Insights Into Perinatal Mood and Anxiety Disorders: Addressing Treatment Gaps, Risk Factors, and Health Outcomes

Aneesh Kumar Sangtiani, MBBS; Manahil Mubeen, MBBS; Ayesha Irfan, MBBS

he transition to motherhood is a profound and complex experience, and when complicated by perinatal mood and anxiety disorders, it can lead to severe consequences for both the mother and her child, warranting an urgent need for increased awareness and comprehensive care strategies.

Perinatal mood and anxiety disorder (PMAD) is a term frequently used to describe mental health conditions that occur during pregnancy, following the birth of a baby, during adoption, or after experiencing the loss of a pregnancy or infant. These conditions include perinatal depression, anxiety disorders, obsessive-compulsive disorder, posttraumatic stress disorder, and postpartum psychosis.

PMADs are the most frequently occurring complications during pregnancy and the most frequently undiagnosed.¹ A systematic review of prevalent anxiety disorders during the perinatal period found that 20.7% of women (95% CI 16.7–25.4) experienced 1 or more anxiety disorders, with a slightly higher prevalence during pregnancy compared to the postpartum period (3.1%).² Significant evidence shows that the negative effects of PMADs are distributed

Author Affiliations: Department of Medicine, Dow University of Heath Sciences, Karachi, Pakistan (Sangtiani, Mubeen, Irfan).

Corresponding Author: Ayesha Irfan, Dow University of Health Sciences, Baba-E-Urdu Rd, Karachi 74200, Pakistan; phone +923062873031; email belairfan4@gmail.com; ORCID ID 0009-0003-0546-7662 unevenly, with Black women facing considerably higher rates of adverse outcomes than White women. $^{\rm 3}$

Risk factors for PMADs are multifaceted and are classified into 5 domains: psychological, obstetric, biological, social, and lifestyle. Psychological factors include a history of patients experiencing these conditions receive no treatment at all. Furthermore, 91% to 93% are inadequately treated, and 95% to 97% continue to suffer without remission. One study reports that only 8.6% of women with depression during pregnancy and 6.6% of women with postpartum depression receive adequate treat-

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depression, negative attitudes towards pregnancy, and past sexual abuse. Obstetric risk factors involve complications during delivery, such as emergency cesarean deliveries and when a woman's hopes or expectations about childbirth and motherhood don't reflect reality. Biological factors include young age, significant drops in estrogen and progesterone levels after childbirth, and low serotonin levels. Social factors involve inadequate support and domestic violence. Lifestyle factors include dietary habits, sleep patterns, and physical activity, with deficiencies in vitamins and minerals also influencing risk.⁴

Despite the prevalence of manifold risk factors, PMADs such as antenatal depression and postpartum depression are severely under diagnosed and inadequately treated. Studies show that these disorders go undetected in 50% to 70% cases, while approximately 85% of

ment,⁵ and Black women are more frequently underdiagnosed or untreated for PMADs than White women.³ This is extremely concerning as untreated PMADs could have disastrous effects on both maternal and infant health.

Maternal mood and anxiety disorders are linked to a higher risk of preeclampsia and put the mother at long-term health risks for conditions such as hypertension and diabetes, increased risk of cardiovascular disease, maternal gestational weight retention, and overall morbidity/mortality.^{5,6} Untreated antenatal depression has been observed to be a significant risk factor for developing postpartum depression—counted as the greatest risk factor for maternal suicide and infanticide.⁵

Untreated anxiety and depression during pregnancy also has been identified as a risk factor for increased labor inductions and cesarean delivery, leading to adverse health outcomes. It is associated with increased risk of low Apgar scores, neonatal hypoxia,7 likelihood of premature delivery, and a reduction in breastfeeding initiation. Furthermore, women exhibiting depressive symptoms in the early postpartum period may face increased risks of negative infant-feeding outcomes, such as shorter breastfeeding duration, more breastfeeding difficulties, and lower levels of breastfeeding self-efficacy. Emerging evidence also indicates that depressed women might be less likely to breastfeed exclusively,8,9 which can lead to poorer health outcomes for both the mother and the infant, including weakened immune function and increased risk of infections in the baby and delayed postpartum recovery for the mother.

Untreated PMADs are also linked to toxic stress in newborns. This severe stress response results in persistently elevated cortisol levels, leading to development of unhealthy lifestyles, socioeconomic inequalities like school failure and financial hardship, and result in poor health outcomes.¹⁰ Per reports, PPD can lead to child abuse, neglect, discontinuation of breastfeeding, and family dysfunction, all harming early brain development. Families of individuals who experienced major depression before thirty are 3 to 5 times more likely to experience major depression themselves, suggesting a genetic component. Maternal PPD impairs mother-child bonding and attachment, vital for infant development. Infants in such neglectful settings due to maternal depression show adverse brain changes, impaired social interaction, and developmental delays, particularly attachment problems, which become less responsive to intervention over time. However, treating maternal depression reduces psychiatric symptoms and improves child functioning, highlighting the importance of addressing PMADs.11

Treating PMADs is of utmost importance for preventing any harm to women's mental health and physical well-being and for the growth and development of the infant. It is crucial for women suffering from these disorders to get screened and assessed by a skilled perinatal mental health specialist. This includes comprehensive planning in coordination with the obstetrics team, ideally prior to conception, and continues throughout the perinatal period.¹² First-line therapy for women suffering from mild to moderate depression are psychological and behavioral therapies.¹² Extensive research supports effectiveness of various psychological interventions, such as interpersonal therapy (IPT),¹³ partner-assisted IPT,¹⁴ cognitive behavioral therapy,¹⁴ and psychoeducation.¹⁵ Pharmacotherapy is also regarded as a suitable and effective therapeutic choice for women suffering from intense symptoms of depression and anxiety.¹³

Women with PMADs face many challenges in accessing health care. System-level barriers include unclear care pathways, poor communication between facilities, lack of protocols, gaps in care, limited educational resources, and bureaucratic hurdles. On the provider side, issues like inadequate training, time constraints, and confusion about roles often hinder effective diagnosis and treatment.

In conclusion, PMADs represent significant yet often overlooked challenges affecting mothers, infants, and families. By understanding the risk factors, recognizing the far-reaching effects on health and family dynamics, and addressing the disparities in treatment, we can create a supportive environment for all mothers. It is compulsory to invest in under-integrated mental health care, inclusive support structures, and racial equity-targeted interventions. Let us work together to ensure that all mothers have the opportunity to thrive during this crucial period of their life.

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