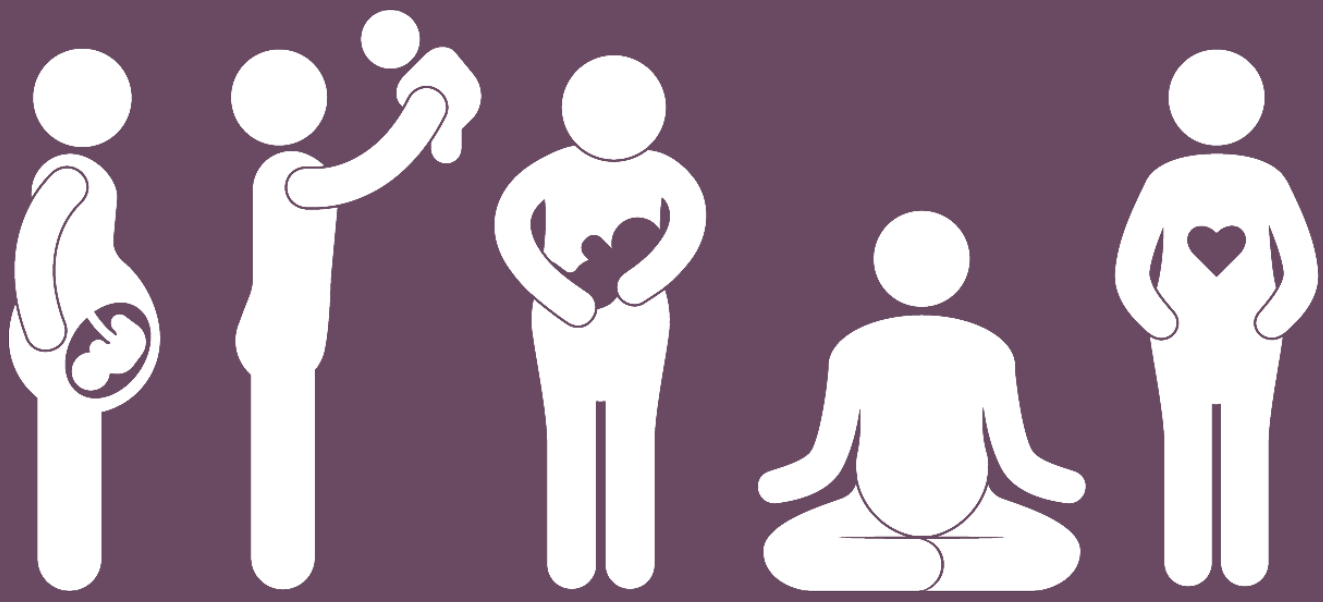
MHTTC
Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

Perinatal Mental Health

Considerations for Health and Mental Health Professionals



Andrea G. Alioto, PhD, LP — MHTTC Network Coordinating Office
Maridee Shogren, DNP, CNM, CLC — Mountain Plains MHTTC
Marianela Rodriguez, PhD, LP — National Hispanic and Latino MHTTC
Katty Rivera, MEd — Northeast and Caribbean MHTTC
Stephanie Lanteri — New England MHTTC
Katie Volk, MA — New England MHTTC

This publication was prepared for the Mental Health Technology Transfer Center (MHTTC) Network under a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA).

At the time of this publication, Miriam Delphin-Rittmon, PhD served as Assistant Secretary for Mental Health and Substance Use and Administrator of SAMHSA. The opinions expressed herein are the view of the authors and do not reflect the official position of the Department of Health and Human Services (DHHS), SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this document is intended or should be inferred.

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Introduction

The transition to parenthood is a life-changing experience with significant physical and psychological adjustments for the entire family. Many parents experience mood changes and feel overwhelmed during pregnancy and/or after the birth of their child. When these symptoms do not resolve on their own, worsen in severity, and begin to affect a person's quality of life, they may be experiencing a perinatal mental health disorder. While the term "postpartum depression" has been used historically, perinatal mental health disorders are actually a spectrum of experiences that can affect expecting persons during the pregnancy and postpartum period. Perinatal mental health disorders occur in people of every culture, age, income level, and ethnicity. Appropriate treatment for perinatal mental health conditions may help prevent long-term and adverse effects for parents, children, and families.

Many health and mental health care professionals do not receive training on helping new parents identify and manage mental health symptoms. This document is designed to help health and mental health professionals support persons who may be experiencing mental health symptoms and disorders during the prenatal and postpartum periods. We describe the spectrum of perinatal mental health issues, discuss recent research findings, and differentiate perinatal mental health disorders from typical emotional responses associated with becoming a new parent. We consider the influence of stigma in seeking treatment and describe cross-cultural considerations for working with individuals affected by perinatal mental health conditions. Finally, we highlight best practices for prevention and treatment options for managing perinatal mental health disorders and provide resources for additional support.

Please note: Pregnancy and parenting are not gender or sex exclusive. Throughout this document you will see language that leaves room for many different birth experiences and outcomes. When describing findings from research studies, we refer to participant population(s) as they were identified by the researchers who conducted the study. All people who identify with pregnancy and parenting can be affected by mental health challenges during the perinatal period, regardless of gender, sex, or sexual orientation.

Definitions

Preconception Period	Period of time before conception during which an individual has a desire to conceive, intentions for pregnancy, or current pregnancy plans (Hill et al., 2020)
Perinatal period	Period of time before and after birth. Although the World Health Organization medical definition is beginning after 22 weeks (154 days) of gestation and ending seven days after birth, regarding **mental health conditions**, the perinatal period is most commonly defined as spanning from the **preconception period through at least 1 year after birth**.
Interconception period	Period of time between a delivery and the conception of the next child that includes, but is not limited to, the postpartum period (D'Angelo et al., 2007)
Antenatal	Occurring before birth
Peripartum	Occurring around the time of childbirth
Postpartum	Occurring after childbirth

Context and Approach

This document aims to serve as a resource for health and behavioral health providers who wish to learn more about the continuum of mental health challenges facing parents during the perinatal period. However, we must keep in mind the "how" as well as the "what"—how services are provided, how we approach conversations with parents, and how we discuss the various routes to treatment and recovery are nothing short of essential. A trauma-informed, recovery-oriented lens promotes healing, empowers families, and ultimately helps both providers and families focus on individual and community well-being. Pregnancy, parenting, and mental health are often loaded topics, embedded in cultural and community expectations and perceptions of well-being, and often cloaked in shame and stigma. Providers have an opportunity to alleviate stigma and support recovery for parents and infants alike.

Recovery-Oriented Principles

Though a thorough discussion of trauma-informed, recovery-oriented perinatal care is outside the scope of this document, we want to provide the reader a few key elements of the approaches, so as to ground the rest of the information in this context.

Recovery is defined as "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential" (SAMHSA, 2020).

Recovery-oriented care, which promotes health and resilience, can help individuals coping with perinatal mental health disorders manage their symptoms successfully.

Through the Recovery Support Strategic Initiative, SAMHSA has delineated four dimensions and 10 guiding principles that support a life in recovery. These can be found at: **https://store.samhsa.gov/sites/default/files/d7/priv/pep12-recdef.pdf**

Health and mental health providers should align their care with the recovery-oriented principles to help provide person-centered, non-stigmatizing care to people with or at risk of developing perinatal mental health disorders.

Trauma-Informed Care

SAMHSA defines trauma-informed care as follows: "a program, organization, or system that is trauma-informed **realizes** the widespread impact of trauma and understands potential paths for recovery; **recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and **responds** by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively **resist re-traumatization**" (SAMHSA, 2014, p. 9).

Trauma-informed care has been explicitly identified as a way of caring for women during the perinatal period (American College of Obstetrics and Gynecologists, 2021; Kuhnly et al., 2020; Mosley & Lanning, 2020; Schiff et al., 2017; Searle et al., 2017; Sperlich et al., 2017; Ward, 2020).

We have included more information on each of these topics in the Resources section at the end of this document.

Perinatal Mental Health Continuum

Mental health states fall along a continuum that ranges in severity from no distress, to some mental distress, to mental health problems or symptoms, to a mental illness or disorder diagnosed by a health or mental health professional (Kutcher et al., 2016).

Perinatal mental health disorders are a group of mental health conditions that are prevalent during pregnancy and up to 1 year after delivery.

While the term "postpartum depression" has been used historically, perinatal mental health disorders are actually a spectrum of experiences that can affect people during the pregnancy and postpartum period. Perinatal mental health disorders include postpartum depression as well as a variety of other conditions.

The spectrum of perinatal mental health conditions includes:

1. Perinatal depression
2. Perinatal anxiety and panic disorders
3. Perinatal obsessive-compulsive disorders (OCD)
4. Perinatal post-traumatic stress disorder (PPTSD)
5. Perinatal bipolar disorder and postpartum trauma
6. Perinatal psychosis
7. Parental suicide
8. Perinatal substance use disorders
9. Complicated grief after perinatal loss

Perinatal mental health disorders do not include **postpartum blues** (also known as "baby blues"), a common experience after having a baby when parents/caregivers may feel physically and emotionally overwhelmed and exhausted.

- Postpartum blues are very common, occurring in 50% to 80% of new parents in the first 1 to 2 weeks after the birth of their baby (Bobo & Yawn, 2014).
- Symptoms may include mood swings, crying spells, anxiety, insomnia, appetite changes, feeling overwhelmed, irritability, fatigue, and trouble sleeping.
- Postpartum blues usually resolve without intervention and do not progress in severity.
- Up to 20% of women with postpartum blues go on to develop postpartum depression (Robertson et al., 2003).

Perinatal mental health disorders are more persistent than postpartum blues and of higher intensity, and require treatment. When left untreated, perinatal mental health disorders can be associated with negative outcomes for the parent/caregiver, the child, and the parent child relationship.

- There is increased risk for low birth weight and pre-term delivery (Hosseini et al., 2009; Grote et al., 2010).
- Mothers with perinatal depression touch their infants less and with less affection than non depressed mothers (Field, 2010).
- Mothers who are depressed are less likely to put their infant to sleep in the back position, have a lower likelihood of ever breastfeeding, are less likely to use car seats, and are more likely to put the child to bed with a bottle (Field, 2010).

Perinatal mental health disorders affect the mental health and general wellbeing of multiple generations.

- Mothers affected by perinatal depression may experience decreased social support, more difficulty with self-care, poor nutrition and weight gain, substance use, and increased partner conflict (Musik & Borovska, 2010).
- Infants and children of mothers with perinatal depression show a more difficult temperament and a greater likelihood to exhibit delays in cognitive and emotional development compared to other infants and children (Musik & Borovska, 2010).
- Mothers with depression and their infants exhibit similar physiological markers including elevated cortisol, lower dopamine and serotonin, and brain wave changes (Musik & Borovska, 2010).

Up to 50% of individuals will not seek treatment for perinatal mental health disorders (Centers for Disease Control and Prevention, 2008).

- Stigma strongly associated with perinatal mental health complications may contribute to treatment disparities (see Stigma section below).

Without treatment, perinatal mental health disorders can become chronic disorders that persist through more than one pregnancy (Meltzer-Brody & Steube, 2014).

Several risk factors have been identified across multiple studies.

- A personal and/or family history of psychiatric disorder is a consistent risk factor for perinatal mental health disorders (Blom et al., 2010; Robertson et al., 2004).

- Additional risk factors include unplanned pregnancy, difficult pregnancy or birth experience, birth complications (e.g., admission to neonatal intensive care unit), giving birth to twins or other multiples, relational distress, social isolation, inadequate social support system, younger age of mother, and low socioeconomic status (Blom et al., 2010; Robertson et al., 2004).

Hormonal changes are thought to contribute to perinatal mental health conditions due to the rapid decline of reproductive endocrine hormones following delivery. Reduced estrogen and progesterone interact with the hypothalamic–pituitary–adrenal (HPA) axis and then trigger hormonal abnormalities (e.g., serotonergic response) among individuals who are at risk (Meltzer-Brody, 2011).

Perinatal Depression

Perinatal Depression	Major depression that occurs during pregnancy or within a year after delivery. The term "perinatal depression" includes both antenatal and postpartum depression.
Antenatal Depression	Depression that occurs before birth.
Postpartum Depression	Depression that occurs after birth.

Symptoms

1. Depressed mood and/or frequent tearfulness
2. Loss of pleasure (e.g., doesn't enjoy interacting with infant)
3. Hopelessness
4. Feelings of guilt
5. Worthlessness or shame
6. Feelings of incompetence (e.g., feeling like a bad mother)
7. Fatigue
8. Irritability
9. Sleep disturbance
10. Change in appetite
11. Poor concentration
12. Feeling inadequate to cope with new infant
13. Social withdrawal
14. 14. Possible thoughts of harming the baby or oneself

(Goodman & Santangelo, 2011)

- Depression is considered the most common complication associated with childbirth. Perinatal depression affects at least 1 in 7 women during pregnancy and postpartum (Wisner et al., 2013).

- Approximately 7% to 13% of women will experience depression at some point during their pregnancy (Bennet et al., 2004), while postpartum depression occurs in 7% to 17%of adult women and up to 26% of adolescent women (Dinwiddie, Schillerstrom, & Schillerstrom, 2018).

- Some reports have estimated the prevalence of perinatal depression to be as high as 40% to 60% among mothers who are teenagers or of low socioeconomic status (Earls et al., 2019).

- Sixty percent of women with perinatal depression have a pre-existing mental health condition (Wisner et al., 2013).

- Up to 50% of women who experience perinatal depression have a family history of mental health disorders (Kimmel et al., 2015).

Heritability of perinatal depression is greater than that of major depressive disorder, suggesting that perinatal depression has a unique etiology (Viktorin et al., 2016).

- Diagnosed in the Diagnostic and Statistical Manual of Psychiatric Disorders, Fifth Edition (DSM-5) as major depressive disorder with an add-on specifier "with peripartum onset" (American Psychiatric Association, 2013).

Perinatal Anxiety Disorders

Perinatal anxiety refers to a variety of anxiety disorders that occur during pregnancy or up to 1 year post-delivery.

- There is a significant overlap with perinatal depression but may occur earlier in the perinatal period. Anxiety disorders are often chronic, and many women may enter pregnancy with pre existing anxiety that can be exacerbated during the perinatal period (O'Hara & Wisner, 2014).

- Prevalence estimates of prenatal anxiety range from 13% to 21% while postpartum anxiety is estimated to occur in 11% to 17% of new mothers (Fairbrother et al., 2016).

- Antenatal anxiety is associated with an increase in risk for postpartum depression (Biaggi et al., 2016)

- Similar to depression, perinatal anxiety is associated with adverse pregnancy and neonatal outcomes such as insecure mother–newborn attachment, and is a predictor of other perinatal mental health complications (Fairbrother et al., 2015).

- There is no DSM specifier for perinatal anxiety disorders.

Perinatal Generalized Anxiety Disorder

Perinatal generalized anxiety disorder has a prevalence of 8.5% to 10.5% during pregnancy and 4.4% to 10.8% postpartum (Misri et al., 2015). Pathological worry associated with perinatal GAD can be difficult to distinguish from normal pregnancy or parenting concerns.

Examples of perinatal worries include fears of fetal wellbeing, maternal wellness, illness in the partner, and parental mortality (Misri et al., 2015).

Perinatal Panic Disorder

This occurs in approximately 2% of new mothers (Fawcett et al., 2019). Symptoms include feeling very nervous, recurring panic attacks (shortness of breath, chest pain, heart palpitations), and excessive worry or fears.

Perinatal Obsessive-Compulsive Disorder (OCD)

Perinatal OCD rates range from 1% to 5% during pregnancy and 4% within 6 months postpartum (O'Hara & Wisner, 2014). Symptoms include obsessions (persistent thoughts or intrusive mental images often related to the baby), compulsions (doing things over and over to reduce the fears and obsessions), or avoidance (Miller et al., 2013).

Higher prevalence rates of OCD in women during the perinatal period relative to the general population.

Frequently co-occurs with perinatal depression.

Perinatal OCD obsessions may center on the baby's welfare (Miller et al., 2013).

Common compulsions: repetitive counting (e.g., diapers in the bag), checking (e.g., baby's breathing), cleaning.

Perinatal Post-Traumatic Stress Disorder (PPTSD)

Nine percent of women experience PTSD during the perinatal period (Vignato et al., 2017).

Childbirth for some can be a highly stressful experience and can be associated with the development of PTSD symptoms.

Symptoms typically occur postpartum and are often directly associated with the childbirth experience.

Symptoms are identical to PTSD resulting from other stressful sources: re-experiencing the trauma (dreams, thoughts, etc.), avoidance of stimuli associated with the event (thoughts, feelings, people, places, details of event, etc.), and persistent increased arousal (irritability, difficulty sleeping, hypervigilance, exaggerated startle response (American Psychiatric Association, 2013).

Perinatal Bipolar Disorder

An estimated 22% of individuals with postpartum depression are experiencing bipolar depression (Wisner et al., 2013).

Over 70% of women with bipolar disorder who stop medication when pregnant become ill during the pregnancy (Wisner et al., 2013). Many primary mood stabilizers are associated with increased risk of birth defects. However, women who discontinue their medications during pregnancy have a very high risk of bipolar mood episode relapse (Epstein et al, 2014).

Personal or family history of bipolar disorder increases the risk (Cantwell & Smith, 2009).

Perinatal Psychosis

Psychosis that occurs during the perinatal period is a serious psychiatric illness involving an acute onset of psychotic symptoms in the days or weeks after birth and often requires psychiatric hospitalization.

Occurs in 1 to 2 of every 1,000 deliveries (Sit et al, 2006).

Onset is usually sudden, most within the first 4 weeks.

Symptoms include delusions (altered beliefs) and/or hallucinations (sensory misperceptions), feeling irritated or hyperactive, decreased need for sleep, and significant mood changes with poor decision making

Fifty percent of individuals are first-time mothers with no previous psychiatric hospitalization (Valdimarsdóttir et al., 2009).

This might occur as part of a severe episode of a mood disorder, usually within the context of bipolar disorder.

A 5% suicide rate and 4% infanticide rate are associated with perinatal psychosis; immediate treatment is essential (Sit et al., 2006).

Parental Suicide

Suicide is the second leading cause of death among women aged 25 to 34, and the proportion of women who die by suicide has steadily increased over the last two decades (Admon et al., 2020; Lindahl et al., 2005).

Suicide causes more deaths than obstetric complications like hemorrhage or eclampsia (Palladino et al., 2011).

Postpartum suicide rates are elevated among at-risk groups such as individuals with a mental health disorder and teenage mothers (Lindahl et al., 2005).

Perinatal Substance Use

In the United States:

7.2% of women smoke cigarettes during pregnancy (Drake et al., 2018).

Ten percent of pregnant women consume alcohol and 3% binge drink (Ordean et al., 2017; SAMHSA, 2020).

A total of 5.6% of pregnant women report illicit drug use including marijuana, cocaine, opioids, or inhalants (SAMHSA, 2020).

Substance use during pregnancy is associated with obstetrical complications including miscarriage, intrauterine growth restriction, pre-term labor and birth, and intrauterine fetal demise (Finnegan, 2013).

Alcohol is a teratogen that causes fetal alcohol syndrome (FAS), which is characterized by impaired growth and intellectual disability in the infant (Finnegan, 2013).

Perinatal substance use frequently co-occurs with perinatal mood disorders.

- Perinatal depression and anxiety are significantly associated with binge drinking and use of tobacco and other drugs (Connelly et al., 2013)

Perinatal substance use is associated with an increased risk of perinatal intimate partner violence (perinatal IPV), which are experiences of violence that occur in the year before pregnancy, during pregnancy, and/or up to one year postpartum.

- A total of 3.7%-9% of women experience perinatal IPV (Hahn et al., 2018).

- Women who report perinatal IPV are at increased risk to use alcohol, nicotine, and other substances compared to women who do not report IPV (Hahn, Gilmore, Aguayo, & Rheingold, 2018).

Interventions for perinatal mental health disorders targeting both psychiatric symptoms as well as other risk factors such as substance misuse and risky infant care practices are a promising delivery model (Howard & Khalifeh, 2020).

Grief and Loss

Loss of an infant through stillbirth, miscarriage, or neonatal death can be a profoundly difficult experience that may be associated with prolonged and/or complicated grief reactions (Kersting & Wagner, 2012).

Miscarriage is the most common cause of perinatal loss, with a prevalence of 15% to 27% for women under 30, and 75% in women older than 45 years (August et al., 2011).

Grief after pregnancy or infant loss does not significantly differ in intensity from that of other grief reactions (Kersting & Wagner, 2012).

Predictors of complicated grief following perinatal loss include lack of social support, pre-existing relationship difficulties, absence of surviving children, and ambivalent attitudes or heightened perception of the reality of the pregnancy (Kersting & Wagner, 2012).

Cross-Cultural Considerations

While perinatal mental health disorders are found worldwide and among individuals of all backgrounds and identities, there is a paucity of studies regarding the ways in which they manifest in individuals of low socioeconomic status, racial-ethnic or social minority status, or other specific populations.

This same is true for screening tools, as there is some evidence that existing screeners may not be as accurate in identifying perinatal mental health issues in some populations. For example, Chaudron and colleagues (2010) recommended that a lower cutoff score be considered in screening individuals representing minority populations, which would capture distress and improve identification and subsequent support and treatment of depression and anxiety.

The World Health Organization (WHO) suggests supporting programs with gender-sensitive, human rights- and equity-oriented strategies.

- There is an urgent need for improved awareness and advocacy of culture- and gender-sensitive counseling for individuals at risk for and experiencing perinatal mental health disorders.

Perinatal depression and increased stress levels may be more prevalent in same-sex couples than in heterosexual couples (Ross et al. 2005), although additional research is needed to better understand the birthing and parenting experiences of those who do not identify as heterosexual.

Individuals of low socioeconomic status and racial-ethnic or social minority status appear to have a higher likelihood of developing a perinatal mental health condition (Lara-Cinisomo et al., 2018).

People of Latinx heritage exhibit a higher prevalence of perinatal mental health disorders and are less likely to be identified or receive adequate and culturally competent mental health care (Lara-Cinisomo, Clark, & Wood, 2018).

In one study, less than half as many African American women with low socioeconomic status received counseling or medication in the six months after giving birth compared to white women with low socioeconomic status. African American women also had lower rates of follow-up and continued care (Kozhimannil, 2011).

A larger proportion of women of American Indian/Alaska Native or Indigenous identity experience mental health symptoms during the perinatal period relative to the general population. More research is needed to better understand the nature and extent of perinatal distress within this group (Bowen et al., 2014).

Fathers, Partners, and Non-Gestational Parents

More than 10% of fathers experience depression and anxiety during the perinatal period (O'Brien et al., 2017).

- Fathers have been shown to exhibit symptoms of irritability, self isolation, overworking, substance misuse, and hopelessness.

Maternal depression is the most significant risk factor for depression in fathers, both prenatally and postpartum (Paulson & Bazemore, 2010).

There is a dearth of research regarding the experience of non gestational and non-biological parents (second parent in a same-sex relationship, multiple parents in a polyamorous family, foster parents, or adoptive parents).

In a meta-analysis, the 3- to 6-month postpartum period had the highest rate of depression for partners (Paulson & Bazemore, 2010).

Adoptive parents face unique challenges to the transition of parenthood (e.g., infertility [if applicable], loss of gestational experience, stigma, uncertain or traumatic adoption process, long wait times), and can experience the same types of perinatal mental health issues as other parents and family members (Foli et al., 2016, 2017; Mott et al., 2011). It is recommended that when working with adoptive parents, professionals be aware of the expectations pre and post placement and the relationship with depressive symptoms.

Stigma

Although perinatal mental health symptoms are relatively prevalent, these conditions can be stigmatized, making it less likely for some individuals to seek help, support, and/or treatment.

Stigma may hinder a person's recognition of the presence of perinatal mental health distress and may reduce likelihood that they disclose their symptoms to a loved one or health care professional (O'Mahen & Flynn, 2008).

Women report that they feel ashamed that their perinatal mental health concerns and symptoms may be seen as signs of personal failure; they fear their social network will disapprove (Fonseca et al., 2018).

Stigma was the most important barrier to women's help-seeking process (Silva, 2015; as cited in Fonseca et al., 2018).

Unrealistic, idealized societal expectations of motherhood are common contributory factors to women with perinatal mental health disorders perceiving themselves as a "bad mother" (McLoughlin, 2013).

- People may experience guilt and shame for not meeting their own expectations of parenthood.

Fear of social service involvement, hospitalization, and loss of custodial rights are often noted as barriers to seeking help for mental health concerns (McLoughlin, 2013).

Previous studies show an inverse relationship between social support and perinatal mental health disorders, suggesting that high levels of social support may help mitigate the effects of stigma (McLoughlin, 2013).

The belief among Latinas that a mother should put her children and family first and sacrifice herself for the well-being of her family, also termed Marianismo, has been shown to discourage treatment-seeking behaviors (Sirulnik et al., 2014).

Among African American women, there is evidence that the need to "tough it out" or be a strong Black woman may further complicate the stigma of experiencing perinatal mental health symptoms (Lara-Cinisomo et al., 2018).

Prevention and Well-Being

Antenatal classes provide an opportunity to inform parents-to-be about mental health issues and preventative measures they can take before their baby arrives (Cantwell & Smith, 2009).

- Maximizing emotional and practical support from partner, family, and friends once the baby arrives
- Avoiding major stresses where possible (e.g., moving homes, starting a new job)
- Planning respite and/or ancillary supports (e.g., baby care, cooking, laundry)
- Maintaining social contact with others

Counseling-based interventions, in particular depression-focused cognitive behavioral therapy and interpersonal therapy, may be effective in preventing perinatal depression, particularly among women at increased risk for perinatal depression (O'Connor et al., 2019).

Wellness and self-care activities play an important role in supporting mental health during the perinatal period.

- Social support is an important buffer against the onset and severity of postpartum depression. Notably, these results do not differ by race/ethnicity, suggesting that social support is an important protective factor for all individuals affected by depression during the perinatal period (Pao et al., 2019).

- Physical exercise is associated with general mental health and health benefits. This is also true for new parents. In one study, mothers who exercised more showed overall better well-being and fewer symptoms of depression (Norman et al., 2010).

- Pregnancy/peripartum yoga is offered at many online and in-person studios.
- Exercise can include walking and other outdoor activities, online exercise classes, gyms and exercise facilities that offer childcare services, or parent/child playgroups.

Breastfeeding is associated with fewer depressive symptoms, reduced stress response, and increases in nurturing behavior (Kroll & Grossmann, 2018).

Mindfulness and relaxation techniques may offer a safe and cost-effective strategy for promoting perinatal mental health.

- Guided meditation for pregnancy and for parents and babies during the postpartum period is available.

Screening Tools

The American College of Obstetricians and Gynecologists (2015), the American College of Nurse Midwives (2020), and the U.S. Preventive Services Task Force (Siu & U.S. Preventative Task Force, 2016) all recommend universal mental health screening of women who are pregnant and in the postpartum stage.

Many states legally mandate perinatal mental health screening (Merrill et al., 2015).

Screening tools validated for use during and following pregnancy:

- Edinburgh Postnatal Depression Scale (Cox et al., 1987)
  - 18 languages and available for free
  - https://med.stanford.edu/content/dam/sm/ppc/documents/DBP/EDPS_text_added.pdf
- Postpartum Depression Screening Scale (Beck & Gable, 2002)
  - English, Spanish, Italian
- PHQ-9 (Kroenke & Spitzer, 2002)
  - Available for free
  - https://med.stanford.edu/fastlab/research/imapp/msrs/_jcr_content/main/accordion/accordion_content3/download_256324296/file.res/PHQ9%20id%20date%2008.03.pdf

Venkatesh and colleagues (2013) determined the Edinburgh Postpartum Depression Scale was most appropriate for accurately identifying depression and anxiety in adolescent mothers during the postpartum period.

Professionals should be equipped with referral resources to ensure that treatment is available to all those identified by screening as requiring it (Cantwell & Smith, 2009).

Screening should include questions about trauma exposure (Mosley & Lanning, 2020; Schiff et al., 2017; Searle et al., 2017; Sperlich et al., 2017).

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS is an ongoing, state-specific, population-based surveillance system designed to identify groups of women and infants at high risk for health problems, monitor changes in health status, and measure progress toward goals in improving the health of mothers and infants.

It was developed in 1987 and funded by the Centers for Disease Control and Prevention.

PRAMS surveillance currently covers about 83% of all U.S. births.

It assesses maternal attitudes and experiences before, during, and shortly after pregnancy.

Data can be used to identify groups of women and infants at high risk for health problems, monitor changes in health status, and measure progress towards goals in improving the health of mothers and infants.

- https://www.cdc.gov/prams/index.htm

Evidence-Based Practices

Evidence-based practices for perinatal mental health disorders include medications, psychotherapeutic interventions, and peer support. Often a combination of these approaches works best. Levels of care recommendations, including outpatient or inpatient, depend on the severity of the issue.

Medications

The use of antidepressant medications during pregnancy and breastfeeding has been controversial due to past studies suggesting their use is associated with birth defects. However, recent studies refute these findings.

- For example, the authors of one study noted, "It should be recognized that the specific defects implicated are rare and the absolute risks are small" (Louik et al., 2007).

- The American College of Obstetricians and Gynecologists (2008) and the American Psychiatric Association (2010) agree that antidepressant medications are an effective option for treating depression during the perinatal period when psychotherapy is unavailable or not appropriate.

- Potential harms and benefits of antidepressants during pregnancy should be discussed by the clinician with the individual so they can make an informed decision (APA, 2010).

- The risks and benefits of psychotropic medications should be reviewed on a case-by-case basis, and disclosure about possible risks and benefits should be provided to the parent to help them make an informed decision (American College of Obstetricians and Gynecologists, 2008; Sriraman et al., 2015).

Psychotherapeutic Interventions

Cognitive behavioral therapy (CBT) is an empirically supported treatment for depression that has been widely studied in perinatal populations. Individuals who participate in CBT had significantly lower rates of postpartum depressive episodes compared to control conditions. In both treatment and prevention trials, interventions initiated during the postpartum period were more effective than antenatal interventions.

- **Internet-based CBT** implemented in the postpartum period significantly improved maternal mood outcomes (Roman et al. 2020).
- **Cognitive behavioral group therapy** was effective in improving anxiety and related symptoms among women with anxiety disorders in the perinatal period compared to waitlist control (Green et al., 2020).
- **CBT for insomnia** is efficacious among women during the postpartum period, showing significant improvements in sleep diary-rated sleep efficiency and total wake time, subjective mood, insomnia severity, sleep quality, and fatigue (Swanson et al., 2013).

Interpersonal psychotherapy (IPT) is a time-limited psychotherapy initially developed for the treatment of major depression that is efficacious in perinatal populations and improves interpersonal functioning. IPT may be particularly well-suited for women during the perinatal period given its emphasis on the interpersonal context (e.g., lack of social support, marital distress) and role transitions (e.g., becoming a parent). A systematic review and meta-analysis (Sockol, 2018) shows that IPT is an effective preventive intervention for perinatal depression and anxiety.

Family therapeutic interventions within the perinatal population typically target depressed women and their adult family members to improve family functioning and reduce depressive symptoms. A meta-analysis (Cluxton-Keller, 2018) showed reductions in depressive symptoms and a trend in improving amily unctioning. Family interventions are effective in both the prevention and treatment of perinatal depression.

- Partner-assisted therapies view the partner without a perinatal mental health condition as a potential social support resource. Partner-assisted interpersonal psychotherapy for perinatal depression (Brandon et al., 2012) is a safe and feasible treatment for perinatal mood disorders.

Perinatal dyadic psychotherapy (PDP): Nurse-led home visits addressing maternal and infant mental health are efficacious in preventing and treating perinatal mood disorders, including improvements in mother-baby relationships (Goodman et al., 2013).

Peer Support

Peer support programs, including both professional- and peer-led programs, such as support groups and home visits, reduce symptoms of postpartum depression. Support and education topics include nutrition, common discomforts, stress management, labor and delivery, breastfeeding, and infant care. Significant benefits have been observed in high-stress mothers who had depression and interpersonal conflict (Cust, 2016; Trotman et al., 2015). Positive outcomes such as appropriate weight gain during pregnancy, compliance with prenatal care appointments, breastfeeding outcomes, and contraceptive use postpartum were also observed. Many hospitals, community mental health agencies, and other entities are incorporating peer-based supports as a routine part of their practice. See "Resources" below.

Other

Electroconvulsive therapy (ECT) is a treatment option for psychosis and severe depression postpartum (Rundgren et al., 2018). The response rate to ECT is higher during the postpartum period than outside the postpartum period (Rundgren et al., 2018). A review study of ECT during pregnancy advised considering this option only under very stringent diagnostic and clinical indications, weighing all potential risks against benefits (Leikness et al., 2013).

Resources

MHTTC Resources

Perinatal Mental Health

- Black Women and Postpartum Depression Fact Sheet, fact sheet. Central East MHTTC
- Perinatal Depression, slide deck. Mountain Plains MHTTC
- Perinatal Mental Health, resource guide. MHTTC Perinatal Mental Health Coordination Group
- Perinatal Mental Health Learning Series, recorded webinar learning series. Global MHTTC
- Perinatal Mood and Anxiety Disorders: Supporting Latinx, recorded webinar. National Hispanic and Latino MHTTC

Recovery and Trauma-Informed Care and Practices

- Area of Focus: Recovery-Oriented Practices, Products and resource guide, webpage. New England MHTTC
- EBP Series: Trauma-Informed Care in the Context of Recovery-Oriented Approaches, recorded webinar, New England and Great Lakes MHTTC
- EBP Series: What Is Trauma-Informed Care and Why Does It Matter?, recorded webinar. New England and Great Lakes MHTTC
- The Intersection of Maternal & Infant Trauma and OUD/SUD - Part One, recorded webinar. New England MHTTC
- The Intersection of Maternal & Infant Trauma and OUD/SUD - Part Two, recorded webinar. New England MHTTC

Addiction TTC (ATTC) and Prevention (PTTC; Substance Use Prevention) Resources

- Addressing the Peril of Illicit Drug Use for Pregnancy: Medication Assisted Treatment & Integrated Care, recorded webinar. Mid-America ATTC
- Cannabis Use in Pregnancy and Lactation: Understanding the Science and Assisting Practitioners with Prevention Strategies, recorded webinar. New England PTTC
- Daily Cannabis Use During Pregnancy and Postpartum: Patient, Provider, and Budtender Perspectives, recorded webinar. Northwest ATTC
- Easier Together: Partnering with Families to Make Recovery Possible, online curriculum with PowerPoint modules. Mid-America ATTC
- Embracing PPW Families Challenges with SUD, recorded webinars. Mid-America ATTC
- Healing Two Generations: Care for Pregnant/Parenting Women with OUD/SUD, recorded webinar. Northwest ATTC
- Kansas City Perinatal Recovery Collective Flyer, flyer. Mid-America ATTC
- Marijuana Use and Pregnancy, recorded webinar. ATTC Network Coordinating Office.
- Medications for Addiction Treatment, recorded webinar. Mid-America ATTC.
- Neonatal Abstinence Syndrome Conference 2017 - One Key Question Presentation, presentation slides. New England ATTC
- Optimizing Care for the Substance Exposed Newborn and Family: Overview of substance use in pregnancy and the impact on fetal and infant development. (Session #1), recorded webinar. New England ATTC
- Parenting for Women in Recovery from Substance Use Disorders, recorded webinar. Mid-America ATTC

- Perinatal Provider Toolkit, toolkit. Mid-America ATTC
- Perinatal Stigma Prompt and Reminder Posters, posters, Mountain Plains ATTC
- Perspectives on Family-Centered Care for Pregnant and Postpartum Women: Broadening the Scope of Addiction Treatment and Recovery, interview monograph. Mid-America ATTC
- Pregnant and Post-Partum Women with Co-Occurring Disorders: Implications for Treatment Providers, recorded webinar. Mid-America ATTC
- Pregnant/Parenting Women Offenders: Treating Addiction, presentation slides. New England ATTC
- South Southwest PTTC March 2020 - Prevention Across the Lifespan: Preconceptual, Pregnancy, and Infancy, newsletter. South Southwest PTTC
- The Stigma is Real: Pregnant and Parenting Women with Substance Use Disorders, recorded webinar. Mountain Plains ATTC
- Treating Women for Opioid Use Disorder during Pregnancy: Methadone and Buprenorphine as a Part of a Complete Care Approach, recorded webinar. Mid-America ATTC

Other Resources

- 2020 Mom
- Black Women Birthing Justice
- Collaboration in Practice: Implementing Team-Based Care, report. The American College of Obstetricians and Gynecologists
- COVID-19 Maternal Mental Health Leadership Alliance
- Depression During and After Pregnancy: A Resource for Women, Their Families, and Friends, resource guide. U.S Health Resources & Services Administration
- Depression in Mothers: More Than the Blues: A Toolkit for Family Service Providers, toolkit. Substance Abuse and Mental Health Services Administration
- Moms' Mental Health Matters
- MotherToBaby
- The National Association to Advance Black Birth
- National Perinatal Association
- Obstetric Provider Toolkit, toolkit. Massachusetts Child Psychiatry Access Project for Moms (MCPAP for Moms)
- Post-partum Support International
- SAMHSA's Working Definition of Recovery and 10 Guiding Principles of Recovery, brochure. Substance Abuse and Mental Health Services Administration
- Support After a Severe Maternal Event Patient Safety Bundle (+AIM), toolkit and resource guide. Council on Patient Safety in Women's Health Care

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