Diagnosing and managing perinatal depression in primary care

The consequences of perinatal depression* can be severe. Suicide is the leading cause of maternal mortality† in New Zealand and more than half of cases involve Māori women. The symptoms of depression may be masked by the stress of pregnancy, childbirth and parenthood and some women may be reluctant to disclose mental health issues. It is essential that women and their family/whānau are adequately supported through pregnancy and after birth to ensure that their mental health and wellbeing needs are being met.

KEY PRACTICE POINTS:

- Consider any clinical encounter an opportunity to assess the well-being of expectant and new mothers and their families/whānau
- Enquire about recent symptoms of depression and anxiety to identify women who may benefit from a mental health assessment with tools such as the PHQ-9 questionnaire, the Edinburgh Postnatal Depression scale, the GAD-7 questionnaire and the anxiety and depression checklist (K10)
- The management of perinatal depression involves the additional considerations of the pregnancy, the infant and the mother-infant relationship, but interventions are similar to depression at other stages of life:
  - Mild depression is managed with behavioural and psychological interventions along with additional support for the mother and family/whānau
  - Moderate to severe or persistent depression usually requires the addition of an antidepressant, generally a selective serotonin reuptake inhibitor (SSRI)
- In general, the benefits of antidepressants outweigh the risks to the mother and fetus or breastfeeding infant. Sertraline is often preferred as it is considered relatively safe during pregnancy and has the lowest infant exposure during breast-feeding. Women who are receiving pharmacological treatment for depression prior to pregnancy should generally continue with the same treatment regimen.
- Women with severe or psychotic symptoms should be referred to a secondary mental health service, e.g. if they have thoughts of harm to self or baby, suicidation or a significant recent deterioration in mental state

* Perinatal depression is defined as maternal depression occurring any time from conception through the first year of an infant's life[1]

† Maternal mortality is defined as the death of a woman while pregnant or within six weeks of giving birth, termination or miscarriage[2]

Perinatal depression in New Zealand

Depression and anxiety* are the most common mental health issues experienced by women during the perinatal period.[3] The Growing up in New Zealand study found that out of 5,664 women who were pregnant in 2009, 12% had symptoms of depression in their third trimester.[4] Similar figures are reported internationally with 12% of women experiencing antenatal depression and 20% experiencing postnatal depression.[5] The Growing up in New Zealand study also found that depression in the third-trimester was 1.2 times higher in Māori women, 1.9 times higher in Pacific women and 2.4 times higher in Asian women, compared with women of European ethnicity.[4]

Approximately 13% of women with depression during pregnancy have a co-existing anxiety disorder, e.g. generalised anxiety disorder, obsessive-compulsive disorder (OCD) or post-traumatic stress disorder following childbirth.[3, 5]

* Also collectively referred to as perinatal mood and anxiety disorders (PMAD)

The risks of undertreated perinatal depression

The severity of perinatal depression is variable, but it can be associated with serious consequences for both the mother and fetus or infant. It can reduce quality of life and increase the risk of negative maternal behaviours such as smoking, excessive use of alcohol and substance misuse.[6, 7] Antenatal depression has been associated with an increased risk of premature delivery, low birth weight, gestational hypertension and perinatal death.[1] Postnatal depression may adversely affect mother-infant bonding, potentially contributing to neglect or abuse, poor infant development and negative outcomes later in life.[8, 9]

In severe cases, perinatal depression can lead to self-harm or suicide. The rate of maternal suicide in New Zealand is 4.06 per 100,000 maternities*; seven times higher than in the United Kingdom.[2] Māori are disproportionately represented in these statistics, accounting for 57% of suicides in New Zealand during pregnancy or within six weeks of birth (2006–2016).[2]

Depression in a mother also places stress on her partner and their relationship, contributing to the risk of the partner developing depression (see: "Depression in partners is more likely in the postnatal period").[10]

* Maternities are all live births and all fetal deaths at 20 weeks gestation or beyond or weighing at least 400g if gestation is unknown.[2]

Co-operative care and communication reduces the risk of undertreatment

During pregnancy, birth and the postpartum period, women will usually interact with multiple healthcare professionals, including their lead maternity carer (LMC – generally a midwife) and Well Child Tamariki Ora providers, e.g. Plunket or Kaupapa Māori providers. It is important that general practices continue to be involved with women during the perinatal period and communicate with other healthcare providers, as appropriate, to ensure that any mental health issues are identified and managed effectively to minimise the risk of harm.

Further information is available from: "The role of the primary healthcare team in pregnancy care", **www.bpac.org.nz/2019/pregnancy-care.aspx**

Risk factors for perinatal depression

Assess pregnant women for risk factors for depression (see below) to help identify those at higher risk; share any pertinent information with the LMC, with the woman's permission, e.g. in a "Dear LMC letter". The LMC should be asked to contact the primary care team if they develop concerns about the woman's mental health.

Risk factors for perinatal depression include:

- **A personal history of:**
  - Previous mental health issues
    - A personal history of depression is the strongest risk factor for perinatal depression.[5, 11] Approximately half of women who have had multiple episodes of depression will relapse during pregnancy.[5]
  - Severe premenstrual syndrome (PMS)
    - Severe PMS is a risk factor for postnatal depression as both conditions are linked to changes in the serotonin transport system[12]
- **A family history of:**
  - Mental health issues
    - A first degree relative with a history of mental health issues is a risk factor for perinatal depression[3]
  - Severe perinatal mental illness
    - A first degree relative with a history of severe perinatal mental illness is a risk factor for postpartum psychosis (see: "Postpartum psychosis is a medical emergency")[3]
- **Non-European ethnicity:**
  - Māori
    - In a survey of 1,144 women, 22% of Māori had symptoms of depression during late pregnancy, compared to 15% of non-Māori women.[11] This might be explained by Māori mothers having on average more risk factors for perinatal depression, e.g. being younger, a prior history of depression, fewer qualifications, lower income and greater psychosocial adversity due to racial marginalisation, compared to New Zealand European mothers.[11, 13]

- Pacific
  - The Growing Up in New Zealand study found that almost one-quarter of pregnant Pacific women had symptoms of antenatal depression, rising to one-third in those aged under 25 years.[14] This might be explained by Pacific mothers having similar risk factors for depression as those outlined above for Māori women.[14]

- **Socioeconomic adversity**:
  - Low income or unemployment
  - Reduced education
  - Experiences of discrimination or racism
    - Māori, Pacific and Asian woman in the Growing up in New Zealand study who reported unfair treatment in the housing sector were more than twice as likely to experience postnatal depression; those that reported unfair treatment by a health professional were 1.66 times more likely to experience postnatal depression.[13]

- **Unplanned pregnancies**
  - The risk of maternal depression is increased in the first trimester of unplanned pregnancies, while the woman adjusts to the idea of being a mother[5]

- **Teenage pregnancies**
  - A New Zealand study of 1,144 women in late pregnancy found those aged 16–19 years were most likely to experience symptoms of depression or significant life stress during pregnancy; this association decreased with age.[11]

- **Loss of pregnancy**
  - Pregnancy loss generally causes intense emotional distress which usually diminishes over time, but approximately 20% of women develop persistent symptoms of depression or anxiety.[15] A mental health assessment six weeks following the loss of pregnancy is recommended, at which point persistent symptoms are more likely to be due to depression, rather than grief alone.[15]

Diagnosing perinatal depression

Any encounter during the perinatal period is an opportunity to assess the well-being of expectant and new mothers and their families. Confirmation of pregnancy is the ideal opportunity for the general practice team to identify women with a history of mental health issues and to reiterate the importance of talking to a health professional if they develop symptoms. In the weeks following childbirth, a letter or phone call to invite them to attend the practice for the infant's six-week vaccinations is another chance to check on the family's wellbeing, and if the family attends an appointment for another child.

Depression may be more difficult to detect during the perinatal period

Some symptoms, e.g. low mood, loss of pleasure or enjoyment, low self-esteem and feelings of self-worthlessness and guilt, may be more obvious than others, e.g. tiredness, sleep disturbance, changes in weight and loss of libido, when distinguishing depression from pregnancy-related changes and the demands of caring for an infant.[5] There are also other

Depression in partners becomes more likely in the postnatal period

The stresses associated with the perinatal period can also increase the risk of depression for partners. The Growing up in New Zealand study found that 2% of males had symptoms of depression during the third trimester of their partner's pregnancy.[10] Nine months after childbirth, a second interview was conducted and the rate of depression in male partners of women who had given birth had increased to 4%.[10] Risk factors for depression in male partners in this study included a prior history of depression, personal health concerns/chronic health condition and stress.[10] Partners of pregnant women with these risk factors may benefit from additional support to prevent the onset of depression.

Parental depression appears to be a bi-directional risk factor in that if one parent develops depression, the risk of depression in their partner is increased.[10] Having a partner with depression is a stronger risk factor for depression for women than it is for men.[10]

causes of similar symptoms, e.g. iron deficiency anaemia and thyroid dysfunction may cause tiredness.[5] Women with perinatal depression can also present with non-classical symptoms such as headaches, pain, anger, irritability or the use of alcohol or other substances.

Perinatal depression may be under-reported by women because they think the symptoms are normal or expected, they do not recognise that they are depressed or because they perceive that reporting symptoms would mean they were failing as a parent.[5] Cultural differences may also influence how the symptoms of depression are reported or if they are reported at all.

The patient's appearance, behaviour, body language and in some situations the rate, volume and content of their speech may be useful in diagnosing depression, anxiety disorders and other mental illnesses.[5] Perinatal obsessive-compulsive disorder occurs in 2–3% of women.[16] This is characterised by intrusive thoughts about causing accidental or intentional harm to the fetus or infant and ritualised behaviours performed to control the resultant anxiety.[16] Post-partum psychosis occurs in < 0.1% of pregnancies; it can be characterised by a manic presentation, excessive sense of wellbeing, grandiosity or paranoia and a reduced need to sleep (see: "Postpartum psychosis is a medical emergency")

Distinguishing depression from the "baby blues"

It is important to distinguish the persistent symptoms of depression from the transitory feelings of anxiety, unhappiness and fatigue associated with the rapid postpartum depletion of oestrogen. These transitory feelings of distress, sometimes referred to as the "baby blues", are experienced by up to 80% of new mothers, typically beginning three days after birth and resolving in 10–14 days.[17] Women with perinatal transitory distress can generally be managed with support and reassurance from an empathetic health professional, her partner, family and other support networks (see: "Resources for patients"). If symptoms persist for more than two weeks, postnatal depression is more likely.[5]

Screening questions and assessment tools

Screening questions are used to identify women who may benefit from a more structured assessment of their mental health, e.g. How often have you been bothered by:[3]

- *…feeling down, depressed or hopeless in the past month?*
- *…having little interest or pleasure doing things in the past month?*
- *…feeling nervous, anxious or on edge in the past two weeks?*
- *…not being able to stop or control worrying in the past two weeks?*

If the patient reports that they have been bothered by any of these symptoms, a full assessment is recommended using the Patient Health Questionnaire (PHQ-9) or the Edinburgh Postnatal Depression Scale (EPDS), and the Generalised Anxiety Disorder 7-item (GAD-7) scale if anxiety is thought to be a significant component (see: "Tools to assess mental health").

Perform a risk assessment

Following a diagnosis of depression, a risk assessment for the mother and any children should be performed. This is best done transparently to avoid increasing maternal anxiety.[5] An appropriate question may be:

> *After having a baby lots of women feel down, some may even think about harming themselves or their baby. Have you ever had thoughts like this?*

Assess the woman's access to social supports and her ability to cope with any children and provide contact details for resources and services (see: "Resources for patients"). The presence of additional risk factors, e.g. relationship problems or domestic violence, should be identified.

Refer to secondary care if symptoms are severe or the woman is at serious risk

Women with severe mental illness during the perinatal period should be managed in secondary care as they require more intensive treatment to reduce the risk of serious adverse outcomes including maternal suicide, stillbirth and neonatal death.[7] Refer pregnant women to a secondary mental health service if they have a history of severe mental illness or they develop symptoms consistent with severe mental illness,[3] e.g:

- A recent significant deterioration in mental state
- Thoughts of harm to self or the baby, or suicidal thoughts
- Psychotic or manic features

Managing perinatal depression and anxiety

The management of perinatal depression is similar to depression at other stages of life, but with the additional considerations of the pregnancy, the fetus or infant and the mother-infant relationship:[5, 8, 21]

- Mild depression is treated with behavioural and psychological interventions, including:
  - Behavioural activation, e.g. re-engaging with friends, family and social activities
  - Exercise, a healthy diet and optimising sleep
  - Relaxation, meditation and mindfulness
  - Avoiding alcohol and drugs
  - Cognitive behavioural therapy (CBT) or other psychological therapies

- Moderate to severe depression or persistent depression is treated with a combination of behavioural, psychological interventions and usually an antidepressant; often a selective serotonin reuptake inhibitor (SSRI)

Management is also guided by the relative success of any previous treatments and the patient's preference. Reassurance is an important component of management to negate any feelings of failure or weakness. The approach to treatment is similar for women with anxiety, with non-pharmacological strategies used first. In women with concurrent moderate to severe depression and anxiety, medicines prescribed to treat the depression are often effective in reducing anxiety.[8]

Non-pharmacological interventions are recommended for all patients with depression or anxiety

Non-pharmacological interventions are the first-line treatment for depression or anxiety. These focus on promoting a healthy lifestyle with adequate nutrition, exercise and sleep and providing psychoeducation, i.e. information and problem-solving techniques, developing coping strategies, building resilience against relapses and establishing social supports. The patient's thoughts and concerns should be explored to identify contributing factors, e.g. a perceived failure to meet expectations, problems with the physical limitations of pregnancy and childbirth, financial concerns or social isolation.[22] If there are financial or accommodation stressors it may be helpful to provide a letter of support to a relevant agency.

Support groups can be valuable as they help to connect people with similar experiences and facilitate socialising, e.g. antenatal group meetings or Parents Centre groups (see: "Resource for patients").

Encourage engagement with friends and family

Behavioural activation, e.g. re-engaging with enjoyable activities and the support of family/whānau/friends, should be encouraged. In general, recommend face-to-face contact with friends and family and that social isolation be avoided. Social media may exacerbate unrealistic expectations of motherhood and it may be appropriate to recommend that some patients minimise their contact with these platforms.

Cognitive behavioural therapy is the most effective perinatal psychological intervention

Cognitive behaviour therapy (CBT) is a form of psychotherapy that helps people understand their response to challenging circumstances, thereby enabling them to improve their management of the situation. Online CBT is available (see: "Resources for patients"). Patients may also be referred to counselling (depending on local availability) or pay for private sessions with a clinical psychologist. CBT is associated with

Tools to assess mental health

The PHQ-9 questionnaire has been validated for detecting depression in pregnant women with a sensitivity of 85% and a specificity of 84%.[18] The patient is asked nine questions about their mood over the past two weeks, which are used to detect and grade the severity of depression from none to mild, moderate, moderately severe or severe. The PHQ-9 questionnaire can be also used to monitor the patient's response to treatment. Available from: **www.cqaimh.org/pdf/tool_phq9.pdf**

The Edinburgh Postnatal Depression Scale (EPDS) is a ten-item questionnaire used to detect depression in the postnatal period, although it has also been validated for use in the antenatal period. A score of ≥ 13 identifies women with serious symptoms of depression and a score of 10–12 identifies women with mild symptoms of depression.[19] Available from: **https://psychology-tools.com/test/epds**

The GAD-7 questionnaire is used to detect generalised anxiety disorder and assess the severity from none, mild, moderate or severe. Available from: **www.nzgp-webdirectory.co.nz/site/nzgp-webdirectory2/files/pdfs/forms/GAD-7_Anxiety.pdf**

The anxiety and depression checklist (K10) is a simple way of assessing the severity of symptoms of anxiety and depression, available from: **www.beyondblue.org.au/the-facts/anxiety-and-depression-checklist-k10**

bestpractice by BPAC Clinical Solutions offers a range of electronic decision support tools for assessing and managing patients with depression. These modules are part of a nationally-funded suite of resources available free-of-charge to all primary care practices in New Zealand. There is a specific module for perinatal depression as well as separate modules for depression in young people, adults and older people. The assessments incorporate the PHQ-9, GAD-7, and EPDS questionnaires and the K10 checklist. For further information, see: **www.bestpractice.net.nz/feat_mod_NatFunded.php**

Postpartum psychosis is a medical emergency

Postpartum psychosis is a medical emergency due to the risk of infanticide and maternal suicide.[20] It is thought to be a variant of bipolar disorder.[8] A personal history of bipolar disorder, primiparity and a family history of severe perinatal mental illness are the only confirmed risk factors for postpartum psychosis.[3, 20] The condition is extremely rare in multiparous women who have not previously experienced a psychotic episode.[20] Adverse life events, social stress or a history of depression do not appear to increase the risk of postpartum psychosis.[20] The prevalence of postpartum psychosis from the limited data available is 0.25 – 0.6 per 1000 primigravida births.[20] The risk of onset of psychosis is highest three to ten days after birth.[20]

Postpartum psychosis is characterised by rapid mood swings often with a delirium-like state and deranged cognition that may include disorientation, confusion, depersonalisation and delusions involving infanticide.[20] The cause is unknown, however, hormonal, immunological and circadian changes have been proposed to trigger episodes in genetically susceptible women.[20]

Women with a history of bipolar disorder should be closely monitored, particularly in the first two weeks following childbirth.[3]

Antidepressants should not be prescribed to women with postpartum psychosis as this may exacerbate their unstable mood.[20] The patient should be referred to a mental health service, ideally a maternal mental health service, immediately for assessment and treatment; inpatient care may be appropriate.[3]

Following a postpartum psychotic episode there is a 50 – 80% chance that the woman will experience a future psychotic episode at some other stage in her life and subsequent pregnancies may require specialist monitoring.[20]

significant improvements in the symptoms of postnatal depression over the short and long-term.[23]

Several other psychological therapies may also be used to manage perinatal depression and anxiety, although they are less commonly available than CBT. Interpersonal therapy (IPT) focuses on resolving relationship problems and is an effective intervention for depression during pregnancy, although in general it appears to be less effective than CBT.[24] Acceptance and Commitment Therapy (ACT) utilises mindfulness and focuses patients on values, forgiveness, acceptance and compassion. Several trials are currently assessing the effectiveness of ACT in treating perinatal mood disorders.

The pharmacological management of perinatal depression

The indications for the pharmacological treatment of perinatal depression are the same as for depression occurring at other stages, i.e. moderate to severe depression or persistent mild to moderate depression that has not responded to non-pharmacological interventions.[8, 21]

Women can be reassured that the benefits of appropriately prescribed antidepressants generally outweigh the risks.[1, 7] If a woman already taking an antidepressant becomes pregnant it is recommended that she continue taking the same medicine (see: "Withdrawing antidepressants during pregnancy is not recommended").[7]

The potential for an antidepressant to cause adverse effects in the fetus or breastfeeding infant is influenced by a number of factors, including:[7]

- The timing of exposure during pregnancy
- The individual risks associated with the specific antidepressant
- The infant dose received while breastfeeding

The differences in the relative safety between antidepressants is, however, not considered to be sufficient to outweigh the potential risks of switching antidepressants in women who are already receiving effective treatment.[7] Breast feeding is encouraged regardless of the antidepressant that is being taken.[1]

SSRIs are often the preferred antidepressants during the perinatal period

SSRIs have been extensively studied during the perinatal period and are generally the preferred class of antidepressant during this time on the basis of safety and efficacy (see: "The risks of taking SSRIs during the perinatal period").[7] SSRIs are also generally the first-line antidepressant for depression occurring at other stages of life, therefore continuity of pharmacological treatment may be a consideration for some patients.

Sertraline, citalopram and escitalopram are the first-choice SSRIs

Sertraline is often preferred for women with perinatal depression as it has the lowest infant exposure during breast feeding.[1, 7] There is also evidence suggesting that sertraline is the SSRI associated with the lowest risk of persistent pulmonary hypertension (PPHT).[25] Citalopram and escitalopram are also reasonable choices during the perinatal period on the basis of safety and efficacy.[1, 26]

Paroxetine has low to undetectable serum levels in breastfed infants, however, an increased risk of congenital cardiac defects and neonatal behavioural syndrome following in utero exposure means that another SSRI would generally be preferred.[7, 26] Fluoxetine is the least preferred SSRI during breastfeeding, as its long half-life increases exposure in breastfed infants.[1, 27]

Prescribe the same SSRI if previous treatment has been successful

For women with a history of successful treatment with a SSRI, it is recommended that clinicians offer the same medicine, unless there are compelling reasons to recommend an alternative.[7] When discussing options with the patient, the rationale is that it is preferable to prescribe a medicine that is known to be tolerated and effective for an individual, even if there is research suggesting the risks may be lower in an alternative medicine.[7]

Prescribe the lowest effective dose

Treatment with an SSRI should begin at the lower end of the therapeutic dose range, e.g. 50 mg of sertraline daily,[27] and then slowly titrated upwards, if necessary, until the woman feels that her symptoms are manageable. It is important to be mindful of the risks of under-dosing which may expose the woman and fetus to adverse effects without treating the depression adequately.[5] It may be necessary to increase the dose of the antidepressant during the third trimester to account for changes in metabolism or haemodilution if clinical monitoring indicates that depressive symptoms are returning. If the woman's symptoms are well-controlled the previous dosing regimen can be reinstated in the weeks following childbirth.

The optimal duration of treatment is unknown

There is no specific guidance for the duration of antidepressant treatment for perinatal depression.[5] A similar duration of treatment for depression occurring at other stages of life is therefore recommended, i.e. for at least one year following a single episode of depression and at least three years for recurrent episodes.[8] Earlier withdrawal of an antidepressant may be considered for patients who have responded well to treatment. The PHQ-9 questionnaire can be used to assess treatment response and guide treatment decisions.

Second-line options if SSRIs are ineffective or not tolerated

Tricyclic antidepressants (TCAs) are generally considered to be safe during pregnancy and breastfeeding and are associated with a similar risk of fetal and infant adverse effects as SSRIs.[7] TCAs are, however a second-line option as they may cause maternal adverse effects such as sedation and are more likely to be fatal in overdose.[26]

The risks of taking SSRIs during the perinatal period

The risks associated with fetal and infant exposure to SSRIs are relatively low and need to be weighed against the potential consequences of untreated or undertreated mental illness.[7] Small increases in the risk of congenital cardiac defects have been observed when SSRIs are taken in the first trimester.[7, 27] The highest risk is associated with paroxetine with cardiac defects occurring in approximately 1.5–2% of exposed births, compared to approximately 1% in the general population.[7] There is some evidence, however, that the association between SSRI use and congenital cardiac defects may be due to confounders such as smoking, the use of other medicines and fetal alcohol syndrome.[7]

Persistent pulmonary hypertension (PPHT) in the infant is a serious condition with a high rate of mortality that is associated with the use of SSRIs.[7] The increase in absolute risk of PPHT attributable to SSRIs is, however, small (0.619 per 1000 livebirths) and equates to a number needed to harm (NNH) of 1615 women.[29]

The use of SSRIs during pregnancy is also associated with neonatal behavioural syndrome, that may be due to in utero exposure to the SSRI or withdrawal of SSRI exposure at birth.[7] The underlying maternal depression may also contribute to the syndrome.[7] The symptoms of neonatal behavioural syndrome are generally self-limiting and include irritability, shivering, eating and sleeping difficulties and occur in approximately 30% of exposed infants compared to 10% in the general population.[7]

Venlafaxine may be a treatment option for women who have not responded to an SSRI, however, due to an increased risk of neonatal withdrawal (including seizures), venlafaxine is only considered if safer treatment options have not been successful.[26, 27]

Antidepressants should be withdrawn gradually

If an antidepressant is withdrawn, this should be done slowly with the woman monitored closely for symptoms of relapse and SSRI discontinuation reactions, and where appropriate other health professionals involved in her care informed.[7] It may also be necessary to intensify non-pharmacological treatment.

Further information on the use of antidepressants for the treatment of depression is available from: "The role of medicines for the management of depression primary care" **www.bpac.org.nz/2017/depression.aspx**

Arrange a follow-up within the next two weeks

Active follow-up is recommended for all patients who present with mental health issues, e.g. negotiate a review plan involving a phone call from the practice after 24–48 hours, a follow-up appointment in one or two weeks and where appropriate passing on any relevant information to her LMC.[28] If the patient does not attend the follow-up appointment, they should be contacted to check on their well-being.[5]

Encourage the patient to bring her partner or other family member to the next consultation as their support is important and they may provide insights into her condition. The partner should also feel supported by the primary care team and know who to contact if they have concerns.

For further information on identifying and managing perinatal depression, see the Goodfellow Unit webinar presented by Dr Mark Huthwaite: **www.goodfellowunit.org/events/perinatal-mood-and-anxiety-disorders**

Withdrawing antidepressants during pregnancy is not recommended

If a woman is already taking an antidepressant, the decision to continue or withdraw pharmacological treatment should be made as soon as possible, once pregnancy is confirmed.[7] The patient should be informed that there is a high level of uncertainty regarding the risks of withdrawing pharmacological treatment during pregnancy.

The consensus among guidelines is that women who are receiving pharmacological treatment for depression prior to pregnancy should continue to do so during pregnancy and into the postpartum period.[1] This recommendation is based on the likely benefits of medicine outweighing the risks of adverse effects. Furthermore, stopping antidepressant treatment once pregnancy is confirmed does not necessarily remove the risks of neonatal malformation and discontinuation may result in the woman experiencing withdrawal symptoms or a relapse.[7]

Resources for patients

Online tools and apps:

The SmartStart online tool provides an online profile to store an infant's health-related information, e.g. vaccination records, and supplying guidance on family eligibility for financial assistance. It also provides people with basic advice on what to do if they are feeling depressed or anxious and can provide contact details for local support services: **https://smartstart.services.govt.nz/**

The Mental Health Foundation has an extensive list of apps and online tools for managing depression: **www.mentalhealth.org.nz/get-help/a-z/apps-e-therapy-and-guided-self-help/**

Support services:

Resources designed for Māori who may be experiencing anxiety and depression are available from: **https://depression.org.nz/maori/**

Resources designed for Pacific peoples who may be experiencing anxiety and depression are available from: **https://depression.org.nz/pasifika/**

Contact details for support services for people affected by postnatal depression are available from: **www.healthnavigator.org.nz/support/p/postnatal-depression-pnd/**

Contact details for support groups for parents are available from: **https://parents.education.govt.nz/learning-support/learning-support-needs/groups-that-can-support-you/#parent**

Parents Centres are located throughout New Zealand and offer education and support for pregnant women and families: **www.parentscentre.org.nz**

Resources for people who have lost a pregnancy or are supporting a person who has lost a pregnancy are available from: **www.miscarriagesupport.org.nz/#**

Online treatment courses for patients:

"Beating the Blues" is an online CBT programme for the treatment of depression that allows health professionals to check on the patient's progress. General practitioners need

to register with Beating the Blues via Medtech or at **www.beatingtheblues.co.nz** in order to prescribe the programme.

The Ministry of Health provides links to resources for people affected by postnatal depression, including counselling and an online treatment, available from: **www.mentalhealth.org.nz/get-help/a-z/resource/26/postnatal-depression**

The recently launched "Just a Thought" tool provides CBT online for the treatment of depression and anxiety. Clinicians register and are provided with a code to email to patients: **www.justathought.co.nz**

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