

It is illegal to post this copyrighted PDF on any website. Screening for Perinatal Anxiety Symptoms in Obstetric Settings Is Recommended, and Proper Provider Training Is Essential

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In this issue, Fawcett et al¹ present an important and timely meta-analysis of the prevalence rates of perinatal anxiety disorders. They include articles reporting the prevalence of 1 or more of 8 common anxiety disorders in pregnant or postpartum women. A total of 2,613 records were retrieved, and anxiety disorder prevalence and potential predictor variables (eg, parity) were extracted from each of the 26 studies included. A Bayesian multivariate modeling approach estimated the prevalence and between-study heterogeneity of each disorder and the prevalence of having 1 or more disorders. Perinatal anxiety disorders were found to be more prevalent than previously thought, with 1 in 5 women meeting diagnostic criteria for at least 1 anxiety disorder. Individual disorder prevalence estimates ranged from 1.1% for posttraumatic stress disorder (PTSD) to 4.8% for specific phobia, and rates of comorbidity were high (20.7%). Substantial between-study heterogeneity was observed, suggesting that “true” prevalence varies broadly across samples.¹

The prevalence of prenatal depression and anxiety ranges between 5% and 16%, and the consequences are extensive.² In addition to negative maternal effects, research points to detrimental fetal effects and higher rates of preterm birth and low birth weight.³ Postpartum symptoms of depression and anxiety are often experienced by women prenatally and may lead to maternal suffering and parenting ineffectiveness.⁴ Thus, research attention to prenatal and postpartum mood and anxiety symptoms and their causes is warranted.

One strength of Fawcett and colleagues' study is their modeling of the individual anxiety disorders using a modern Bayesian multivariate approach. This is significant, as questionnaire-based assessments of mental health conditions substantially overestimate prevalence and incidence rates. The authors also anticipated heterogeneity and therefore explored potential moderators, another important strength. Finally, the authors discussed the consequences of untreated perinatal anxiety on the growing

fetus as well as the developing infant. This is important for practitioners to be aware of to ensure that they refer their patients with symptoms of perinatal anxiety to mental health providers.

Several important omissions were detected in this study. For example, the authors do not include (1) an important related condition called *pregnancy-specific anxiety*⁵; (2) the differential findings for preterm birth, low birth weight, and pregnancy-specific anxiety⁶; (3) the research on increased rates of anxiety in those who experience adverse pregnancy complications, adverse perinatal outcomes, or stillbirth or have babies in the neonatal intensive care unit (NICU)⁷⁻¹³; (4) the disparities across race and socioeconomic status^{14,15}; (5) rigorous quality ratings; or (6) the importance of differentiating postpartum psychosis from postpartum obsessive-compulsive disorder (OCD) or postpartum depression,¹⁶ particularly as it relates to available effective treatments. These omissions are discussed in more detail below.

1. Pregnancy-specific anxiety is not an official anxiety disorder diagnosis in the *DSM*. Pregnant women often have concerns about the health of their babies, labor, delivery, and the maternal role and responsibilities. These concerns are known in the literature as pregnancy-specific anxiety and have been strongly linked with adverse perinatal outcomes such as spontaneous preterm birth.⁵ Therefore, this important concept should be a topic of continued study in the field.
2. In order to understand how psychosocial factors influence the complex phenomenon of preterm birth, which is one of the adverse perinatal outcomes reviewed by the authors, one must distinguish different etiologies.⁶ Depressive symptoms in pregnancy have been associated with fetal growth restriction, but much less often with spontaneous preterm birth. In contrast, prenatal anxiety has most often been associated with preterm birth, especially anxiety concerning one's pregnancy.^{5,6} Growing evidence indicates that pregnancy-specific anxiety in expecting mothers prospectively predicts a wide range of neurodevelopmental consequences in their children, even into adolescence. Some of the outcomes linked to prenatal anxiety include impaired attention regulation and delayed mental and motor development in the first year of life,¹⁷ higher

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temperamental negativity in infants,¹⁸ negative behavioral reactivity to novelty in infants and 12-month mental development,^{19,20} behavioral and emotional problems at 4 to 7 years,^{21,22} decreased gray matter density on MRI scan in 6- to 9-year-olds,²³ and adolescent impulsivity, externalizing, and processing speed.^{24,25} Thus, exploring the effects of reducing stress, anxiety, and pregnancy-specific anxiety specifically on developmental outcomes is an active and important frontier in perinatal research.

3. Rates of anxiety and other posttraumatic stress symptoms are higher if women experience an adverse perinatal complication or outcome, such as preeclampsia or preterm birth, or have a baby in the NICU.⁹ For example, approximately 9% of women who experienced preeclampsia or preterm birth or had a baby in the NICU develop PTSD,¹⁰ and estimates range as high as from 28%–70% in some studies.¹¹ This disparity is likely due to the dramatic difference in the birth and postpartum experience for these mothers. Loss of control and privacy and an inability to care for or touch her newborn can cause the NICU mother to feel incompetent. This can lead to fear and anxiety about bringing baby home and parenting in general.¹¹ Major obstetric hemorrhage, severe preeclampsia, and intensive care unit admission have also been associated with increased postpartum PTSD symptoms.¹² Women who have had a previous fetal loss, such as miscarriage and stillbirth, are especially susceptible to postpartum PTSD. According to a recent systematic review of 48 studies, PTSD or posttraumatic symptoms (PTS) occur after nonmedical (PTSD, 12.6%) and medical (PTS ranged from 41%–64%) termination of pregnancy, miscarriage (11%–68% PTS, 88% for recurrent miscarriage), perinatal loss (no prevalence rates reported), and stillbirth (21% PTSD).¹³ Shorter length of gestational age was also associated with an increased likelihood for diagnosis of PTS or PTSD. Demographic factors such as maternal age, gestational age, lower education, and a history of previous physical or sexual trauma are significant risk factors for the development of PTS or PTSD after loss. Prior history of mental health problems and current depression, anxiety, and perinatal grief are also risk factors.¹³ Therefore, inclusion of this complicated bidirectional relationship is critical so that future research can distinguish the most important risk factors and consequences involved. Specific variables would include prenatal and pregnancy-specific anxiety, pregnancy complications, and how these impact adverse birth outcomes.

4. Disparities across race and socioeconomic status are important because rates of perinatal mood and anxiety disorders are higher in Black women, for example, and other sociodemographic risk factors play a role.^{14,15} A discussion on ethnicity including the racial composition of the included studies is important. This could be a limitation of the included studies (not necessarily the Fawcett analysis) but must be discussed in future work.
5. Rigorous and informative quality ratings must be included in robust meta-analyses. For example, information on patterns could be included. Future research would benefit from the overall ratings for each included study and whether authors draw different conclusions from the moderate versus high quality studies.
6. Clinically, it is very important to differentiate postpartum psychosis from postpartum OCD¹⁶: For example, a new mother might have thoughts of hurting her baby. The mother with OCD will be upset by these thoughts and devise intricate plans to avoid harming her baby. However, in a woman with postpartum psychosis, no such insight occurs, these thoughts are the same as any others, and immediate intervention is critical. Effective empirically based medical and psychotherapeutic treatments exist for perinatal anxiety and psychosis; however, the conditions must be screened for and properly diagnosed so that referral to care and appropriate intervention is achieved.²⁶

Conclusion

Overall, this meta-analysis and its conclusions are important because perinatal anxiety (and depression) significantly affect the physical and mental well-being of the woman, her significant other(s), and her family. Aside from the limitations noted, this meta-analysis strongly supports the view that anxiety is more prevalent than depression during pregnancy and the postpartum period. Therefore, screening for prenatal and postpartum symptoms of anxiety disorders as well as pregnancy-specific anxiety is recommended in addition to depression screening. Investigating ways in which medical providers can help is critically important. The perinatal period is an opportune time for mental health screening and education because of the frequency with which women meet with health care providers. Medical providers including obstetricians, gynecologists, and maternal fetal medicine doctors and nurses, doulas, and nurse midwives must be well trained to screen for anxiety, particularly OCD symptoms, as well as depression, in order to provide proper education and referral to care. Finally, future research should focus on distinct psychosocial risk factors and establish precise pathways for how anxiety may affect the physiologic health and well-being of both mother and fetus in pregnancy and attachment, including breastfeeding, and maternal and infant health in the postpartum period.

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Implications for Practice and Research

- Anxiety is more prevalent than depression during pregnancy and the postpartum period. Therefore, screening for prenatal and postpartum symptoms of anxiety disorders as well as pregnancy-specific anxiety is recommended in addition to depression screening.
- The perinatal period is a time when women frequently utilize health care. Therefore, to detect

perinatal mental disorders, medical providers must be trained in anxiety screening to provide proper education and referral to care.

- Future research should focus on distinct psychosocial risk factors and establish precise pathways for how anxiety may affect the physiologic health and well-being of both mother and fetus in pregnancy and attachment and infant health in the postpartum period.

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