Postpartum anxiety: More common than you think

Postpartum anxiety is more common than postpartum depression, but is often overlooked. Here's when to suspect it.

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THE CASE

Julia* is a 31-year-old woman, gravida 3 para 3, who presents to your office for evaluation after a recent emergency department (ED) visit. Her husband and children are with her. She is 4 months postpartum after an uncomplicated normal spontaneous vaginal delivery. She is breastfeeding her healthy baby boy and is using an intrauterine device for birth control. She went to the ED last week after "choking on a chip" while having lunch with her children. It felt like she "couldn't breathe." She called 911 herself. The ED evaluation was unremarkable. Her discharge diagnosis was "panic attack," and she was sent home with a prescription for lorazepam.

Since the incident, she has been unable to eat any solid foods and has lost 7 pounds. She also reports a globus sensation, extreme fear of swallowing, insomnia, and pervasive thoughts that she could die at any moment and leave her children motherless. She has not taken the lorazepam.

She has a history of self-reported anxiety dating back to high school but no history of panic attacks. She has never been diagnosed with an anxiety disorder and has never before been prescribed anti-anxiety medication. She doesn't have a history of postpartum depression in prior pregnancies, and a depression screening at her postpartum visit 2 months ago was negative.

HOW WOULD YOU PROCEED WITH THIS PATIENT?

**The patient's name has been changed to protect her identity.*

During the perinatal period, women are particularly vulnerable to affective disorders, and primary care physicians are encouraged to routinely screen for and treat depression in pregnant and postpartum women.[1] However, anxiety disorders have a higher incidence than mood disorders in the general population,[2] and perinatal anxiety may be more widely underrecognized and undertreated than depression.[3] In addition, higher depression scores early in pregnancy have been shown to predict higher anxiety later in pregnancy.[4]

As family physicians, we are well-trained to recognize and treat anxiety disorders in the general patient population; however, we may lack the awareness and tools to identify these conditions in the perinatal period. Given our frequent encounters with both mom and baby in a child's first year of life, we are uniquely positioned to promptly recognize, diagnose,

Consider screening for postpartum anxiety with the GAD-7 or the Edinburgh Postnatal Depression Scale (questions 3-5).

and treat postpartum anxiety and thereby improve health outcomes for families.

DEFINING PERINATAL ANXIETY

Anxiety disorders (including generalized anxiety disorder, panic, phobia, and social anxiety) are the most common mental health disorders evaluated and treated in the primary care setting, with a lifetime prevalence of close to 30%.[2]

A recent report from the Centers for Disease Control and Prevention (CDC) estimates that 1 in 9 women experience symptoms of postpartum depression.[5] The prevalence of anxiety disorders during pregnancy and the early postpartum period is not as well-known, but studies suggest that perinatal anxiety is much more prevalent than depression. In one study, generalized anxiety disorder (GAD) in the pre- and postnatal periods was 15.8% and 17.1%, respectively; an incidence far exceeding that of perinatal depression (3.9% and 4.8%, for the same periods).[6] Additional evidence suggests that even more women in the postnatal period experience clinically significant levels of anxiety but do not meet full diagnostic criteria for an anxiety disorder.[7]

In another study, 9.5% of women met criteria for GAD at some point during pregnancy, with highest anxiety levels in the first trimester.[8] Women with a history of GAD, lower education, lack of social support, and personal history of child abuse have the highest risk for postpartum anxiety. Women with a history of posttraumatic stress disorder (PTSD) may be twice as likely to develop postpartum anxiety as healthy women.[9]

It has been well-documented that sleep disruption—which is very common in new mothers in the postnatal period—contributes to mood and anxiety disorders.[10,11]

Clarifying a diagnosis of postpartum anxiety

The *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* (*DSM-5*)[12] specifies no diagnosis of postpartum anxiety disorder. And no standardized diagnostic criteria exist. It is likely that in some cases, postpartum anxiety represents an exacerbation of underlying GAD, and in other cases it is a situational disorder brought about by specific circumstances of the peripartum period.

The *DSM-5* does, however, provide a helpful diagnostic approach. It defines a diagnosis of postpartum depression as being a variant of major depressive disorder (MDD) in which a woman must 1) meet criteria for a major depressive episode; and 2) occur during pregnancy or within 4 weeks of delivery. In practice, many clinicians extend the second requirement to include the first year postpartum.[13] There is a "with anxious distress" specifier for major depression in the *DSM-5*, but the 2 disorders are otherwise unlinked.

To apply the *DSM-5* principles for postpartum depression to postpartum anxiety, a patient would need to 1) meet the diagnostic criteria for an anxiety disorder that 2) have their onset within a specified perinatal period. Variant presentations of anxiety in the postpartum period might include panic disorder and phobias, which could also interfere with a woman's ability to care for her child.

The *DSM-5* offers the following criteria for GAD[12]:

- excessive worry about a variety of topics
- worry that is experienced as hard to control
- worry associated with at least 3 physical or cognitive symptoms: edginess/restlessness, tiring easily, impaired concentration, irritability
- anxiety, worry, or associated symptoms that make it hard to carry out day-to-day activities and responsibilities
- symptoms that are unrelated to any other medical conditions and cannot be explained by the effect of substances including a prescription medication, alcohol, or recreational drugs
- symptoms that are not better explained by a different mental disorder.

Debilitating effects of postpartum anxiety

Many women experience some level of anxiety during pregnancy and early postpartum—anxiety that may range from normal and adaptive to debilitating.[14] While the challenges of caring for a newborn are likely to bring some level of

anxiety, these symptoms should be transient and not interfere with a woman's capacity to care for her infant, herself, or her family.

Postpartum anxiety has been associated with a prior fear of giving birth, fear of death (of both mother and baby), lack of control, lack of self-confidence, and lack of confidence in the medical system.[9] The experience of such ongoing disturbing thoughts or feelings of worry and tension that affect a woman's ability to manage from day to day should indicate an illness state that deserves medical attention.

Mothers with postpartum anxiety disorders report significantly less bonding with their infants than do mothers without anxiety.[15] A recent narrative review describes numerous studies that illustrate the negative effects of postpartum anxiety on bonding, breastfeeding, infant temperament, early childhood development, and conduct disorders.[16] Anxious women may be less likely to initiate breastfeeding, have more challenges with breastfeeding, and even have a different milk composition.[17] Women with prenatal anxiety are also more likely to stop breastfeeding prematurely.[18] Children of anxious mothers may be more likely to have a difficult temperament and to display more distress.[19] There are small studies demonstrating deficits in early infant development and increases in conduct disorder in the male offspring of anxious women.[20]

SCREENING FOR POSTPARTUM ANXIETY

Screening for perinatal depression has become standard of care, and the Edinburgh Postnatal Depression Scale (EPDS) is a widely used instrument.[1] The EPDS, a 10-question self-report scale, was created and validated to screen for perinatal depression, with a cutoff of > 10/30 usually considered a positive result.

Researchers have investigated the utility of the EPDS as a screening tool for perinatal anxiety as well.[21-23] These studies show some promise, but there are questions as to whether a total score or a subscale score of the EPDS is most accurate in detecting anxiety. Women with perinatal anxiety may score low on the total EPDS, yet score higher on 3 anxiety-specific questions (**TABLE 1**[23]). For this reason, several studies propose an EPDS anxiety subscore or subscale (referred to as EPDS-3A).

TABLE 1
EPDS-3A subscale: Questions 3-5 from the Edinburgh Postnatal Depression Scale[23]

I have blamed myself unnecessarily when things went wrong.
☐ Yes, most of the time
☐ Yes, some of the time
☐ Not very often
☐ No, never
I have been anxious or worried for no good reason.
☐ No, not at all
☐ Hardly ever
☐ Yes, sometimes
☐ Yes, very often
I have felt scared or panicky for no very good reason.
☐ Yes, quite a lot
☐ Yes, sometimes
☐ No, not much
☐ No, not at all

Answers to each of the 3 items are scored from 0 (least severe) to 3 (most severe).

Of note, there are some women who will score high on the subscale who do not ultimately meet the criteria for an anxiety disorder diagnosis. Clinicians should not over-interpret these scores and should always use sound clinical judgment when making a diagnosis.

Research has also focused on using the GAD 7-item (GAD-7) scale (**TABLE 2**[24]),[25] and on the development of new tools and screening tools designed specifically for perinatal anxiety, including the Postpartum Worry Scale[26] and the Postpartum Specific Anxiety Scale (PSAS).[27]

Family physicians may consider using the EPDS subscale if they are already using the EPDS, or adding the GAD-7 as a separate screening instrument during a postpartum visit. To date there is no one standard recommendation or screening tool.

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Consider diagnosing postpartum anxiety when *DSM-5* criteria for generalized anxiety disorder are met during the first year postpartum.

TABLE 2

Generalized Anxiety Disorder 7-item (GAD-7) scale[24]

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Worrying too much about different things	0	1	2	3
Trouble relaxing	0	1	2	3
Being so restless that it is hard to sit still	0	1	2	3
Becoming easily annoyed or irritable	0	1	2	3
Feeling afraid as if something awful might happen	0	1	2	3
	Total = ____ + ____ + ___			

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

☐ Not difficult at all

☐ Somewhat difficult

☐ Very difficult

☐ Extremely difficult

Scoring the GAD-7: A score of ≥ 10 suggests that a patient has generalized anxiety disorder. As part of a clinical assessment, a score of 5 might be interpreted as mild anxiety, with 15 indicating a severe level of anxiety.

NONPHARMACOLOGIC TREATMENT

As one would with any patient who has situational anxiety, help new mothers find ways to increase their coping skills, reduce stress, and mobilize social supports and family resources. Given the association between sleep disruption and perinatal anxiety, counsel new mothers, especially those at high risk for postpartum anxiety, to prioritize sleep during this vulnerable time. To that end, consider recommending that they ask partners, family members, or friends to help them take care of the infant at night (or during the day). Such nonmedical interventions may be sufficient for women with mild anxiety.

Very few studies have addressed nonpharmacologic management of postpartum anxiety, but cognitive behavioral therapy (CBT) has been shown to help in managing and treating anxiety disorders outside of pregnancy.[28] A few small studies indicate promise for CBT and for mindfulness-based interventions (MBIs) during pregnancy.[29]

A 2016 systematic review of pharmacologic and nonpharmacologic treatment of anxiety in the perinatal period found support for the use of CBT for panic disorder and specific phobias both in pregnancy and postpartum.[30] A very small study found that teaching mothers to massage their preterm infants decreased maternal anxiety.[31]

If the patient is amenable, it is reasonable to start with behavioral interventions like CBT or MBI before pharmacologic treatment—particularly when physicians have mental health professionals embedded in their primary care team.

PHARMACOLOGIC TREATMENT

Selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) are considered first-line treatment for moderate to severe anxiety disorders in the perinatal and postnatal period.

SSRIs in pregnancy. Lacking support of randomized controlled trials, most recommendations regarding SSRIs in pregnancy come from expert consensus or cohort and case control studies. Studies have raised concerns for an increased rate of congenital heart defects among fetuses exposed to paroxetine[32] and primary pulmonary hypertension with all SSRIs.[33] But the absolute risks are quite small. There have also been concerns regarding low birth weight and preterm birth, but it

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is possible that these outcomes result from the depression itself rather than the medication.[34]

Unfortunately, there are very few studies evaluating the efficacy of SSRIs in treating postpartum depression[35] and even fewer that specifically evaluate their effect on perinatal anxiety. Many experts believe that not treating anxiety/depression is actually more harmful than the fetal effects of SSRIs, and that SSRIs are largely safe in both pregnancy and while breastfeeding, with benefits outweighing the risks.

SSRIs while breastfeeding. SSRIs have been found to be present in varying levels in breastmilk but may or may not be present in the serum of nursing infants.[36] A 2008 guideline from the American College of Obstetricians and Gynecologists lists paroxetine, sertraline, and fluvoxamine as slightly safer than fluoxetine, escitalopram, and citalopram.[37] A 2015 systematic review similarly concluded that sertraline and paroxetine have the most safety data on lactation.[38] Lowest effective dose is always recommended to minimize exposure.

Benzodiazepines. As in the general population, benzodiazepines should be reserved for short-term use in acute anxiety and panic because they are associated with such adverse effects as worsening of depression/anxiety and risk of dependence and overdose. Longer-acting benzodiazepines (eg, clonazepam) are generally not recommended in lactation because of reported effects on infants, including sedation. Shorter-acting benzodiazepines (eg, lorazepam) are considered safer in lactation.[39]

THE CASE

Julia saw her family physician 4 more times, was evaluated by an ear-nose-and-throat specialist for her throat complaints, saw a therapist for CBT and a psychiatrist for medication, had 3 more ED visits, and lost 23 pounds before she finally agreed to start an SSRI for postpartum anxiety. She screened high on the EPDS-3A (9/9) despite scoring low on the full EPDS for perinatal depression (total, 9/30).

Because of her swallowing impediments and because she was breastfeeding, sertraline solution was started at very small doses. It was titrated weekly to obtain therapeutic levels. By 4 weeks, her weight stabilized. By 8 weeks, she started gaining weight and sleeping better. She saw the therapist regularly to continue CBT techniques. Over the next several months she started eating a normal diet. She is currently maintained on her SSRI, is still breastfeeding, and has achieved insight into her perinatal anxiety disorder. JFP

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References

1. O'Connor E, Rossom RC, Henninger M, et al. Primary care screening for and treatment of depression in pregnant and postpartum women: evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2016;315:388-406.
2. Kessler RC, Berglund P, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62:593-602.
3. Giardinelli L, Innocenti A, Benni L, et al. Depression and anxiety in perinatal period: prevalence and risk factors in an Italian sample. *Arch Womens Ment Health*. 2012;15:21-30.
4. Rallis S, Skouteris H, McCabe M, et al. A prospective examination of depression, anxiety and stress throughout pregnancy. *Women Birth*. 2014;27:e36-e42.
5. Ko JY, Rockhill KM, Tong VT, et al. Trends in postpartum depressive symptoms — 27 States, 2004, 2008, and 2012. *MMWR Morb Mortal Wkly Rep*. 2017;66:153-158.
6. Fairbrother N, Janssen P, Antony MM, et al. Perinatal anxiety disorder prevalence and incidence. *J Affect Disord*. 2016;200:148-155.
7. Phillips J, Sharpe L, Matthey S, et al. Maternally focused worry. *Arch Womens Ment Health*. 2009;12:409-418.
8. Buist A, Gotman N, Yonkers KA. Generalized anxiety disorder: course and risk factors in pregnancy. *J Affect Disord*. 2011;131:277-283.
9. Schlomi Polachek I, Huller Harari L, Baum M, et al. Postpartum anxiety in a cohort of women from the general population: risk factors and association with depression during last week of pregnancy, postpartum depression and postpartum PTSD. *Isr J Psychiatry Relat Sci*. 2014;51:128-134.
10. Bei B, Coo S, Trinder J. Sleep and mood during pregnancy and the postpartum period. *Sleep Med Clin*. 2015;10:25-33.
11. Lawson A, Murphy KE, Sloan E, et al. The relationship between sleep and postpartum mental disorders: a systematic review. *J Affect Disord*. 2015;176:65-77.
12. APA. *Diagnostic and Statistical Manual of Mental Disorders, 5th ed*. Washington, DC: American Psychiatric Association Publishing; 2013.
13. Langan R, Goodbred AJ. Identification and management of peripartum depression. *Am Fam Physician*. 2016;93:852-858.
14. Ali E. Women's experiences with postpartum anxiety disorders: a narrative literature review. *Int J Womens Health*. 2018;10:237-249.
15. Tietz A, Zietlow AL, Reck C. Maternal bonding in mothers with postpartum anxiety disorder: the crucial role of subclinical depressive symptoms and maternal avoidance behaviour. *Arch Womens Ment Health*. 2014;17:433-442.
16. Field T. Postnatal anxiety prevalence, predictors and effects on development: a narrative review. *Infant Behav Dev*. 2018;51:24-32.
17. Serim Demirgoren B, Ozbek A, Ormen M, et al. Do mothers with high sodium levels in their breast milk have high depression and anxiety scores? *J Int Med Res*. 2017;45:843-848.
18. Ystrom E. Breastfeeding cessation and symptoms of anxiety and depression: a longitudinal cohort study. *BMC Pregnancy Childbirth*. 2012;12:36.
19. Britton JR. Infant temperament and maternal anxiety and depressed mood in the early postpartum period. *Women Health*. 2011;51:55-71.
20. Glasheen C, Richardson GA, Kim KH, et al. Exposure to maternal pre- and postnatal depression and anxiety symptoms: risk

CONTINUED ON PAGE 174

CONTINUED FROM PAGE 170

for major depression, anxiety disorders, and conduct disorder in adolescent offspring. *Dev Psychopathol*. 2013;26:1045-1063.

21. Petrozzi A, Gagliardi L. Anxious and depressive components of Edinburgh Postnatal Depression Scale in maternal postpartum psychological problems. *J Perinat Med*. 2013;41:343-348.
22. Bina R, Harrington D. The Edinburgh Postnatal Depression Scale: screening tool for postpartum anxiety as well? Findings from a confirmatory factor analysis of the Hebrew version. *Matern Child Health J*. 2016;20:904-914.
23. Matthey S, Fisher J, Rowe H. Using the Edinburgh postnatal depression scale to screen for anxiety disorders: conceptual and methodological considerations *J Affect Disord*. 2013;146:224-230.
24. Spitzer RL, Kroenke K, Williams JB, et al. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006;166:1092-1097.
25. Simpson W, Glazer M, Michalski N, et al. Comparative efficacy of the Generalized Anxiety Disorder 7-Item Scale and the Edinburgh Postnatal Depression Scale as screening tools for generalized anxiety disorder in pregnancy and the postpartum period. *Can J Psychiatry*. 2014;59:434-440.
26. Moran TE, Polanin JR, Wenzel A. The Postpartum Worry Scale-Revised: an initial validation of a measure of postpartum worry. *Arch Womens Ment Health*. 2014;17:41-48.
27. Fallon V, Halford JCG, Bennett KM, et al. The Postpartum Specific Anxiety Scale: development and preliminary validation. *Arch Womens Ment Health*. 2016;19:1079-1090.
28. Hofmann SG, Smits JA. Cognitive-behavioral therapy for adult anxiety disorders: a meta-analysis of randomized placebo-controlled trials. *J Clin Psychiatry*. 2008;69:621-632.
29. Goodman JH, Guarino A, Chenausky K, et al. CALM Pregnancy: results of a pilot study of mindfulness-based cognitive therapy for perinatal anxiety. *Arch Womens Ment Health*. 2014;17:373-387.
30. Marchesi C, Ossola P, Amerio A, et al. Clinical management of perinatal anxiety disorders: a systematic review. *J Affect Disord*. 2016;190:543-550.
31. Feijó L, Hernandez-Reif M, Field T, et al. Mothers' depressed mood and anxiety levels are reduced after massaging their preterm infants. *Infant Behav Devel*. 2006;29:476-480.
32. Bérard A, Iessa N, Chaabane S, et al. The risk of major cardiac malformations associated with paroxetine use during the first trimester of pregnancy: a systematic review and meta-analysis. *Br J Clin Pharmacol*. 2016;81:589-604.
33. Huybrechts KF, Bateman BT, Palmsten K, et al. Antidepressant use late in pregnancy and risk of persistent pulmonary hypertension of the newborn. *JAMA*. 2015;313:2142-2151.
34. Cantarutti A, Merlino L, Monzani E, et al. Is the risk of preterm birth and low birth weight affected by the use of antidepressant agents during pregnancy? A population-based investigation. *PLoS One*. 2016;11:e0168115.
35. Molyneaux E, Howard LM, McGeown HR, et al. Antidepressant treatment for postnatal depression. *Cochrane Database Syst Rev*. 2014;11:CD002018.
36. Freeman MP. Postpartum depression treatment and breastfeeding. *J Clin Psychiatry*. 2009;70:e35.
37. ACOG Committee on Practice Bulletins—number 92. Use of psychiatric medications during pregnancy and lactation. *Obstet Gynecol*. 2008;111:1001-1020.
38. Orsolini L, Bellantuono C. Serotonin reuptake inhibitors and breastfeeding: a systematic review. *Hum Psychopharmacol*. 2015;30:4-20.
39. NIH. Drugs and Lactation Database. https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm. Accessed February 26, 2019.