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## Perinatal Anxiety and Depression in Minority Women

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### Abstract

Depression and anxiety are common during pregnancy and are experienced at higher rates among women who are racial and ethnic minorities. Because depression and anxiety influence maternal and infant outcomes, intervening to improve perinatal mental health should be a priority for all health care providers. However, in the United States, a number of barriers including lack of mental health providers, lack of perinatal behavioral health systems, and stigma, limit access to care. Universal screening has been recommended and here we examine how universal screening can help nurses improve the mental health of childbearing women. Interventions that are currently in use to improve perinatal anxiety and depression are reviewed and include: psychopharmacology, cognitive behavioral therapy, interpersonal psychotherapy, and mindfulness. Recommendations for future research and health care system changes are made.

### Keywords

Depression; Anxiety; Minority Health; Pregnancy

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Up to 16% of pregnant women experience depressive symptoms (Dunkel-Schetter & Tanner, 2012) and 14% experience anxiety (Henderson & Redshaw, 2013); these rates are higher for women of racial and ethnic minorities, 17% and 19% respectively (Katz, Crean, Cerulli, & Poleshuck, 2018). Rates of depression and anxiety vary between minority groups (Chang, Tabet, Elder, Kiel, & Flick, 2016). For example, up to 54% of Latinas and up to 28% of

Black women have been found to experience perinatal depression in the United States (Lara-Cinisomo, Clark, & Wood, 2018).

All pregnant women naturally experience some reluctance in deciding to access mental health care because they are not sure what is a “normal” experience during pregnancy or at what point their depression or anxiety should be a concern (Kingston et al., 2015). For minority women, this concern about what is normal in pregnancy is coupled with socio-economic barriers such as, poverty and decreased access to resources, along with racism, trauma, and cultural barriers, all of which make it more difficult for minority women to receive mental health care in pregnancy (Coburn et al., 2018; Segre, Brock & O’Hara, 2015).

Pregnant women report that some of the greatest barriers to receiving mental health care include lack of time, stigma and childcare issues (Fonseca, Gorayeb, & Canavarro, 2015). The mental health diagnosis and treatment of women of racial and ethnic minorities, especially impoverished immigrant women, are negatively influenced by stigma (Lara-Cinisomo, Clark, & Wood, 2018). A shortage of mental health providers, lack of continuity of care, and lack of follow-up with screening tools are all perceived as barriers to accessing adequate mental health care by pregnant women (Da Costa, Zelkowitz, Nguyen, & Deville-Stoetzel, 2018; Yu & Sampson, 2016).

The US Preventative Services Task Force (USPSTF) recommends collaborative care, linking mental health care with primary health and obstetric care (Siu & USPSTF, 2016), which is especially important for women of ethnic minorities who are less likely to initiate mental health care (Da Costa, Zelkowitz, Nguyen, & Deville-Stoetzel, 2018). Additional recommendations to decrease barriers to accessing mental health care include building health care systems in which trusting relationships are fostered; teaching women about the expected and unexpected emotional changes in pregnancy; and screening followed by opportunities to receive evidence-based care (Fonseca, Gorayeb, & Canavarro, 2015).

Provision of perinatal mental health services is particularly important for women who are ethnic and racial minorities as they are at greater risk of poorer pregnancy outcomes, including up to a 50% greater risk of having a low birth weight baby and up to a 20% greater risk of having a preterm or small for gestational age baby (Borrell Rodriguez-Alvarez, Savitz, & Baquero, 2015). Regardless of the specific type of mental health problem experienced during pregnancy, a mother’s poor mental health increases the likelihood that her child will have problems as a school-age child, including global development concerns, behavior problems, and diminished socio-emotional development (Kingston & Tough, 2014).

Anxiety and depressive symptoms are both seen as part of perinatal mood disorders. However, there is more research focusing on the outcomes of depression than anxiety. Prenatal anxiety has been related to poorer maternal health outcomes in the early postpartum period (Henderson & Redshaw, 2013) and to poorer infant temperament (Henrichs et al., 2009).

Prenatal depression may or may not be related to preterm labor (Gentile, 2017) but it is associated with shorter breastfeeding duration (Figueiredo, Canario, & Field, 2014). Infants

of depressed mothers are more likely to have a low birth weight (Flynn, McBride, Cely, Wang, & DeCesare, 2015) and are susceptible to developing several health concerns such as rash, vomiting, and diarrhea (Coburn et al., 2018). Pregnant women who are depressed are more likely to be exhausted and to experience migraines and incontinence (Perlen, Woolhouse, Gartland, & Brown, 2013). They are also at increased risk of chronic health complications, such as hypertension and diabetes (Cox, Sowa, Meltzer-Brody, & Gaynes, 2016).

## Screening

The first step in improving prenatal mental health is to screen women for depression and anxiety. For example, the US Preventative Task Force recommends screening for depression in all adults, including pregnant and postpartum women, to identify, diagnose, and treat those with depression or depressive symptoms (Siu & USPSTF, 2016). The American College of Obstetricians and Gynecologists (ACOG, 2018) has endorsed this recommendation and eight states have mandatory screening laws (New Jersey, California, Oregon, Texas, Vermont, West Virginia, Illinois and Massachusetts) while four have health care policies that address peripartum mental health (Maine, Minnesota, Virginia and New York) (Selix & Goyal, 2018). Since the mandatory screening law was passed in New Jersey, 67% of pregnant women in that state report having been screened for depression by their prenatal care provider with 90% of those women being screened at the time of hospital delivery (Farr, Denk, Dahms, & Dietz, 2014).

Mental health screening presents minimal risk to maternal health (Cox et al., 2016). The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN, 2015) supports routine screening for all pregnant and postpartum women so that early intervention strategies can be implemented. ACOG endorses screening even when treatment is not available, as screening itself might help women to have more self-knowledge (ACOG, 2018). However, universal screening is still not the norm and it is inadequately reimbursed. Further, there are no consequences to health care sites if screening does not occur.

Improvements in screening rates do not always lead to improvements in treatment rates; a recent study noted that only 8.6% of women identified with antenatal depression received adequate treatment (Cox et al., 2016). Providers most commonly cite inadequate time as a barrier for providing treatment to women who present with perinatal depression. Other barriers to treatment faced by providers include inadequate services or resources, cost and reimbursement concerns, and lack of knowledge or skills (Price, Corder-Mabe, & Austin, 2012).

System-wide barriers to the provision of adequate treatment include the lack of a national system designed to monitor peripartum mental health screening and inadequate funding for mental health treatment during the peripartum period (Kozhimannil, Adams, Soumerai, Busch, & Huskamp, 2011).

## Tools for Screening

The tools commonly used for screening of perinatal depression all have well established validity and reliability and have all been found to be useful in clinical practice. ACOG supports the use of the Edinburgh Postnatal Depression Scale (EPDS) as a depression screening tool in pregnant women because of its brevity, readability and scoring ease (ACOG, 2018). The EPDS also has the benefit of identifying women at immediate risk for self-harm. It has been translated to more than 50 languages and does include some items that screen for anxiety symptoms (ACOG, 2018). Other screening tools such as, The Patient Health Questionnaire 9 (PHQ-9), the Beck Depression Inventory (BDI), and the Center for Epidemiologic Studies Depression Scale (CESD), are also used with varying degrees of specificity (ACOG, 2018).

## Traditional Interventions to Improve Mental Health in Pregnancy

A number of interventions have been studied and shown to be useful with pregnant women. While there are emerging interventions (nutrition, practicing good sleep hygiene and exercise) further research needs to be conducted to ensure that these interventions are acceptable to pregnant women.

## Pharmacologic Treatment

One intervention that has a long history is pharmacologic treatment of anxiety or depression. Although pharmacologic treatment may be effective for some women, many prefer not to use antidepressant medication during pregnancy due to fears of harming the fetus (Battle, Salisbury, Schofield, & Ortiz-Hernandez, 2013). Only about 5–13% of pregnant women choose to continue taking their antidepressant during pregnancy (Hanley & Oberlander, 2014). Antidepressant medications are known to pass through the placenta (Chaudron, 2013). Newborns exposed to antidepressants have greater irritability and poorer psychomotor development outcomes compared to those without exposure (Previti, Pawlby, Chowdhury, Aguglia and Pariante, 2014). Pregnant women may prefer non-pharmacological treatments such as cognitive behavioral therapy (CBT) and interpersonal psychotherapy (IPT), which have consistently been found to be successful in decreasing depression (almost a 40% decrease identified throughout over 20 studies) (USPTF, 2019).

## Cognitive Behavioral Therapy

Cognitive behavioral therapy is widely considered to be an effective treatment for depression and anxiety in pregnant women (USPTF, 2019). This approach to mental health treatment is based on the idea that dysfunctional thought patterns lead to negative feelings and unhealthy behaviors.

Cognitive behavioral therapy works to help individuals reinterpret stressful events or interactions in their lives. The ABCs are learned in CBT; individuals are taught to monitor for Activating or stressful events that trigger a negative *Belief* or thought, which is then stopped and turned into a positive belief so that one experiences less negative *Consequences* (i.e., negative emotions such as depression or anxiety). By altering the way people think, CBT helps to modify how they feel and support healthier behaviors (Butler, Chapman,

Forman, & Beck, 2006). Homework is an important component of CBT so that individuals can put into practice the content they are learning so it becomes their standard way of thinking. In contrast, other types of treatments may focus only on behavior and do not target cognition for treatment (Butler et al., 2006). In addition to focusing on creating more functional thought patterns, CBT-based programs have also supported the development of problem-solving skills and goal-setting for positive health behaviors such as eating healthy meals and engaging in physical activity (Melnyk, Kelly, & Lusk, 2014).

Cognitive behavioral therapy, although effective, involves attending multiple sessions. Many studies evaluating the effectiveness of CBT in pregnant women have experienced high rates of attrition (Jesse et al., 2015; USPSTF, 2019). One promising strategy for delivering CBT to minority women is to include it in standard group prenatal care (Gennaro & Melnyk, 2017).

### Interpersonal Psychotherapy

Interpersonal psychotherapy aims to improve individuals' relationships with others and to help individuals cope with life changes such as preparing for motherhood or losing a loved one (Genovez, Vanderkruik, Lemon, & Dimidjian, 2018). An IPT-based program, culturally tailored for low-income African American pregnant women (Grote et al., 2009), significantly reduced depression in that population. However, the number of sessions was a barrier to lower-income women who of which attended fewer sessions than higher-income women (Lenze & Potts, 2017).

Both IPT and CBT are typically provided by psychologists, psychiatric nurse practitioners and mental health therapists with graduate level training; the high level of training required may limit the number of providers available in a given area. However, studies have shown that when CBT is manualized, it can be delivered in individual and group format by healthcare providers and other professionals without a mental health specialty degree after a training workshop with positive effects on depression and anxiety over time (Hart Abney, Lusk, Hovermale & Melnyk, 2019; Melnyk, Kelly, & Lusk, 2014).

### Non-Traditional Interventions to Improve Mental Health During Pregnancy

**Mindfulness-Based Interventions**—Mindfulness-based interventions (MBI) are a relatively new approach to the treatment of prenatal depression. They have been shown to be effective for anxiety. The practice of mindfulness involves being attentive to one's thoughts, feelings, and physical sensations without judgment, and developing tolerance for stress (Dhillon, Sparkes, & Duarte, 2017). The two most common interventions are mindfulness-based stress reduction and mindfulness-based cognitive therapy (Lever Taylor, Cavanaugh & Strauss, 2016). Most interventions are group based and are often led by psychologists, social workers, or meditation teachers with specific training in mindfulness (Dhillon et al., 2017).

While a recent systematic review concludes that interventions focused on mindfulness may reduce depression and anxiety levels in prenatal women, nearly all of the studies were based on samples of Caucasian women (Matvienko-Sikar, Lee, Murphy & Murphy, 2016). One study focused on pregnant African-American women found that an eight-week mindfulness-based stress reduction intervention called Mindful Motherhood reduced stress related to

pregnancy and depression symptoms one month after the treatment ended (Zhang & Eugene, 2015). However, the study suffered from a high level of attrition, with only a few number of participants attending all the sessions.

## Implications for Nursing Practice

All women should be screened for depression at some point during pregnancy (Siu & USPSTF, 2016). Establishing a protocol for screening women while pregnant is a necessary first step. Although there is minimal evidence regarding optimal timing of screening (Siu & USPSTF, 2016), a protocol for screening perinatal mood disorders might consider screening patients at entry to prenatal care, at any point during pregnancy based on clinician concern and clinical scenario, and at the time of the 6 – 8 week postpartum visit. No single screening tool for perinatal depression is consistently recommended, and as with all screening tests, a positive screen does not indicate a definitive diagnosis of depression and deserves a careful clinical evaluation. Using the EPDS, however, identifies women at high-risk of self-harm and suicide ideation who can be referred for appropriate mental health assessment and care immediately (Milgrom & Gemmill, 2014).

Before screening for perinatal mood disorders is in place, management protocols for women at immediate risk of self-harm should be formulated. Available out-patient Behavioral Health and Psychiatric services and acute care services need to be identified. Every practice should establish a standardized approach for the individual who presents with a mental health emergency, which includes expression of suicidality. Staff and provider training is essential – the majority of out-patient prenatal practices do not have a social worker on-call for psychosocial assessment and referral. Training such as Mental Health First Aid<sup>®</sup> regarding assessment and de-escalation would provide essential skills for any perinatal care setting as would plans for referral to the acute care setting.

For individuals who express mental or behavioral health concerns, but who do not report or exhibit signs or symptoms necessitating emergent care, creating a standard approach for assessment and referral ensures a comprehensive plan. An assessment of staff and provider psychosocial assessment skills can be offered. Based on the results of the assessment, staff and provider training in psychosocial assessment skills can be created. Identifying and vetting a list of community resources for women who need or desire out-patient mental health care, talk therapy, peer support groups, or psychiatric care, who are not at immediate risk, will help facilitate timely, appropriate referrals. Optimally, an outpatient practice would seek out and foster linkages with the community resources, in order to ease the referral process and foster dialogue for feedback and coordination of care.

On-going patient education throughout the perinatal period is another important step as it helps women to understand what are normal physical, emotional and cognitive adaptive changes in pregnancy, and that addressing mental and physical health are equally important. Discussing anticipated changes in mood and sleep patterns during pregnancy, for example, encourages further discussion about mental health concerns during pregnancy. Fostering an open dialogue through prenatal education helps to decrease the stigma surrounding mental

health concerns, may encourage women to initiate conversations with trusted health providers about specific concerns, and ensures discussion through the postpartum period.

Providers need to initiate one-on-one conversations with pregnant women about their mental health just as they would about their physical health. These conversations lessen stigma and encourage pregnant women to talk about all mental health concerns, not just anxiety and depression, and facilitates the initiation of treatment for all women in need.

Current research is investigating the potential benefits of providing cognitive behavioral therapy as part of prenatal care (Gennaro & Melnyk, 2017). This form of treatment is provided by midwives and advanced practice nurses, and has the advantage of being embedded in the obstetrical care giving system, which obviates the need for additional mental health workers in the obstetrical clinics. The provision of mental health care onsite, via co-located primary and behavioral health, or integrated care settings such as those where mental health services and support are integrated into prenatal/postpartum and pediatric care (Kozhimmnal et al., 2011) may improve rates of early detection and treatment (Yu & Sampson, 2016). More rigorous, well-designed studies using samples of ethnically and racially diverse women are needed to help identify other successful interventions to improve mental health as an integral part of prenatal care.

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Bernadette Melnyk has a company, COPE2Thrive, that disseminates the COPE program. For the remaining authors, there are no disclosures to declare.

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### Call Outs

Almost 20% of women of racial and ethnic minorities, experience anxiety and/or depression, during pregnancy, potentially leading to negative consequences for the health of both mother and child.

Barriers to seeking treatment include uncertainty about what is normal, lack of time, difficulty accessing treatment, and stigma.

Providers should screen all pregnant women for depression and provide them with referrals to treatment.

Effective counseling interventions, such as cognitive behavioral therapy, interpersonal therapy, and mindfulness interventions, can be provided in individual or group format.

Providing mental health care onsite by linking group cognitive behavioral therapy sessions with regular prenatal care appointments is a promising area of research.

**Implications for practice**

- All women should be screened for perinatal mood disorders, specifically anxiety and depression.
- A protocol for women who are at immediate risk for self-harm should be established within each facility.
- A standard approach for assessment and referral should be developed to ensure a comprehensive plan.
- Available community resources and networks, including peer support groups and psychiatric care settings, should be made available to health care providers conducting the screening and assessments to ease the referral process
- Educating women about normal physical and emotional changes in pregnancy decreases stigma and fosters an open dialogue about mental health concerns during the perinatal period.
- Develop, research based, behavioral health programs that promote physical and mental well- being during pregnancy.

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