with Scottish Medicines Consortium (SMC) advice, financial, human and other resource implications
- the impact of the recommendation on people and carers with lived experience in Scotland, and issues identified in the equality impact assessment.

Where a recommendation or good practice point was evidence based but not considered applicable, the recommendation was not included, or the text was revised to better reflect Scottish practice. Changes were discussed and agreed by the guideline development group.

The types of guidance included from COPE are:

- evidence-based recommendation (EBR) a recommendation formulated after a systematic review of the evidence, with a clear linkage from the evidence base to the recommendation using Grading of Recommendations Assessment, Development and Evaluation (GRADE) methods
- consensus-based recommendation (CBR) a recommendation formulated in the absence
  of quality evidence, after a systematic review of the evidence was conducted and failed
  to identify sufficient admissible evidence on the clinical question
- **good practice point (GPP)** advice on a subject that is outside the scope of the search strategy for the systematic evidence review, based on expert opinion and formulated by a consensus process.

Details of the evidence review and evidence-to-decision making for the original recommendations are available from the COPE website: <u>National Perinatal Mental Health</u> <u>Guideline – COPE</u>. Explanations for any adaptations to the original recommendations are provided in sections 2–6. In sections where further advice was required recommendations have been included from other UK-based organisations, such as NICE.

SIGN acknowledges and thanks COPE for their generous agreement to use their guideline as the basis of this work.

#### 9.2 Recommendations for research

The guideline development group identified the following areas where there was insufficient research to support an evidence-based recommendation:

- the experience of gestational or birthing parents who do not identify as women, who experience perinatal mental health conditions, and which therapies best suit their needs
- prevalence of psychological birth trauma
- studies into secondary prevention and management of people experiencing birth trauma and PTSD, including the benefits and harms of a 3-month 'watch and wait' period before referral for treatment
- validation studies for the Stirling Antenatal Anxiety Scale
- benefits of input from members of the wider multidisciplinary team, such as occupational therapists, speech and language therapists, and perinatal mental health nurses, in providing an holistic approach to care
- benefits of psychological therapies or approaches, in comparison with CBT or IPT, to address depression, anxiety or trauma in women/birthing parents in the perinatal period
- evidence on the safety of sedating antihistamines in pregnancy
- evidence on the safety of esketamine nasal spray in pregnancy
- trials on the safety of alpha-1-adrenergic antagonist prazosin in pregnancy and during breastfeeding
- trials on safety and monitoring requirements of using lithium in breastfeeding.

#### 9.3 Review and updating

This guideline was issued in 2023 and will be considered for review in three years. The review history, and any updates to the guideline in the interim period, will be noted in the update report, which is available in the supporting material section for this guideline on the SIGN website: www.sign.ac.uk

Comments on new evidence that would update this guideline are welcome and should be sent to <a href="mailto:sign@sign.ac.uk">sign@sign.ac.uk</a>.

## 10 Stakeholder involvement

#### 10.1 Introduction

SIGN is a collaborative network of clinicians, other healthcare professionals and patient organisations and is part of Healthcare Improvement Scotland. SIGN guidelines are developed by multidisciplinary groups of practising healthcare professionals using a standard methodology. The methodology used to develop this guideline is detailed in section 9.1. Further details of SIGN methodologies are available at <a href="https://www.sign.ac.uk">www.sign.ac.uk</a>

#### 10.2 The guideline development group

Dr Selena Gleadow Ware (co-Chair)	Chair, Perinatal Faculty of the Royal College of Psychiatrists in Scotland, and Consultant Perinatal Psychiatrist, NHS Lanarkshire
Ms Susan McConachie (co-Chair)	Regional Perinatal Nurse Consultant, NHS Lothian
Ms Rosey Adams	Lived Experience representative, PND and Me, Tayside
Ms Claire Bow	Perinatal Mental Health Social Worker, Perinatal Mental Health team, NHS Lothian
Dr Malcolm Cameron	Consultant Perinatal Psychiatrist, NHS Ayrshire and Arran
Ms Donna Cowan	Specialist Midwife, Perinatal Infant Mental Health team, NHS Highland
Ms Emma Craig	Occupational Therapist, NHS Lanarkshire
Ms Victoria Creanor	Health Visiting Team Leader, NHS Forth Valley
Dr Amanullah Durrani	Consultant Perinatal Psychiatrist, NHS Greater Glasgow and Clyde
Ms Catriona Dutch	Nursery Nurse, Mother and Baby Unit, NHS Greater Glasgow and Clyde
Dr Issmael Fergague	General Practitioner, Glasgow
Ms Heather Kelly	Advanced Clinical Pharmacist, NHS Lothian
Ms Shona McCann	Specialist Midwife in Perinatal Mental Health, NHS Grampian
Dr Jennifer MacDonald	Clinical Psychologist, NHS Forth Valley
Ms Rebecca McLelland	Advanced Clinical Pharmacist, NHS Highland
Ms Lisa Malcolmson	Perinatal Regional Nurse Consultant and Deputy Clinical Director for Specialisms, Mental Health, NHS Grampian
Ms Pauline Neison	Knowledge Manager, Digital Health and Care Innovation Centre
Ms Fiona Petersen	Perinatal Nursery Nurse, NHS Lothian
Ms Amy Piper	Family Nurse Supervisor, NHS Fife
Dr Katharine Rankin	Consultant Obstetrician, NHS Fife
Dr Moira Shulman	Head of Child Psychotherapy, NHS Fife
Ms Linsey Singers	Lived experience representative, Let's All Talk North East Mums (LATNEM), Aberdeenshire
Ms Gill Skene	Lived experience representative, LATNEM, Aberdeenshire

Ms Helen Sloan	Consultant Nurse for Perinatal Mental Health, NHS Greater Glasgow and Clyde
Ms Ailsa Stein	Programme Manager, SIGN
Dr Ann Wales	Programme Lead, Knowledge and Decision Support, Healthcare Improvement Scotland
Dr Lilian Wanless	Consultant Clinical Psychologist, West of Scotland Mother and Baby Unit, NHS Greater Glasgow and Clyde

The membership of the guideline development group was confirmed following consultation with the member organisations of SIGN. All members of the guideline development group made declarations of interest. A register of interests is available in the supporting material section for this guideline at <a href="https://www.sign.ac.uk">www.sign.ac.uk</a>

Guideline development and literature review expertise, support and facilitation were provided by SIGN Executive and Healthcare Improvement Scotland staff. All members of the SIGN Executive make yearly declarations of interest. A register of interests is available in the supporting material section for this guideline on the sign website.

Karen Graham	Patient and Public Involvement Adviser
Kirsty Littleallan	Administrative Officer
Gaynor Rattray	Guideline Co-ordinator

#### 10.3 Consultation and peer review

A report of the consultation and peer review comments and responses is available in the supporting material section for this guideline on the SIGN website. All expert referees and other contributors made declarations of interest and further details of these are available on request from the SIGN Executive.

#### 10.3.1 Specialist review

This guideline was also reviewed in draft form by the following independent expert referees, who were asked to comment primarily on the feasibility of implementing the recommendations in the guideline. The guideline group addresses every comment made by an external reviewer, and must justify any disagreement with the reviewers' comments.

SIGN is very grateful to all of these experts for their contribution to the guideline.

Dr Gillian Anderson	Consultant Perinatal Psychiatrist, NHS Forth Valley
Dr Elly Aristotelous	Clinical Associate in Applied Psychology, Maternity and Neonatal Psychological Interventions, NHS Lothian
Dr Marisa Forte	Consultant Clinical Psychologist, NHS Ayrshire and Arran
Dr Fiona Fraser	Consultant Clinical Psychologist, West of Scotland Mother and Baby Unit, NHS Greater Glasgow and Clyde
Ms Debra Grice	Team Manager, Huntlyburn House, NHS Borders
Mr Thomas Lynch	Service Manager, Dad's Rock
Dr Katie Marwick	Community Psychiatrist, NHS Lothian
Ms Pennie McGuire	Specialist Health Visitor, Parent and Infant Mental Health Services, NHS Grampian
Ms Alana McLellan	Specialist Midwife in Perinatal Mental Health, NHS Lanarkshire

Dr Sarah McRobbie	Obstetrician with a special interest in mental health, NHS Grampian
Ms Aimee Millington	Perinatal Infant Mental Health Co-ordinator, Homestart, Caithness
Ms Claire Mollison	Social Worker, NHS Lanarkshire
Ms Lynne Mosley	Community Perinatal Mental Health Nurse, Whitemans Brae Hospital, NHS Fife
Ms Victoria Reid	Representative with lived experience, Glasgow
Ms Marie Claire Shankland	Programme Director, NHS Education for Scotland, Glasgow
Ms Meg Sherratt	Specialist Midwife in Perinatal Mental Health, St John's Hospital, NHS Lothian

#### 10.3.2 Public consultation

The draft guideline was also available on the SIGN website for a month to allow all interested parties to comment. The response to consultation comments is available in the consultation report on the SIGN website, <a href="https://www.sign.ac.uk">www.sign.ac.uk</a>

#### 10.3.3 SIGN editorial group

As a final quality control check, the guideline is reviewed by an editorial group comprising the relevant specialty representatives on SIGN Council to ensure that the specialist reviewers' comments have been addressed adequately and that any risk of bias in the guideline development process as a whole has been minimised. The editorial group for this guideline was as follows. All members of SIGN Council make yearly declarations of interest. A register of interests is available on the SIGN Council page of the SIGN website, <a href="https://www.sign.ac.uk">www.sign.ac.uk</a>

Dr Shridevi Gopi-Firth	Royal College of Psychiatrists
Ms Amanda Gotch	Royal College of Midwives
Dr Roberta James	SIGN Programme Lead; Co-Editor
Ms Nicola Mackay	Royal College of Midwives
Dr Chris Pell	Royal College of Psychiatrists
Dr Safia Qureshi	Diector of Evidence, Healthcare Improvement Scotland
Ms Jacqueline Thompson	Royal College of Nursing
Professor Angela Timoney	Chair of SIGN; Co-Editor

## **Abbreviations**

**ADHD** attention deficit hyperactivity disorder

**AGREE** Appraisal of Guidelines Research And Evaluation

ANRQ Antenatal Risk Questionnaire

ASD autism spectrum disorder

BPD borderline personality disorderBPF borderline personality features

**CBR** consensus-based recommendation

COPE cognitive behavioural therapy
COPE Centre for Perinatal Excellence

**EBR** evidence-based recommendation

**ECT** electroconvulsive therapy

**EPDS** Edinburgh Postnatal Depression Scale

**GAD** generalized anxiety and depression questionnaire

**GIRFEC** Getting It Right For Every Child

**GMC** General Medical Council

GP general practitioner good practice point

**GRADE** Grading of Recommendations, Assessment, Development, and Evaluations

**HALL 4** Health for all children, 4th edition

**ICD** International Classification of Diseases

**IPT** interpersonal therapy

**IPV** intimate partner violence

**LATNEM** Let's All Talk North East Mums

MA marketing authorisation

MBRACCE-UK Mothers and Babies: Reducing Risk through Audits and

Confidential Enquiries across the UK

**MBU** mother and baby units

MHRA Medicines and Healthcare products Regulatory Agency

**NES** NHS Education Scotland

NICE National Institute for Health and Care Excellence

**OCD** obsessive-compulsive disorder

**PIMHS** Parent Infant Mental Health Scotland

**PMHCN** Perinatal Mental Health Clinical Managed Network

**PTSD** post-traumatic stress disorder

**RCT** randomised controlled trial

**SHANARRI** safe, healthy, achieving, nurtured, active, respected, responsible and included

indicators

**SIGN** Scottish Intercollegiate Guidelines Network

**SMC** Scottish Medicines Consortium

**SNRI** serotonin-norepinephrine reuptake inhibitors

**SSRI** selective serotonin reuptake inhibitors

**TCA** tricyclic antidepressant

**UK** United Kingdom

**UKDILAS** UK Drugs in Lactation Advisory Service

**UKTIS** UK Teratology Information Service

## References

- 1 Howard LM, Khalifeh H. Perinatal mental health: a review of progress and challenges. World Psychiatry 2020;19(3):313-27.
- 2 Knight M BK, Patel R. Saving Lives, Improving Mothers' Care Core Report-Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2018-20. Oxford: National Perinatal Epidemiology Unit, University of Oxford; 2022. Available from url: https://maternalmentalhealthalliance.org/wp-content/uploads/ MBRRACE-UK-Maternal-Report-2015-3.pdf
- Basu A, Kim HH, Basaldua R, Choi KW, Charron L, Kelsall N, et al. A cross-national study of factors associated with women's perinatal mental health and wellbeing during the COVID-19 pandemic. PLoS One 2021;16(4):e0249780.
- 4 Kasaven LS, Raynaud I, Jalmbrant M, Joash K, Jones BP. The impact of the COVID-19 pandemic on perinatal services and maternal mental health in the UK. BJPsych Open 2023;9(1):e13.
- 5 Saunders B aHS. Babies in lockdown: listening to parents to build back better. 2000. [cited 25 Sept 23]. Available from url: https://parentinfantfoundation.org.uk/our-work/campaigning/ babies-in-lockdown/#fullreport
- 6 Vardi N, Zalsman G, Madjar N, Weizman A, Shoval G. COVID-19 pandemic: Impacts on mothers' and infants' mental health during pregnancy and shortly thereafter. Clin Child Psychol Psychiatry 2022;27(1):82-8.
- Jones I, Chandra PS, Dazzan P, Howard LM. Bipolar disorder, affective psychosis, and schizophrenia in pregnancy and the post-partum period. Lancet 2014;384(9956):1789-99.
- 8 Ladd C MN, Carmaciu C, Perinatal Mental Illness. InnovAIT 2017;10(11):653-8.
- 9 Lockwood Estrin G RE, Trevillion K, Demilew J, Bick D, Pickles A, Howard LM. Young pregnant women and risk for mental disorders: findings from an early pregnancy cohort. BJPsych Open 2019;5(2):e21.
- 10 Abel KM, Hope H, Swift E, Parisi R, Ashcroft DM, Kosidou K, et al. Prevalence of maternal mental illness among children and adolescents in the UK between 2005 and 2017: a national retrospective cohort analysis. Lancet Public Health 2019;4(6):e291-e300.
- 11 Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses. Br J Psychiatry 1987;150:662-73.
- 12 Langan Martin J, McLean G, Cantwell R, Smith DJ. Admission to psychiatric hospital in the early and late postpartum periods: Scottish national linkage study. BMJ Open 2016;6(1):e008758.
- 13 Munk-Olsen T, Laursen TM, Mendelson T, Pedersen CB, Mors O, Mortensen PB. Risks and predictors of readmission for a mental disorder during the postpartum period. Arch Gen Psychiatry 2009;66(2):189-95.
- 14 Munk-Olsen T, Maegbaek ML, Johannsen BM, Liu X, Howard LM, di Florio A, et al. Perinatal psychiatric episodes: a populationbased study on treatment incidence and prevalence. Transl Psychiatry 2016;6(10):e919.
- 15 Galloway S, Hogg S. Getting it right for mothers and babies. Closing the gaps in community perinatal services. Scotland; 2015. Available from url: www.nspcc.org.uk

- 16 Mental Welfare Commission for Scotland. Perinatal themed visit report: keeping mothers and babies in mind. Edinburgh 2016. [cited 14 Mar 23]. Available from url: www.mwcscot. org.uk/sites/default/files/2019-06/perinatal\_report\_final.pdf
- 17 The Scottish Government. Perinatal mental health services: needs assessment and recommendations. Edinburgh; 2019. Available from url: https://www.gov.scot/publications/delivering-effective-services-needs-assessment-service-recommendations-specialist-universal-perinatal-mental-health-services/pages/0/
- 18 The Scottish Government. Perinatal and Infant Mental Health Programme Board 2020-2021: delivery plan. Edinburgh: The Scottish Government,; 2020. [cited 03 May 2023]. Available from url: https://www.gov.scot/publications/perinatal-infantmental-health-programme-board-2020-2021-delivery-plan/
- 19 Perinatal Mental Health Network Scotland Managed Clinical Network. Scottish Perinatal Mental Health Care Pathways. [cited 09 Aug 2023]. Available from url: https://www.pmhn.scot.nhs. uk/wp-content/uploads/2021/06/Care-Pathways-full.pdf
- 20 Love R, McFadyen A. Wellbeing for Wee Ones: Mapping of parent-infant interventions and support services in Scotland. Key Theme Summary Report. Every Childhood is Worth Fighting For. . 2020. [cited 07 Nov 2023]. Available from url: https://www.pmhn.scot.nhs.uk/wp-content/uploads/2020/03/ Final-Wellbeing-for-Wee-Ones-Summary-report.pdf
- 21 The Scottish Government. Voice of the Infant: best practice guidelines and infant pledge. Appendix 2. Edinburgh; 2023. [cited 03 May 2023]. Available from url: https://www.gov. scot/publications/voice-infant-best-practice-guidelines-infantpledge/pages/14/
- 22 The Promise Scotland. [cited 24 May 2023]. Available from url: https://thepromise.scot/the-promise-scotland/
- 23 NHS Education for Scotland (NES). Perinatal mental health curricular framework: a framework for maternal and infant mental health. [cited 03 May 2023]. Available from url: https://www.nes.scot.nhs.uk/our-work/perinatal-and-infant-mental-health/
- 24 NHS Education for Scotland (NES). Infant Mental Health. [cited 03 May 2023]. Available from url: https://www.nes.scot.nhs. uk/our-work/infant-mental-health/
- 25 The Scottish Government. Nursing 2030 Vision. Edinburgh: The Scottish Government; 2017. Available from url: https://www. gov.scot/publications/nursing-2030-vision-9781788511001/
- 26 The Scottish Government. Mental health and wellbeing strategy. Edinburgh; 2023. [cited 25 Sept 23]. Available from url: https://www.gov.scot/publications/mental-health-wellbeing-strategy/
- 27 Perinatal Mental Health Network Scotland National Managed Clinical Network. Women and Families Maternal Mental Health Pledge. [cited Available from url: https://www.pmhn.scot.nhs. uk/wp-content/uploads/2019/03/PMHN-Women-Families-Pledge.pdf
- 28 HIghnet NJ and the Expert Working Group and Expert Subcommittees. Mental Health Care in the Perinatal Period: Australian Clinical Practice guideline. Melbourne: Centre of Perinatal Excellence (COPE); 2023. Available from url: https://www.cope.org.au/health-professionals/health-professionals-3/review-of-new-perinatal-mental-health-guidelines/

- 29 World Health Organization (WHO). International Classification of Diseases 11th Edition. [cited 04 Nov 2021]. Available from url: https://icd.who.int/en
- 30 National Institute for Health and Care Excellence (NICE). Antenatal and postnatal mental health: clinical management and service guidance. London; 2014; updated 2020. Available from url: https://www.nice.org.uk/guidance/cg192
- 31 Fisher SD, Glangeaud-Freudenthal N. Fathers as assets to support maternal mental health and family wellbeing. Arch Womens Ment Health 2023;26(1):87-8.
- 32 Battle CL, Cardemil EV, Rossi R, O'Hara MW, Miller IW. Family treatment for postpartum depression: acceptability, feasibility, and preliminary clinical outcomes. Arch Womens Ment Health 2023;26(1):127-34.
- 33 Heron J OF. Postpartum hypomania: future perspective. Neuropsychiatry 2011;1(11):55-60.
- 34 Sharma V, Singh P, Baczynski C, Khan M. A closer look at the nosological status of the highs (hypomanic symptoms) in the postpartum period. Arch Womens Ment Health 2021;24(1): 55-62.
- 35 Howard LM, Molyneaux E, Dennis CL, Rochat T, Stein A, Milgrom J. Non-psychotic mental disorders in the perinatal period. Lancet 2014;384(9956):1775-88.
- 36 Russell EJ, Fawcett JM, Mazmanian D. Risk of obsessivecompulsive disorder in pregnant and postpartum women: a meta-analysis. J Clin Psychiatry 2013;74(4):377-85.
- 37 Hudak R, Wisner KL. Diagnosis and treatment of postpartum obsessions and compulsions that involve infant harm. Am J Psychiatry 2012;169(4):360-3.
- 38 Hudepohl N, MacLean JV, Osborne LM. Perinatal Obsessive-Compulsive Disorder: Epidemiology, Phenomenology, Etiology, and Treatment. Curr Psychiatry Rep 2022;24(4):229-37.
- 39 Cook N, Ayers S, Horsch A. Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. J Affect Disord 2018;225:18-31.
- 40 Yildiz PD, Ayers S, Phillips L. The prevalence of posttraumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis. J Affect Disord 2017;208:634-45.
- 41 Heyne CS, Kazmierczak M, Souday R, Horesh D, Lambregtse-van den Berg M, Weigl T, et al. Prevalence and risk factors of birthrelated posttraumatic stress among parents: A comparative systematic review and meta-analysis. Clin Psychol Rev 2022;94:102157.
- 42 Harrison SE, Ayers S, Quigley MA, Stein A, Alderdice F. Prevalence and factors associated with postpartum posttraumatic stress in a population-based maternity survey in England. J Affect Disord 2021;279:749-56.
- 43 Madora M V, R. Complex trauma in the perinatal period. Curr Psychiatr 2022;21(11):20-6.
- 44 Oh W, Muzik M, McGinnis EW, Hamilton L, Menke RA, Rosenblum KL. Comorbid trajectories of postpartum depression and PTSD among mothers with childhood trauma history: Course, predictors, processes and child adjustment. J Affect Disord 2016;200:133-41.
- 45 Dias MC, Jones I. Perinatal psychiatry. Medicine 2016;44(12):720-3.
- 46 Paschetta E, Berrisford G, Coccia F, Whitmore J, Wood AG, Pretlove S, et al. Perinatal psychiatric disorders: an overview. Am J Obstet Gynecol 2014;210(6):501-9 e6.

- Di Florio A, Gordon-Smith K, Forty L, Kosorok MR, Fraser C, Perry A, et al. Stratification of the risk of bipolar disorder recurrences in pregnancy and postpartum. Br J Psychiatry 2018;213(3):542-7.
- 48 Viguera AC, Whitfield T, Baldessarini RJ, Newport DJ, Stowe Z, Reminick A, et al. Risk of recurrence in women with bipolar disorder during pregnancy: prospective study of mood stabilizer discontinuation. Am J Psychiatry 2007;164(12):1817-24.
- 49 Munk-Olsen T, Laursen TM, Meltzer-Brody S, Mortensen PB, Jones I. Psychiatric disorders with postpartum onset: possible early manifestations of bipolar affective disorders. Arch Gen Psychiatry 2012;69(4):428-34.
- 50 Royal College of Psychiatrists. Perinatal Mental Health Services: Recommendations for the provision of services for childbearing women. . 2021. Available from url: https://www. rcpsych.ac.uk/improving-care/campaigning-for-better-mentalhealth-policy/college-reports/2021-college-reports/perinatalmental-health-services-CR232
- 51 Perry A, Gordon-Smith K, Jones L, Jones I. Phenomenology, Epidemiology and Aetiology of Postpartum Psychosis: A Review. Brain Sci 2021;11(1).
- 52 Lewis KJS, Di Florio A, Forty L, Gordon-Smith K, Perry A, Craddock N, et al. Mania triggered by sleep loss and risk of postpartum psychosis in women with bipolar disorder. J Affect Disord 2018;225:624-9.
- 53 Wesseloo R, Kamperman AM, Munk-Olsen T, Pop VJ, Kushner SA, Bergink V. Risk of Postpartum Relapse in Bipolar Disorder and Postpartum Psychosis: A Systematic Review and Meta-Analysis. Am J Psychiatry 2016;173(2):117-27.
- 54 Vigod SN, Kurdyak PA, Dennis CL, Gruneir A, Newman A, Seeman MV, et al. Maternal and newborn outcomes among women with schizophrenia: a retrospective population-based cohort study. BJOG 2014;121(5):566-74.
- Tusiani-Eng P, Yeomans F. Borderline Personality Disorder: Barriers to Borderline Personality Disorder Treatment and Opportunities for Advocacy. Psychiatr Clin North Am 2018;41(4):695-709.
- 56 Blankley G, Galbally M, Snellen M, Power J, Lewis AJ. Borderline Personality Disorder in the perinatal period: early infant and maternal outcomes. Australas Psychiatry 2015;23(6):688-92.
- 57 Pare-Miron V, Czuzoj-Shulman N, Oddy L, Spence AR, Abenhaim HA. Effect of Borderline Personality Disorder on Obstetrical and Neonatal Outcomes. Womens Health Issues 2016;26(2):190-5.
- 58 Prasad D, Kuhathasan N, de Azevedo Cardoso T, Suh JS, Frey BN. The prevalence of borderline personality features and borderline personality disorder during the perinatal period: a systematic review and meta-analysis. Arch Womens Ment Health 2022;25(2):277-89.
- 59 Eyden J, Winsper C, Wolke D, Broome MR, MacCallum F. A systematic review of the parenting and outcomes experienced by offspring of mothers with borderline personality pathology: Potential mechanisms and clinical implications. Clin Psychol Rev 2016;47:85-105.
- 50 Dorsam AF PH, Micali N, Lorcher SB, Zipfel S, Giel KE. The Impact of Maternal Eating Disorders on Dietary Intake and Eating Patterns during Pregnancy: A Systematic Review. Nutrients 2019;11(4):840.
- 61 Pettersson CB, Zandian M, Clinton D. Eating disorder symptoms pre- and postpartum. Arch Womens Ment Health 2016;19(4):675-80.

- 62 Farrington D TM. The 1001 critical days: the importance of the conception to age two period: a cross party manifesto. London; 2009. Available from url: https://www.nspcc.org.uk/globalassets/documents/news/critical-days-manifesto.pdf
- 63 Stein A, Pearson RM, Goodman SH, Rapa E, Rahman A, McCallum M, et al. Effects of perinatal mental disorders on the fetus and child. Lancet 2014;384(9956):1800-19.
- 64 Schore AN. The effects of early relational trauma on right brain development, affect regulation, and infant mental health. Infant Ment Health J 2001;22(1-2):201-69.
- 65 Fearon RP, Bakermans-Kranenburg MJ, van Ijzendoorn MH, Lapsley AM, Roisman GI. The significance of insecure attachment and disorganization in the development of children's externalizing behavior: a meta-analytic study. Child Dev 2010;81(2):435-56.
- 66 Groh AM, Roisman GI, van Ijzendoorn MH, Bakermans-Kranenburg MJ, Fearon RP. The significance of insecure and disorganized attachment for children's internalizing symptoms: a meta-analytic study. Child Dev 2012;83(2):591-610.
- 67 Brockington I. Suicide and filicide in postpartum psychosis. Arch Womens Ment Health 2017;20(1):63-9.
- 68 The Scottish Government. National Guidance for Child Protection in Scotland 2021 updated 2023. Edinburgh; 2023. [cited 07 Nov 2023]. Available from url: https://www.gov.scot/publications/national-guidance-child-protection-scotland-2021-updated-2023/documents/
- 69 Barnes DL. Towards a new understanding of pregnancy denial: the misunderstood dissociative disorder. Arch Womens Ment Health 2022;25(1):51-9.
- 70 Stenton S, Cohen MC. Assessment of neonaticide in the setting of concealed and denied pregnancies. Forensic Sci Med Pathol 2020;16(2):226-33.
- 71 Ewens D, Finlay, J., Hunter, S. C., Simpson, L., Graham, A., Sharp, A., et al. The Scottish Mental Illness Stigma Study: Final Report. The Mental Health Foundation and See Me; 2022. [cited 14 Aug 2023]. Available from url: www.seemescotland.org/media/11118/see-me-scottish-mental-illness-stigma-study-final-report-sep-2022.pdf
- 72 Cénat JM. How to provide anti-racist mental health care. Lancet Psychiatry 2020;7(11):929-31.
- 73 Giscombe T, Hui A, and Stockley T. Perinatal mental health amongst refugee and asylum-seeking women in the UK. Mental Health Review 2020;25(3):241-53.
- 74 Jankovic J, Parsons J, Jovanović N, Berrisford G, Copello A, Fazil Q, et al. Differences in access and utilisation of mental health services in the perinatal period for women from ethnic minorities—a population-based study. BMC Med 2020;18(1):245.
- Abelsohn KA, Epstein R, Ross LE. Celebrating the "Other" Parent: Mental Health and Wellness of Expecting Lesbian, Bisexual, and Queer Non-Birth Parents. J Gay Lesbian Ment Health 2013;17(4):387-405.
- 76 Darwin Z, Greenfield M. Mothers and others: The invisibility of LGBTQ people in reproductive and infant psychology. J Reprod Infant Psychol 2019;37(4):341-3.
- 77 Ellis SA, Wojnar DM, Pettinato M. Conception, pregnancy, and birth experiences of male and gender variant gestational parents: it's how we could have a family. J Midwifery Womens Health 2015;60(1):62-9.

- 78 Greenfield M, Darwin Z. Trans and non-binary pregnancy, traumatic birth, and perinatal mental health: a scoping review. Int J Transgend Health 2021;22(1-2):203-16.
- 79 Oram S, Fisher HL, Minnis H, Seedat S, Walby S, Hegarty K, et al. The Lancet Psychiatry Commission on intimate partner violence and mental health: advancing mental health services, research, and policy. Lancet Psychiatry 2022;9(6):487-524.
- 80 Besag FM. ADHD treatment and pregnancy. Drug Saf 2014;37(6):397-408.
- Caye A, Swanson J, Thapar A, Sibley M, Arseneault L, Hechtman L, et al. Life Span Studies of ADHD-Conceptual Challenges and Predictors of Persistence and Outcome. Curr Psychiatry Rep 2016;18(12):111.
- 82 Lemelin M, Boukhris T, Zhao JP, Sheehy O, Bérard A. Prevalence and determinants of attention deficit/hyperactivity disorder (ADHD) medication use during pregnancy: Results from the Quebec Pregnancy/Children Cohort. Pharmacol Res Perspect 2021;9(3):e00781.
- 83 Li L, Sujan AC, Butwicka A, Chang Z, Cortese S, Quinn P, et al. Associations of Prescribed ADHD Medication in Pregnancy with Pregnancy-Related and Offspring Outcomes: A Systematic Review. CNS Drugs 2020;34(7):731-47.
- 84 Surendran I, Wijesinghe, K, and Johnson, J., Treatment of Attention Deficit Hyperactivity Disorder (ADHD) in Pregnant Women: A Systematic Review of Cohort Studies. BJPsych Open 2022:8:574-S.
- 85 National Institute for Health and Care Excellence (NICE). Attention deficit hyperactivity disorder: diagnosis and management. NG87. London: NICE; 2019. [cited 4 Sept 23]. Available from url: https://www.nice.org.uk/guidance/ng87
- 86 Rogers C, Lepherd L, Ganguly R, Jacob-Rogers S. Perinatal issues for women with high functioning autism spectrum disorder. Women Birth 2017;30(2):e89-e95.
- 87 Samuel P, Yew RY, Hooley M, Hickey M, Stokes MA. Sensory challenges experienced by autistic women during pregnancy and childbirth: a systematic review. Arch Gynecol Obstet 2022;305(2):299-311.
- 88 Scottish Intercollegiate Guidelines Network (SIGN). Assessment, diagnosis and interventions for autism spectrum disorders. Edinburgh: SIGN; 2016. [cited 4 Sept 23]. Available from url: https://www.sign.ac.uk/our-guidelines/assessment-diagnosis-and-interventions-for-autism-spectrum-disorders/
- National Institute for Health and Care Excellence (NICE). Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors: CG110. London: NICE; 2010. [cited 4 Sept 23]. Available from url: https://www.nice.org.uk/guidance/cg110/resources/pregnancy-and-complex-social-factors-a-model-for-service-provision-for-pregnant-women-with-complex-social-factors-pdf-35109382718149
- 90 McFadyen A, McCann S, Cantwell R, and the Perinatal Mental Health Network Scotland,. Supporting women, reducing harm: review of services for substance-using women and their infants in pregnancy and the postnatal period. 2021. [cited 4 Sept 23]. Available from url: https://www.pmhn.scot.nhs.uk/supportingwomen-reducing-harm/
- Molenaar NM, Bais B, Lambregtse-van den Berg MP, Mulder CL, Howell EA, Fox NS, et al. The international prevalence of antidepressant use before, during, and after pregnancy: A systematic review and meta-analysis of timing, type of prescriptions and geographical variability. J Affect Disord 2020;264:82-9.

- 92 Clark CT. Psychotropic drug use in perinatal women with bipolar disorder. Semin Perinatol 2020;44(3):151230.
- 93 BMJ Group and the Royal Pharmaceutical Society. British National Formulary (BNF): Guidance on Prescribing. [cited 04 Nov 2021]. Available from url: https://www.medicinescomplete. com/mc/bnf/current/PHP97234-guidance-on-prescribing.htm
- 94 General Medical Council (GMC). Good practice in prescribing and managing medicines and devices. [cited 14 Aug 2023]. Available from url: https://www.gmc-uk.org/ethical-guidance/ ethical-guidance-for-doctors/good-practice-in-prescribingand-managing-medicines-and-devices/prescribing-unlicensedmedicines
- 95 Royal Pharmaceutical Society. A Competency Framework for all Prescribers. London: Royal Pharmaceutical Society; 2021. [cited 14 August 2023]. Available from url: https://www.rpharms.com/resources/frameworks/prescribing-competency-framework/competency-framework
- 96 Medicines and Healthcare products Regulatory Agency. Off-label or unlicensed use of medicines: prescribers' responsibilities. Drug Saf Update 2009;2(9):6-7.
- 97 Committee UNS. Antenatal screening programme: postnatal depression. [cited Available from url: https://view-healthscreening-recommendations.service.gov.uk/postnataldepression/
- 98 Hall D, Elliman D (eds). Health for all children. 4th ed; 2003.
- 99 Beal M, Toscano M, Osborne L. Special Report: Women's Reproductive Mental Health A Clinical Framework. American Psychiatric Association; 2022. Available from url: https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2022.10.10.33#:~:text=Published%20Online%3A,appi.pn.2022.10.10.33https://doi.org/10.1176/appi.pn.2022.10.10.33
- 100 Harlow BL, Vitonis AF, Sparen P, Cnattingius S, Joffe H, Hultman CM. Incidence of hospitalization for postpartum psychotic and bipolar episodes in women with and without prior prepregnancy or prenatal psychiatric hospitalizations. Arch Gen Psychiatry 2007;64(1):42-8.
- 101 Jones I, Craddock N. Familiality of the puerperal trigger in bipolar disorder: results of a family study. Am J Psychiatry 2001:158(6):913-7.
- 102 Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB. Family and partner psychopathology and the risk of postpartum mental disorders. J Clin Psychiatry 2007;68(12):1947-53.
- 103 The Scottish Government. Creating Hope Together: suicide prevention strategy 2022 to 2032. Edinburgh; 2022. [cited 14 March 2023]. Available from url: https://www.gov.scot/ publications/creating-hope-together-scotlands-suicideprevention-strategy-2022-2032/
- 104 National Institute for Health and Care Excellence (NICE). Preconception - advice and management. London; 2023. [cited 25 Sept 23]. Available from url: Pre-conception - advice and management
- 105 Pérez-Escamilla R, Tomori C, Hernández-Cordero S, Baker P, Barros AJD, Bégin F, et al. Breastfeeding: crucially important, but increasingly challenged in a market-driven world. Lancet 2023:401(10375):472-85.
- 106 Louis-Jacques AF, Stuebe AM. Enabling Breastfeeding to Support Lifelong Health for Mother and Child. Obstet Gynecol Clin North Am 2020;47(3):363-81.

- 107 Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 2016;387(10017):475-90.
- 108 UNICEF. Guide to the UNICEF UK baby friendly intiative standards, 2nd edition. London; 2017.
- 109 World Health Organization (WHO). Breastfeeding. [cited 15 May 23]. Available from url: https://www.who.int/health-topics/breastfeeding#tab=tab\_1
- 110 Mental Welfare Commission for Scotland. Advanced Statement Guidance: My Views, My Treatment. 2017. [cited 25 Sept 23]. Available from url: www.mwcscot.org.uk/sites/default/ files/2019-06/advance\_statement\_guidancesep2018revision. pdf
- 111 The Scottish Parliament. Mental Health (Care and Treatment) (Scotland) Act. [cited 05 Nov 2021]. Available from url: https://www.legislation.gov.uk/asp/2003/13/contents
- 112 The Scottish Parliament. Mental Health (Scotland) Act. [cited Available from url: https://www.legislation.gov.uk/asp/2015/9/ contents
- 113 The Scottish Government. Safer sleep for babies: guide for patents and carers. [cited Available from url: Safer sleep for babies: guide for parents and carers gov.scot (www.gov.scot)
- 114 Malmquist A, Wikström J, Jonsson L, Nieminen K. How norms concerning maternity, femininity and cisgender increase stress among lesbians, bisexual women and transgender people with a fear of childbirth. Midwifery 2021;93:102888.
- 115 NHS Education for Scotland (NES). The Matrix: A Guide to Delivering Evidence Based Psychological Therapies and Interventions in Scotland. [cited 17 August 2023]. Available from url: https://www.matrix.nhs.scot/
- 116 Viswanathan M, Middleton JC, Stuebe AM, Berkman ND, Goulding AN, McLaurin-Jiang S, et al. Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatr Res Clin Pract 2021;3(3):123-40.
- 117 Wang J, Cosci F. Neonatal Withdrawal Syndrome following Late in utero Exposure to Selective Serotonin Reuptake Inhibitors: A Systematic Review and Meta-Analysis of Observational Studies. Psychother Psychosom 2021;90(5):299-307.
- 118 Marks C, Silvola R, Teal E, Quinney SK, Haas DM. Comparing newborn outcomes after prenatal exposure to individual antidepressants: A retrospective cohort study. Pharmacotherapy 2021;41(11):907-14.
- 119 Oberlander TF, Warburton W, Misri S, Aghajanian J, Hertzman C. Neonatal outcomes after prenatal exposure to selective serotonin reuptake inhibitor antidepressants and maternal depression using population-based linked health data. Arch Gen Psychiatry 2006;63(8):898-906.
- 120 Robakis TK, Miyares S, Bergink V. Risks and benefits of predelivery taper in pregnant women taking antidepressants. Acta Psychiatr Scand 2023.
- 121 Oberlander TF, Misri S, Fitzgerald CE, Kostaras X, Rurak D, Riggs W. Pharmacologic factors associated with transient neonatal symptoms following prenatal psychotropic medication exposure. J Clin Psychiatry 2004;65(2):230-7.
- 122 McAllister-Williams RH, Baldwin DS, Cantwell R, Easter A, Gilvarry E, Glover V, et al. British Association for Psychopharmacology consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 2017. J Psychopharmacol 2017;31(5):519-52.

- 123 McAllister-Williams RH, Baldwin DS, Cantwell R, Easter A, Gilvarry E, Glover V, et al. British Association for Psychopharmacology consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 2017. J Psychopharmacol 2017;31(5):519-52.
- 124 Fluoxetine. [Updated 2023 Aug 15]. Drugs and Lactation Database (LactMed\*) 2006;
- 125 National Institute for Health and Care Excellence (NICE). Obsessive-compulsive disorder and body dysmorphic disorder: treatment. London; 2005. Available from url: www.nice.org.uk/ guidance/cg31/resources/obsessivecompulsive-disorder-and-body-dysmorphic-disorder-treatment-pdf-975381519301
- 126 National Institute for Health and Care Excellence (NICE). Generalised anxiety and panic disorder in adults: management. London; 2020. Available from url: www.nice.org.uk/guidance/cg113/resources/generalised-anxiety-disorder-and-panic-disorder-in-adults-management-pdf-35109387756997
- 127 UK Teratology Information Service. [cited Available from url: https://uktis.org/
- 128 Medicines and Healthcare products Regulatory Agency.
  Antiepileptic drugs in pregnancy: updated advice following comprehensive safety review. [cited Available from url: https://www.gov.uk/drug-safety-update/antiepileptic-drugs-in-pregnancy-updated-advice-following-comprehensive-safety-review#major-congenital-malformations
- 129 Medicines and Healthcare products Regulatory Agency (MHRA). Pregabalin and risks in pregnancy. [cited 06/06/23]. Available from url: https://www.gov.uk/government/publications/ pregabalin-and-risks-in-pregnancy
- 130 Galbally M, Roberts M, Buist A. Mood stabilizers in pregnancy: a systematic review. Aust N Z J Psychiatry 2010;44(11):967-77.
- 131 Meltzer-Brody S, Kanes SJ. Allopregnanolone in postpartum depression: Role in pathophysiology and treatment. Neurobiol Stress 2020;12:100212.
- 132 Zheng W, Cai DB, Zheng W, Sim K, Ungvari GS, Peng XJ, et al. Brexanolone for postpartum depression: A meta-analysis of randomized controlled studies. Psychiatry Res 2019;279:83-9.
- 133 Deligiannidis KM, Meltzer-Brody S, Maximos B, Peeper EQ, Freeman M, Lasser R, et al. Zuranolone for the Treatment of Postpartum Depression. Am J Psychiatry 2023;180(9):668-75.
- 134 Taylor DM, Barnes TRE, Young A. The Maudsley Prescribing Guidelines in Psychiatry, 14th Edition. London: Wiley-Blackwell: 2021.
- 135 Westin AA, Brekke M, Molden E, Skogvoll E, Castberg I, SpigsetO. Treatment With Antipsychotics in Pregnancy: Changes in Drug Disposition. Clin Pharmacol Ther 2018;103(3):477-84.
- 136 Medicines and Healthcare products Regulatory Agency (MHRA).

  Update on MHRA review into safe use of valproate. [cited Available from url: https://www.gov.uk/government/news/update-on-mhra-review-into-safe-use-of-valproate
- 137 Jairaj C, Seneviratne G, Bergink V, Sommer IE, Dazzan P. Postpartum psychosis: A proposed treatment algorithm. J Psychopharmacol 2023:2698811231181573.
- 138 National Institute for Health and Care Excellence (NICE). Bipolar disorder: assessment and management. London; 2014. [cited 25 Sept 23]. Available from url: https://www.nice.org.uk/guidance/cg185
- 139 Hastie R, Tong S, Hiscock R, Lindquist A, Lindström L, Wikström AK, et al. Maternal lithium use and the risk of adverse pregnancy and neonatal outcomes: a Swedish population-based cohort study. BMC Med 2021;19(1):291.

- 140 Molenaar NM, Poels EMP, Robakis T, Wesseloo R, Bergink V. Management of lithium dosing around delivery: An observational study. Bipolar Disord 2021;23(1):49-54.
- 141 Poels EMP, Bijma HH, Galbally M, Bergink V. Lithium during pregnancy and after delivery: a review. Int J Bipolar Disord 2018;6(1):26.
- 142 Wesseloo R, Wierdsma AI, van Kamp IL, Munk-Olsen T, Hoogendijk WJG, Kushner SA, et al. Lithium dosing strategies during pregnancy and the postpartum period. Br J Psychiatry 2017;211(1):31-6.
- 143 Clark CT, Klein AM, Perel JM, Helsel J, Wisner KL. Lamotrigine dosing for pregnant patients with bipolar disorder. Am J Psychiatry 2013;170(11):1240-7.
- 144 Drugs and Lactation Database (LactMed®). [cited 05 Sept 23]. Available from url: https://www.ncbi.nlm.nih.gov/books/ NBK501922/





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