Prioritizing Mental Health to Optimize Perinatal, Fetal, and Neonatal Outcomes

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Selective serotonin reuptake inhibitors (SSRIs) have long been a cornerstone in the treatment of perinatal mood and anxiety disorders, with efficacy extrapolated from studies in the general population. Their safety in pregnancy and lactation has been rigorously evaluated in large observational studies that carefully account for confounding by indication. Recently, the US Food and Drug Administration convened a panel discussion on the use of SSRIs in pregnancy, questioning the safety of fetal exposure. This discussion illustrated the imperative to utilize evidence-based medical knowledge when evaluating and developing treatment plans for perinatal women with depression and anxiety. It also highlighted the need for balanced conversations and shared decision-making that account for the risks of untreated disease for both the mother and the offspring.

One in 5 women will experience a perinatal mood or anxiety disorder (PMAD) during pregnancy or postpartum. Of those who develop a PMAD, approximately 30% will enter their pregnancy with symptoms, another 30% will develop symptoms during pregnancy, and 40% will have incident symptoms in the postpartum period. The mental health of the mother directly affects not only her health but also that of her pregnancy and offspring as well. Pregnant women with moderate to severe depression or anxiety are more likely to have preterm births and undergo cesarean deliveries. When PMADs are untreated, there is also a higher likelihood of developing placental abnormalities, including hypertensive disorders of pregnancy.[1–3] Those struggling with PMADs are less likely to attend prenatal appointments, which may delay identification of other health issues. In addition, those with untreated PMADs are more likely to use unregulated or nonprescribed substances in pregnancy. When PMADs are left untreated in the postpartum period, new mothers may be unable to adequately bond with their infants, placing these children at increased risk for difficulties in socialization, insecure attachment, and behavioral and cognitive developmental disorders, as well as depression and anxiety, as they grow and develop.[4]

Among perinatal individuals, one of the leading overall and preventable causes of maternal death is mental health conditions—specifically, suicide and overdose.[5,6] According to the most recent 2021 data from the Centers for Disease Control and Prevention, among pregnancy-related deaths with mental health condition as the underlying cause, 31.3% were determined by maternal mortality review committees to be due to suicide.[7] Thus, for multiple reasons, there is no question that mental health should be optimized in all people, including those who are pregnant.

Pregnancy is a time that is associated with increased scrutiny related to maternal exposures as the care of 2 patients is occurring simultaneously and their outcomes are inextricably linked. This requires clinicians and patients to balance the risks of leaving conditions untreated, with established negative health impacts, against the benefits and risks of treatments. Education of clinicians and patients using appropriately interpreted data is imperative for patient-centered decision-making. Without adequate knowledge informed by accurate scientific data, medications may be discontinued by clinicians or patients, or never even offered or started.

When discussing treatment of PMADs, clinicians should assess symptom severity and consider the full range of treatment options including psychosocial changes (eg, sleep hygiene, exercise), psychotherapy, and psychopharmacology. Evidence-based modes of psychotherapy for PMADs include cognitive behavioral therapy (CBT) and interpersonal therapy (IPT). CBT focuses on identifying and challenging negative thought patterns (cognitive distortions) by reframing one's thoughts and adjusting behaviors. In addition to addressing the "negative thoughts," CBT also focuses on behavioral activation, which encourages patients to engage in activities that bring them joy. CBT is a short-term therapy that typically requires 12–16 sessions. It is meant to offer timely identification and change of negative thoughts and behaviors. Whereas CBT examines thoughts and behaviors, IPT examines feelings and relationships. IPT focuses on

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improving a person's current interpersonal relationships and social functioning, which can contribute to depressive symptoms. Similar to CBT, IPT is also time-limited therapy, and participants typically undergo 12–16 sessions.

Although psychotherapy is recommended as first-line treatment for mild depression or anxiety, psychopharmacology may be appropriate in certain circumstances. Not all patients have access to therapy due to lack of availability of therapist, limited after-hours appointments, or inadequate insurance coverage. Some patients may not feel comfortable participating in psychotherapy, while others may have had benefit with medications in the past and would like to resume medication management. Psychopharmacology is the preferred modality for individuals with severe symptoms, given their higher likelihood of functional impairment, safety concerns, and the need for more rapid symptom relief. In many cases, initiating medication early in severe illness can be lifesaving.[8] There is ample supportive evidence that a combination of therapy and medications may work synergistically, offering more robust treatment outcomes. Ultimately, the decision of which treatment option to pursue should be a shared decision between patients and their clinicians.

When discussing psychopharmacologic management in the perinatal patient, it is important to acknowledge that, to date, pregnant and lactating women have been excluded from randomized controlled trials. However, well-designed observational studies including hundreds of thousands of exposed offspring with long-term follow-up demonstrate minimal adverse impacts of SSRI use in pregnancy, when confounding by indication is addressed by using appropriate comparison groups that account for underlying maternal illness.

Large, well-controlled studies demonstrate no significant increase in the risk of congenital malformations with in utero SSRI exposure after adjusting for confounding factors.[9] For persistent pulmonary hypertension of the newborn (PPHN), the absolute risk difference, if present, is small, with a residual absolute risk increase of approximately 1–2 per 1,000 births.[10] These risks are lower than those associated with other common pregnancy complications, such as pregestational or gestational diabetes (which increase the risk of congenital malformation and PPHN) and preterm birth (which increases the risk of PPHN). The risk of adverse neurodevelopmental outcomes is, likewise, not higher in children exposed to SSRIs in pregnancy than those exposed to untreated PMADs. In fact, IQ and behavioral disorders may be positively affected by treating perinatal mental health needs instead of allowing them to remain untreated.[11] Reports of increased risk of autism or attention-deficit/hyperactivity disorder have not been substantiated in observational studies when applying robust pharmacoepidemiological approaches adjusting for genetic and environmental confounders.[12]

Neonatal adaptation syndrome is noted in up to 30% of neonates exposed to SSRIs in utero, presenting with symptoms including neonatal jitteriness, increased muscle tone, fussiness, feeding difficulties, or mild respiratory distress. The proposed mechanism involves either a serotonin discontinuation effect or serotonergic overstimulation in the neonatal period due to immature metabolic clearance.[13] Ultimately, the symptoms, if present, are transient and typically resolve within the first few days after delivery. Breastfeeding may mitigate the discontinuation effect as small amounts of SSRI pass into breastmilk, which allows for gradual tapering of the SSRI exposure in the neonate.[14]

As clinicians, we are obligated to care for the whole patient. Obstetric clinicians are obligated to care for two patients simultaneously. Mental health needs are no different than physical health needs and, in fact, actively impact physical health. Similar to providing appropriate treatment advice, including pharmacotherapy, for disorders such as hypertension or diabetes in pregnancy, clinicians should feel competent and confident in advising their patients on appropriate treatment options for mental health disorders. These conversations should be personalized, grounded in an understanding of the patient's values and preferences, and informed by the best available evidence on the safety and effectiveness of treatment options in pregnancy and postpartum. They should acknowledge the potential consequences of untreated illness; address benefits, limitations, and risks of all treatment options; and ultimately empower patients to make informed decisions that support the health and well-being of themselves and their families.

Multiple societies have published or endorsed guidelines as a roadmap for clinicians and patients, including the American College of Obstetricians and Gynecologists,[15] Society for Maternal-Fetal Medicine, American Psychiatric Association, and Postpartum Support International (PSI). Additionally, there are currently 30 state or regional and 2 national (PSI and Department of Veterans Affairs) perinatal psychiatric access programs in the US that offer perinatal psychiatric consultation, resources, and referrals for care. These resources offer education and support for clinicians to feel empowered to care for the mental health needs of their perinatal patients. Furthermore, integrated behavioral health models, such as the collaborative care model, provide another effective strategy, embedding mental health screening, brief interventions, and care coordination directly within obstetric settings. This approach allows timely identification and treatment of mental health conditions, reduces barriers to access, and fosters a seamless, team-based approach to perinatal care.

Treating perinatal mental health conditions is both life-changing and life-saving. There is no maternal health without addressing mental health, and improving outcomes for women, their children, and their families requires offering the full range of treatment options supported by informed counseling and shared decision-making.

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References

1. Runkle JD, Risley K, Roy M, et al. Association between perinatal mental health and pregnancy and neonatal complications: a retrospective birth cohort study. *Womens Health Issues*. 2023;33(3):289–299.
2. Shay M, MacKinnon AL, Metcalfe A, et al. Depressed mood and anxiety as risk factors for hypertensive disorders of pregnancy: a systematic review and meta-analysis. *Psychol Med*. 2020;50(13): 2128–2140.
3. Martinez CA, Marteinsdottir I, Josefsson A, et al. Epigenetic modifications appear in the human placenta following anxiety and depression during pregnancy. *Placenta*. 2023;140:72–79.
4. Screening and Diagnosis of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 4. *Obstet Gynecol*. 2023; 141(6):1232–1261.
5. Trost S, Beauregard J, Chandra G, et al. *Pregnancy-Related Deaths: Data From Maternal Mortality Review Committees in 36 US States, 2017–2019*. Centers for Disease Control and Prevention, U.S. Dept. of Health and Human Services; 2022. Accessed December 7, 2022. https://www.cdc.gov/maternal-mortality/php/data-research/mmrc-2017-2019.html
6. Trost SL, Beauregard JL, Smoots AN, et al. Preventing pregnancy-related mental health deaths: insights from 14 US maternal mortality review committees, 2008-17. *Health Aff*. 2021;40(10):1551–1559.
7. Centers for Disease Control and Prevention. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees. 2025. Accessed August 23, 2025. https://www.cdc.gov/maternal-mortality/php/data-research/mmrc/index.html?cove-tab=3
8. Barbui C, Esposito E, Cipriani A. Selective serotonin reuptake inhibitors and risk of suicide: a systematic review of observational studies. *CMAJ (Can Med Assoc J)*. 2009;180(3):291–297.
9. Huybrechts KF, Palmsten K, Avorn J, et al. Antidepressant use in pregnancy and the risk of cardiac defects. *N Engl J Med*. 2014;370(25): 2397–2407.
10. 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(21):2142–2151.
11. Lähdepuro A, Lahti-Pulkkinen M, Pyhälä R, et al. Positive maternal mental health during pregnancy and mental and behavioral disorders in children: a prospective pregnancy cohort study. *J Child Psychol Psychiatry*. 2023;64(5):807–816.
12. Ames JL, Ladd-Acosta C, Fallin MD, et al. Maternal psychiatric conditions, treatment with selective serotonin reuptake inhibitors, and neurodevelopmental disorders. *Biol Psychiatry*. 2021;90(4):253–262.
13. Grigoriadis S, VonderPorten EH, Mamisashvili L, et al. The effect of prenatal antidepressant exposure on neonatal adaptation: a systematic review and meta-analysis. *J Clin Psychiatry*. 2013;74(4):e309–e320.
14. Kieviet N, Hoppenbrouwers C, Dolman KM, et al. Risk factors for poor neonatal adaptation after exposure to antidepressants in utero. *Acta Paediatr*. 2015;104(4): 384–391.
15. Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 5. *Obstet Gynecol*. 2023;141(6):1262–1288.