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Perinatal Depression

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Continuing Education Activity

Perinatal depression is a prevalent and potentially severe mood disorder that affects approximately 1 in 7 people during pregnancy or within the first year after childbirth. Perinatal depression stems from a combination of hormonal changes, genetic predisposition, and environmental factors, yet up to 50% of cases remain undiagnosed due to the stigma surrounding the condition and patients' reluctance to disclose symptoms. Unlike the transient "postpartum blues," perinatal depression is more severe, often manifesting as persistent sadness, low self-esteem, sleep disturbances, anxiety, and difficulties bonding with the baby. Effective recognition and management of perinatal depression are essential for optimizing the health outcomes of the parent and infant.

Screening for perinatal depression using tools like the Edinburgh Postnatal Depression Scale (EPDS) is crucial for early diagnosis. Regulatory bodies ensure standardized care through screening and management guidelines. Treatment typically involves psychotherapy, support groups, and medications such as antidepressants, which are generally safe during pregnancy and lactation. This activity for healthcare professionals is designed to enhance the learner's competence in perinatal depression screening and diagnosis, differentiating it from other mood disorders, performing the recommended evaluation, and implementing an appropriate interprofessional management approach to improve patient outcomes.

Objectives:

- Identify the clinical features of perinatal depression.
- Differentiate perinatal depression from other mood disorders.
- Implement evidence-based screening guidelines for perinatal depression.
- Strategize interprofessional team management plans to improve care coordination and outcomes for patients with perinatal depression.

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Introduction

Perinatal depression is a mood disorder that affects individuals during pregnancy or within 1 year after childbirth. According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*, postpartum depression is now included in the term perinatal depression.[1] A major depressive episode that begins during pregnancy or within 4 weeks after delivery is classified as peripartum depression. This term encompasses both prenatal and postpartum depression. The *DSM-5-TR* does not recognize postpartum depression as a separate entity. Instead, postpartum depression is included within the broader diagnosis of perinatal depression.[2]

Depression symptoms, including persistent sadness, lack of interest, low self-esteem, sleep disturbances, loss of appetite, anxiety, irritability with a hostile attitude towards infants, self-blame, and feelings of humiliation characterize perinatal depression. People with perinatal depression may also experience changes in sleeping and eating patterns, difficulty bonding with their baby, and feelings of hopelessness or worthlessness.[3] In contrast, postpartum blues, also known as maternity blues or baby blues, includes mild, transient depressive symptoms and dysphoria during the first days to weeks after delivery.[4] Symptoms of postpartum blues are similar to perinatal depression, including tearfulness, crying spells, sorrow, mood swings, irritability, insomnia, anxiety, poor appetite, fatigue, and inability to think clearly. However, unlike postpartum blues, which typically resolves within a few weeks, does not cause significant functional impairment, and is not considered to be a mental disorder, perinatal depression is more severe. It can last for months if untreated, resulting in significant mental health dysfunction.[5][6]

Recognizing and addressing perinatal depression is crucial for the health and well-being of the patient and their baby. If left untreated, perinatal depression can interfere with the ability to care for the child. It may contribute to long-term developmental issues in the child (eg, emotional and behavioral problems). Perinatal depression can also strain family relationships and increase the risk of suicide.[7]

Screening for perinatal depression should be a routine part of prenatal and postpartum care, utilizing tools such as the Edinburgh Postnatal Depression Scale (EPDS) to identify those at risk. Treatment typically involves a combination of psychotherapy, support groups, and medication, including antidepressants, which can safely be used during pregnancy and lactation. Up to 50% of perinatal depression cases remain undiagnosed due to patient reluctance to disclose symptoms, partly because of the stigma around perinatal depression, which includes fears of abandonment and lack of support upon disclosure.[8] Raising awareness about perinatal depression, reducing stigma, and ensuring access to mental health resources are essential steps in supporting pregnant people and new parents to promote healthy family dynamics.

Etiology

The exact cause of perinatal depression and postpartum blues is not fully understood, but potential underlying etiologies contributing to the development of these conditions include hormonal changes, genetic predisposition, and psychosocial stressors. The rapid drop in estrogen and progesterone levels after delivery, coupled with the stress and sleep deprivation that often accompany caring for a newborn, can increase the risk of experiencing postpartum blues and trigger depressive episodes in susceptible people.

In a meta-analysis of 33 studies, gestational diabetes, having boy infants, a history of depression, and epidural anesthesia use were noted as risk factors for perinatal depression. However, further research is needed to assess the true significance of these reported risk factors, especially the sex of the infant and the use of epidural anesthesia.[3] Besides hormonal, changes in many other metabolic pathways may be associated with the development of perinatal depression, including alterations in energy metabolism, the purine and amino acid cycles, steroid and neurotransmitter metabolism, and exposure to xenobiotics.[9]

Perinatal Depression Risk Factors

Factors associated with a high risk of developing perinatal depression or postpartum blues include:

- **Psychological:** A personal history of depression and anxiety, premenstrual syndrome, a negative attitude towards the baby, the reluctance of the baby's sex, and a history of sexual abuse
- **Obstetric risk factors:** A high-risk pregnancy, hospitalization during pregnancy, and traumatic events during childbirth that include emergency cesarean section, in-utero meconium passage, umbilical cord prolapse, preterm or low birth weight infant, and low hemoglobin
- **Social factors:** Lack of social support, domestic violence in the form of spousal abuse (eg, sexual, physical, or verbal), smoking, and young maternal age during pregnancy [9]

- **Lifestyle:** Poor eating habits, decreased physical activity and exercise, vitamin B6 deficiency (via its conversion to tryptophan and, later on, serotonin, which, in turn, affects mood), and lack of sleep; exercise decreases low self-esteem caused by depression and increases endogenous endorphins and opioids, which brings positive effects on mental health and improves self-confidence and problem-solving capacity.[10]
- **Family history of psychiatric disorders:** Recent studies have shown that a family history of psychiatric disorders is a risk factor for developing perinatal depression. This increased risk is likely due to genetic and environmental factors during childhood and later in life, which may be associated with a lack of social support, another risk for perinatal depression.[11]

Epidemiology

Postpartum Blues

Postpartum blues has an incidence of 39.0% (13.7%-76.0%).[12] The prevalence varies widely by country due to varying definitions of postpartum blues in different geographical and cultural settings.[4][13] Postpartum blues can develop into major depressive disorder, especially if the symptoms persist or are severe. In one study, 27.7% of women with postpartum blues developed perinatal depression, compared to 16.4% of women without postpartum blues.[14] Additionally, a French study showed a prevalence of postpartum blues of 17.5% in new fathers.[15]

Perinatal Depression

Depression is the most common psychiatric condition of the peripartum period. Perinatal depression is associated with an increased risk of parental suicide, which is the second most common cause of mortality postpartum.[16] Perinatal depression affects 6.5% to 20% of postpartum individuals globally.[17] The incidence varies based on contributing factors, including the country's cultural environment and economic conditions. Different studies have found varying risk factors for perinatal depression, resulting in little consistency between studies.[3] Perinatal depression occurs more commonly in adolescents, patients who deliver premature infants, and those living in urban areas.

In a meta-analysis, the prevalence of perinatal depression was the highest in China, at 21.4%. In comparison, the prevalence in Japan was 14%, and the prevalence in the United States was 8.6%. The average time of onset of postpartum depression is 14 weeks after delivery.[3] Overall, Black and Hispanic patients tend to report the onset of symptoms within 2 weeks of delivery, unlike Caucasian patients, who more frequently report the onset of symptoms later.

Pathophysiology

The pathogenesis of perinatal depression and postpartum blues is currently unknown but is likely multifactorial.[17] Genetic, hormonal, psychological, and social life stressors have been suggested to play a role in the development of perinatal depression.[18][19][20] The role of reproductive hormones in depressive behavior suggests neuroendocrine pathophysiology for perinatal depression. Ample data advocating that changes in the reproductive hormones stimulate the dysregulation of these hormones in sensitive individuals has been documented. The pathophysiology of perinatal depression can be from alterations of multiple biological and endocrine systems, for example, the immunological system, the hypothalamic-pituitary-adrenal axis (HPA), and lactogenic hormones.

The HPA is known to be involved in the disease process of perinatal depression and postpartum blues. The HPA axis causes the release of cortisol in trauma and stress; with HPA axis dysfunction, the release of catecholamines is decreased, leading to a poor stress response. HPA-releasing hormones increase during pregnancy and remain elevated up to 12 weeks postpartum. Recent evidence suggests that perinatal depression is linked to the gamma-aminobutyric acid (GABA) neurotransmission system. The imbalance in GABA, the chief inhibitory neurotransmitter in the brain, likely plays a role in causing perinatal depression.[17]

The rapid drop in reproductive hormones, like estradiol and progesterone, following delivery can be a potential stressor in susceptible patients. These changes can lead to the onset of depressive symptoms as well as postpartum blues. Elevated cortisol levels and low tryptophan levels may be noted.[9] Oxytocin and prolactin also play an essential role in the pathogenesis of perinatal depression. These hormones regulate the milk let-down reflex and the synthesis of breast milk. Failure to lactate and the onset of perinatal depression are often observed to coincide. Low levels of oxytocin are particularly observed in perinatal depression and unwanted early weaning. During the third trimester, lower levels of oxytocin are associated with increased depressive symptoms during pregnancy and following delivery.[21]

History and Physical

Perinatal Depression Clinical Features

Perinatal depression is diagnosed when at least 5 depressive symptoms are present for at least 2 weeks. Most experts include the onset of symptoms that occur during pregnancy and up to 12 months postpartum.[22] The following 9 symptoms in affected people may be present almost daily and represent a change from the previous routine; however, a perinatal depression diagnosis should always include either depression or anhedonia:

- Depressed mood (subjective or observed) is present most of the day
- Loss of interest or pleasure (anhedonia), most of the day
- Sleep disturbances (insomnia or hypersomnia)
- Psychomotor retardation or agitation
- Worthlessness or guilt
- Loss of energy or fatigue
- Suicidal ideation or attempt and recurrent thoughts of death
- Impaired concentration or indecisiveness
- Change in weight or appetite (eg, a weight change of 5% over 1 month)

The symptoms above can lead to significant distress and impairment. Furthermore, these symptoms should not be attributable to substance use or another medical condition. A psychotic disorder cannot cause the episode, and there cannot have been a prior manic or hypomanic episode.[16]

The International Classification of Diseases-10 describes a depressive episode as follows:

- In typical mild, moderate, or severe depressive episodes, the patient has a depressed mood with a decrease in activity and energy.
- Capacity for enjoyment, interest, and concentration is reduced. The patient feels tired after minimum effort, with sleep disturbance and a decreased appetite. Guilt, worthlessness, lowered self-esteem, and lowered self-confidence are commonly present.
- Somatic symptoms, including anhedonia, unusual waking in the very early morning, agitation, weight loss, loss of libido, decreased appetite, and marked psychomotor retardation are noted. These symptoms may vary daily and are not responsive to a change in circumstances.
- A depressive episode may be classified as mild, moderate, or severe, depending on the severity and number of symptoms.

The signs and symptoms of perinatal depression are identical to nonpuerperal depression with an additional history of pregnancy or childbirth. Symptoms include depressed mood, loss of interest, changes in sleep patterns, change in

appetite, feelings of worthlessness, inability to concentrate, and suicidal ideation. Affected patients may also experience anxiety. Patients with perinatal depression may also have psychotic symptoms, which include delusions and hallucinations, such as voices saying to harm their infants. Perinatal depression may lead to poor parent-infant bonds, failure of breastfeeding, harmful parenting practices, marital discord, as well as worse outcomes concerning the child's physical and psychological development. The remission of symptoms reduces the risk of behavioral and psychiatric problems in the offspring. A prior episode of perinatal depression increases the future risk of major depression, bipolar disorder, and perinatal depression. Past personal and family histories of perinatal depression and postpartum psychosis should also be noted.

Postpartum Blues Clinical Features

The symptoms of postpartum blues are similar to perinatal depression, including crying, dysphoric affect, irritability, anxiety, insomnia, and appetite changes.[23] However, the symptoms of postpartum blues, when present, should not rise to the level of meeting the criteria for major depressive disorder. In postpartum blues, the symptoms usually develop within 2 to 3 days of delivery and resolve within 2 weeks. Although postpartum blues are much more common than perinatal depression, patients should be assessed at every postnatal visit for a diagnosable mood disorder as well as for suicide risk and psychosis, which are emergencies and require immediate treatment to minimize the risk to the patient and infant.

Evaluation

The American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), and the American Academy of Family Medicine (AAFP) all recommend screening every patient for perinatal depression using the EPDS.[3] During the evaluation, the inclusion of drug and alcohol history, smoking habits, and all prescription and over-the-counter drug medications is essential. Perinatal depression screening should be performed during pregnancy and in the postpartum.[6]

Several screening tools are available, including the Patient Health Questionnaire-9 (PHQ-9) and the Generalized Anxiety Scale (GAD-7). However, the most frequently used is the EPDS, a 10-item questionnaire completed by patients within a few minutes (see **Table**. Edinburgh Postnatal Depression Scale).[24][12] The highest score possible is 30. A score ≥ 13 is associated with an increased risk of developing perinatal depression and provides the basis for additional clinical assessment. Recommendations on the threshold that should prompt a mental health referral vary, but many institutions use a total score of above 9 or 10 and/or suicidal ideation. The objectives of the clinical evaluation are to constitute the diagnosis, assess suicidal and homicidal risks, and rule out other psychiatric illnesses.[25]

According to the *DSM-5-TR*, when an episode of mood symptoms meets the criteria for major depressive disorder and occurs during pregnancy or in the 4 weeks following delivery, the specifier "with peripartum onset" is used. This terminology replaces the older term, postpartum depression, as about 50% of postpartum major depressive episodes start before delivery. Psychotic features can accompany peripartum mood disorders, and the specifier "with psychotic features" is used then. Postpartum psychosis increases the risk of infanticide (although it is rare) as symptoms may include command hallucinations to kill the infant or that the infant is possessed. Please see StatPearls' companion resource, "Postpartum Psychosis," for more information.

Treatment / Management

Prevention of perinatal depression in high-risk patients using counseling and cognitive behavioral therapy, as well as interpersonal therapy, has been effective. Clinicians should identify and implement these interventions as preventative measures for high-risk patients.[22]

Antidepressant Medications

The first-line treatment for perinatal depression is psychotherapy and antidepressant medications. Psychotherapy is the first-line treatment option for patients with mild to moderate peripartum depression. A combination of therapy and

antidepressant medications is recommended for moderate to severe depression. Referral to a behavioral health resource may also be recommended.[22] ACOG recommends using selective serotonin reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, and tricyclic antidepressants as medical therapy for perinatal depression.[16]

Selective serotonin reuptake inhibitors are the first choice medications for perinatal depression. Consideration should be given to switching to serotonin-norepinephrine reuptake inhibitors or mirtazapine if selective serotonin reuptake inhibitors are ineffective. Sertraline or escitalopram are good first-line choices for medical therapy. Sertraline has extensive and reassuring safety research. Fluoxetine and paroxetine, if previously used effectively for a specific individual, may be considered despite an increased risk of neonatal adaptation syndrome. As such, the treatment for patients who have had successful medical therapy with an antidepressant in the past should be allowed to resume that effective medication during or after pregnancy.[22]

The goal of treatment for perinatal depression is remission or resolution of symptoms of depression. The same screening tool should be used to track symptoms. An improvement of 50% or more defines a treatment response. Algorithms may be used to help in adjusting dosages of medications with continued use of the Patient Health Questionnaire-9 or EPDS. Inadequately or untreated mental health conditions are associated with perinatal risks, as are any pharmacologic agents; the risks of both need to be recognized. The lowest effective dose of medication should be used to achieve illness remission. However, avoiding undertreatment, which is common in obstetrics, is critical. Polypharmacy and switching medications should be avoided if remission is possible with the use of a single agent.[22] Although benefits may be reported within 1 week of the start of oral therapy, symptom improvement may take 4 to 8 weeks.[16]

Once an effective dose is reached, continued treatment for at least 6 to 12 months is recommended to prevent relapse of symptoms.[26] Discontinuation of medical therapy during pregnancy or in the postpartum period results in a high risk of recurrence and is not recommended; also, discontinuing medication in the third trimester to mitigate the risk of neonatal adaptation syndrome is not recommended. Additionally, abrupt discontinuation of both selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors is associated with complications unless a progressive taper over 2 to 4 weeks is used. Discontinuation symptoms may include gastrointestinal upset, agitation, anxiety, headache, dizziness, fatigue, sleep disruption, tremors, myalgias, and electric-like shocks.[22]

Pharmacologic recommendations for people who are lactating should include discussing the benefits of breastfeeding, the risks of antidepressant use during lactation, and the risks of untreated illness. Repetitive transcranial magnetic stimulation is a treatment that may provide an alternative option for people who breastfeed and are concerned about their babies being exposed to medication. The risk of breastfeeding while taking a serotonin reuptake inhibitor is relatively low, and patients can be encouraged to breastfeed while on antidepressants. After 12 weeks, cognitive behavioral therapy, sertraline monotherapy, and combination therapy have all been shown to be helpful. The cognitive behavioral therapy monotherapy group found the most accelerated initial gains after treatment startup.

Neurosteroid Therapy

Brexanolone, an intravenous neurosteroid that positively acts at the GABA-A receptors, was approved by the Food and Drug Administration (FDA) in March 2019, specifically for perinatal depression. Brexanolone may be considered for use with moderate to severe depression in the third trimester or postpartum. Patients must be enrolled in the Risk Evaluation and Mitigation Strategy Program.[27] Brexanolone has a rapid onset of action but is hard to access and may be cost-prohibitive. No data supports its safety with breastfeeding or efficacy beyond 30 days of use. Inpatient monitoring for increased sedative effects, sudden loss of consciousness, and hypoxia during infusion is required.[16][22]

Brexanolone, an analog of allopregnanolone, a metabolite of progesterone, was the first medication approved by the FDA for the treatment of moderate to severe perinatal depression.[27] Brexanolone is administered intravenously as a continuous 60-hour infusion lasting approximately 2.5 days. Multiple clinical trials demonstrate that brexanolone is usually well-tolerated in women with moderate to severe perinatal depression and can provide a rapid beneficial response.[28][29] Breastfeeding is not recommended during and for 4 days after brexanolone infusion therapy. More

clinical trials are needed to assess further the long-term safety and efficacy of brexanolone in treating perinatal depression.[22]

Zuranolone, a neuroactive steroid like brexanolone, is also a GABA-A receptor modulator that was FDA-approved on August 4, 2023, for perinatal depression management. A 50-mg oral dose every night is given for 14 days with a fat-containing meal (700 cal; 30% fat). Zuranolone may be used alone or in combination with oral antidepressants. The onset of action is rapid, from hours to days, which helps give more immediate relief. Because of the central nervous system depression seen with zuranolone, patients should be counseled that their driving ability may be reduced. Also, zuranolone has been suggested to produce harmful effects on the fetus during pregnancy and lactation. Overall, zuranolone is well tolerated and has minimal side effects.[17] The most common adverse event reported by over 26% of patients was somnolence.[30] Because safety and effectiveness have not yet been studied, zuranolone is not recommended to be continued for longer than 14 days.

Nonpharmacologic Therapies

Transcranial magnetic stimulation is a noninvasive procedure that uses magnetic waves to stimulate and activate nerve cells in a targeted area of the brain.[31] These cells are underactive in people with major depression. Transcranial magnetic stimulation is usually done once a day for 4 to 6 weeks to be effective. This therapy may be used in patients who are not responding to antidepressants and psychotherapy. Generally, transcranial magnetic stimulation is safe and well-tolerated in pregnancy, but some side effects can include headaches, lightheadedness, scalp discomfort, and facial muscle twitching. Some serious side effects are rare, including seizures, hearing loss if ear protection is not adequate, and mania in people with bipolar disorder.[32] Although early results are promising, future studies are needed to address the benefits of transcranial magnetic stimulation for perinatal depression.[31] Theta burst stimulation is a newer method of transcranial magnetic stimulation that may be more beneficial during pregnancy due to less risk of postural hypotension.

Patients with severe perinatal depression may not respond to psychotherapy and pharmacotherapy. For patients refractory to 4 consecutive medication trials, electroconvulsive therapy (ECT) may be recommended. ECT is beneficial in patients with psychotic depression, with intent or plans on committing suicide or infanticide, and refusal to eat, leading to malnutrition and dehydration.[33][34] Several observational studies have suggested ECT as a safer option for pregnant and lactating patients as there are fewer adverse events for the mother and the infant.[35][36] Other authors are not as supportive of ECT use for perinatal depression.

Additional Resources

Mothers who experience racism and socioeconomic disadvantages are at risk for health inequities in the prevalence, screening, treatment, and outcomes of depression and anxiety. Transgender and gender-diverse perinatal individuals merit special attention due to the relatively limited literature on transgender health and health care. Multilevel barriers exist in addressing perinatal mental health and integrating mental health care with perinatal care. Mental health professional referral networks may be limited, and clinicians may be reluctant to treat pregnant and breastfeeding individuals.

Perinatal Psychiatry Access Programs were developed and designed to increase access by providing training and resources to obstetric care clinicians via training, real-time psychiatric consultation, and community-based mental health resources. A free, 24/7, confidential national hotline (1-833-943-5746 [1-833-9-HELP4MOMS]) in multiple languages by phone or text for pregnant individuals, new mothers, and individuals who have given birth is available.[6]

Differential Diagnosis

Differential diagnoses that should also be considered when evaluating perinatal depression include:

- **Postpartum baby blues:** Baby blues most commonly occur within a week after delivery and resolve within a few days, around day 10 to 14 postpartum. Approximately 50% to 75% of patients experience baby blues, which are

temporary and require no treatment. Symptoms may include crying bouts, sadness, anxiety, irritability, sleep disturbance, appetite changes, confusion, and fatigue. The postpartum blues does not affect daily functioning or the ability to care for the baby. However, severe postpartum baby blues is associated with a risk for perinatal depression.[37]

- **Hyperthyroidism and hypothyroidism:** These conditions can also lead to mood disorders. Thyroid disorders can be assessed by testing thyroid-stimulating hormone levels.
- **Sleep disturbances:** Poor sleep patterns may present as dysphoria, impaired concentration, and fatigue.
- **Substance use disorders:** Substance use disorders or substance intoxication may present with mood swings.
- **Mood disorders:** Various mood disorders may have overlapping clinical features. Postpartum anxiety focuses on excessive worry. Adjustment disorder includes emotional and behavioral responses to the stress of childbirth, which are less severe and shorter in duration than perinatal depression. Posttraumatic stress disorder involves trauma-related symptoms due to a traumatic birth experience. Major depressive disorder with peripartum onset, bipolar I disorder, or bipolar II disorder should be considered if symptoms last more than 2 weeks, particularly if prominent irritability is present.
- **Postpartum psychosis:** Postpartum psychosis is defined as the onset of psychosis during the first 4 weeks postpartum. Most women do not have a known history of psychiatric disorders, but some have had bipolar disorder in the past. Usually, onset is within 3 to 10 days postpartum but may occur over 4 weeks postpartum. Postpartum psychosis is a psychiatric emergency with potential suicide and infanticidal risk. A patient can experience hallucinations, agitation, unusual behavior, disorganized thoughts, and delusions. This is a rare disorder, occurring in only 1 to 2 per 1000 pregnancies, and presents with an acute onset of manic or depressive psychosis within the first few days or weeks after delivery.[22]

Prognosis

Postpartum blues involve mood changes and other symptoms that are typically mild, temporary, and self-limited. For patients with perinatal depression, dose adjustments may be needed based on monitoring symptoms through clinical assessment, validated screening tools, or both. Due to increased renal clearance, increased distribution volume, and changes in enzyme activity with advancing gestation, an increase in medication dose during pregnancy may be required. Empiric down-titration of psychiatric medications in the third trimester is not recommended as neonatal outcomes were not improved, and the associated risk of worsening mental health conditions was noted.[22]

A pivotal factor in the duration of perinatal depression is delayed treatment. Approximately 25% of patients with perinatal depression will have symptoms for 3 years after giving birth.[22] Perinatal depression has repercussions beyond possible physical harm to the child. Data reveal that the condition also affects parent-infant bonding. Often, the parent treats the child inappropriately and with a negative attitude, which can significantly impact the child's growth and development. Children born to patients with perinatal depression have been found to exhibit marked changes in behavior, altered cognitive development, and early onset of depressive illness. More importantly, these children may struggle with obesity and dysfunction in social interactions.

Complications

Perinatal depression affects the parents and the infant and can lead to a chronic depressive disorder if untreated. Even if treated, perinatal depression can be a risk for future episodes of major depression. Moreover, perinatal depression is a stressful event for the entire family, as children may be affected also. Children of parents who have untreated depression can develop behavioral and emotional problems, including language development delays, which are commonly seen, sleeping problems, eating difficulties, excessive crying, and attention-deficit/hyperactivity disorder.

When untreated, perinatal depression is associated with negative consequences for those who are postpartum, including disrupted health behaviors, relationships, physiology, and parenting. This results in a risk for the fetus, the partner, and the whole family.[22] Therefore, ACOG does not recommend withholding or stopping psychiatric medications due to pregnancy status alone.[22]

According to the *DSM-5-TR*, psychotic features are estimated to occur in from 1 in 500 to 1 in 1,000 deliveries. The risk is higher in primiparous women, those with a prior history of depressive or bipolar disorders, and those with a family history of bipolar disorders. The *DSM-5-TR* notes that once an individual has had 1 postpartum episode with psychotic features, the risk of recurrence of a psychotic episode is between 30% and 50% with each subsequent delivery.

Deterrence and Patient Education

According to the position statement of the American College of Nurse-Midwives, "Mental Health During Childbirth and Across the Lifespan," there are several barriers to seeking and accepting mental health support, including lack of access, cultural stigma, concern that symptoms will be dismissed, and fear that the infant will be removed. These barriers are magnified in social minorities, especially for those in multiple stigmatized social groups.

Deterrence and education are critical components in addressing perinatal depression. Proactive education about perinatal depression should begin during prenatal care, with clinicians informing expectant mothers and their families about the signs, symptoms, and potential risks associated with this condition. Clinicians should educate the mother and family about postpartum blues and the risk of worsening symptoms and encourage families to plan and prepare ahead of time for support and rest for the new parents. By increasing awareness, new mothers can recognize the onset of perinatal depression early and seek timely intervention. Education programs can include prenatal classes, informational brochures, and discussions during regular medical appointments. Additionally, integrating mental health screenings into antepartum and postpartum checkups can help with early detection and management. Patients with postpartum blues should be carefully evaluated over time by interprofessional members of the healthcare team for persistent worsening symptoms. [6][38]

Support systems, including counseling services and support groups, should be readily accessible to pregnant and new parents, providing a safe space for them to share experiences and receive professional guidance. By fostering an environment of understanding and support, the stigma associated with perinatal depression can be mitigated, encouraging more people to seek help. Ultimately, comprehensive deterrence and educational strategies are essential in reducing the incidence and severity of perinatal depression, ensuring healthier outcomes for parents and their infants.

Pearls and Other Issues

During pregnancy, many patients who are at risk of developing perinatal depression can be identified. These patients, along with their families, should be provided with information and education regarding perinatal depression. The information should be reinforced during postpartum hospitalization and after discharge.[8] Childbirth education classes teach new parents to seek help and the support that they might need for childbirth. By teaching patients and their partners about the signs and symptoms of perinatal depression, educators can increase the chance that a patient with this condition receives proper treatment.

Screening for depressive symptoms can be done during pregnancy. This screening can identify women who are at increased risk for developing perinatal depression. Exclusive breastfeeding has a positive effect on reducing depressive symptoms from childbirth to 3 months postpartum. Perinatal depression can be prevented when parents are given positive parenting lessons and when the parent-infant bond is promoted and increased. This can be achieved through social support from family and clinicians.

Patients who experience racism and socioeconomic disadvantages are at risk for health inequities in the prevalence, screening, treatment, and outcomes of depression and anxiety. Transgender and gender-diverse perinatal individuals

merit special attention due to the relatively limited literature on transgender health and health care. Multilevel barriers exist in addressing perinatal mental health and integrating mental health care with perinatal care.

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Attention should also be given to fathers with postpartum blues, which can impair father-infant bonding.[15]

Enhancing Healthcare Team Outcomes

To enhance patient-centered care, outcomes, patient safety, and team performance related to perinatal depression, an interprofessional approach involving physicians, advanced practitioners, nurses, pharmacists, and other health professionals is crucial. Due to the high morbidity of perinatal depression, current efforts emphasize prevention. Nurses are in a primary position to identify patients at high risk for antepartum and postpartum mood disorders during pregnancy. During visits, nurses can identify patients with a history of depression or postpartum blues and monitor those who develop depression during pregnancy. These patients require education on available treatments and support from the postpartum nurse or primary care clinician. Coordination with therapists and referrals to psychiatrists for antidepressant treatment may be necessary.

Pharmacological and nonpharmacological prophylaxis are used with variable success, but evidence shows that parents who are treated have better bonding experiences with their infants. Additionally, untreated parental depression can lead to mood and behavior problems and obesity in children. Despite awareness, many patients remain untreated due to a lack of follow-up. Therefore, the role of the postpartum visiting nurse is critical in ensuring ongoing support and care. Effective interprofessional communication and care coordination among clinicians are essential in identifying, monitoring, and treating perinatal depression, ultimately improving patient outcomes and safety.

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Tables

Table. Edinburgh Postnatal Depression Scale

Screening Question	Response Scoring
I have been able to laugh and see the funny side of things	• As much as I always could (0) • Not quite so much now (1) • Definitely not so much now (2) • Not at all (3)
I have looked forward with enjoyment to things	• As much as I ever did (0) • Rather less than I used to (1) • Definitely less than I used to (2) • Hardly at all (3)
I have blamed myself unnecessarily when things went wrong	• Yes, most of the time (3) • Yes, some of the time (2) • Not very often (1) • No, never (0)
I have been anxious or worried for no good reason	• No, not at all (0) • Hardly ever (1) • Yes, sometimes (2) • Yes, very often (3)
I have felt scared or panicky for no very good reason	• Yes, most of the time I haven't been able to cope at all (3) • Yes, sometimes I haven't been coping as well as usual (2) • No, most of the time I have coped quite well (1) • No, I have been coping as well as ever (0)
Things have been getting on top of me	• Yes, quite a lot (3) • Yes, sometimes (2) • No, not much (1)

	• No, not at all (0)
I have been so unhappy that I have had difficulty sleeping	• Yes, most of the time (3) • Yes, sometimes (2) • Not very often (1) • No, not at all (0)
I have felt sad or miserable	• Yes, most of the time (3) • Yes, quite often (2) • Not very often (1) • No, not at all (0)
I have been so unhappy that I have been crying	• Yes, most of the time (3) • Yes, quite often (2) • Only occasionally (1) • No, never (0)
The thought of harming myself has occurred to me	• Yes, quite often (3) • Sometimes (2) • Hardly ever (1) • Never (0)

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