Postpartum Depression
A Major Public Health Problem

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Postpartum psychiatric disorders, particularly depression, have received increasing attention in the United States for several reasons. Postpartum depression is very common. One of 7 new mothers (14.5%) experience depressive episodes that impair maternal role function.1 The neurobiology of women with postpartum mood instability appears differentially sensitive to the destabilizing effects of hormonal withdrawal at birth.2 Coupled with entry of the newborn into the family, postpartum depression affects crucial infant and adult developmental processes. The disruption to the early mother-infant relationship contributes to short- and long-term adverse child outcomes.3 The negative effects of maternal depression on children include an increased risk of impaired mental and motor development, difficult temperament, poor self-regulation, low self-esteem, and behavior problems.4

Postpartum psychosis has been associated with tragic outcomes, such as maternal suicide and infanticide.5 As one example of a policy response to concern about postpartum disorders, legislation that mandates education and screening was enacted recently in New Jersey.6 The Safe Motherhood Group, which included representatives from multiple agencies within the US Department of Health and Human Services, commissioned an evidence-based evaluation of data about perinatal depression that could be used to inform national policy. In response, the Agency for Healthcare Research and Quality (AHRQ) developed an evidence report.7

In the AHRQ report,1 perinatal depression is defined as an episode of major or minor depression that occurs during pregnancy or the first 12 months after birth. The authors noted that the diagnosis and timing of perinatal episodes have not been consistently identified. Two definitional dimensions are relevant: diagnosis and time of onset. The term with postpartum onset is used in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision.7 The diagnosis must be either major depression, a mixed or manic episode of bipolar disorder, or brief psychotic disorder. The time criterion is within 4 weeks of birth. The International Classification of Diseases, 10th Edition8 permits classification of mental disorders as associated with the puerperium if they begin within 6 weeks of birth and cannot be classified elsewhere. An international expert panel9 recommended 3 months as the time frame for defining postpartum onset for a variety of diagnoses, based on the epidemiologic studies of Kendell and colleagues.10-12 According to the AHRQ report, the specifics of the course of a depressive illness with onset during the perinatal period, including the severe physiologic and psychological challenges unique to this period that complicate the identification and management of perinatal depression, seem to suggest that this topic would have a substantial degree of high-quality research. We were surprised by the paucity of such evidence in this area.10,11

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Against this backdrop of evolving data, the study by Munk-Olsen et al in this issue of JAMA is the first large-scale epidemiologic investigation of psychiatric illness during childbearing since the work of Kendall et al more than 2 decades ago in Edinburgh, Scotland. The findings of these 2 studies in different populations with varying comparison groups converge. Kendall et al studied 120 mothers admitted from a population of 54,087 women who gave birth. Comparison data were derived from a temporal analysis of the 2-year period before birth (excluding gestation). An increased risk of hospital admission for any psychiatric illness occurred from birth to 90 days. The risk remained significantly higher over the first 2 years following childbirth, even after exclusion of admissions from the first 3 months. Admissions specifically for psychoses were strikingly higher even after exclusion of admissions from the first 3 months. Factors associated with postpartum admission were being unmarried (primarily widowed, divorced, or separated), primiparity, surgical delivery, and perinatal death.

In their current study involving a large, reproductive-aged, population-based Danish cohort, Munk-Olsen et al limited their study to women (n = 1171) and men (n = 658) with a first lifetime onset of psychiatric illness from the time of their infant’s birth to 12 months after becoming a parent. The authors provided strong evidence that in this group, previously undiagnosed women have an increased risk for incident psychiatric treatment, particularly hospital admission. Similar to the findings of Kendall et al, the risk of admission for the period of birth through 3 months postpartum was significantly higher compared with women who became parents 11 to 12 months earlier. There was a significantly elevated period of risk in the 10- to 19-day postpartum period (relative risk [RR], 7.31; 95% confidence interval [CI], 5.44-9.81), followed by the 0- to 9-day postpartum period (RR, 3.60; 95% CI, 2.57-5.02). Primiparity was a crucial risk factor. Although increased risk also followed second pregnancies, it was not present following 3 or more.

The diagnostic entities most frequently observed after birth in both studies were major mood disorders, with a particular risk of bipolar disorder. Munk-Olsen et al observed highly significant RRs of 23.33 (95% CI, 11.52-47.24) in the first 30 days and 6.30 (95% CI, 2.44-16.25) in the 31- to 60-day postpartum period for bipolar disorder. Kendall et al reported an RR of 21.7 for admission with psychosis (primarily bipolar disorder) within 30 days; in fact, they observed more admissions for psychosis in the 30-day postpartum period than in the entire 2-year period prior to birth.

Munk-Olsen et al found no increase in the risk of incident psychiatric illness among fathers of live-born infants at any time during or following their partner’s pregnancy. Both groups of authors described pregnancy as a time of decreased risk of new-onset mental disorders among women. Munk-Olsen et al found that the pregnancy period reduced the risk of admission to a psychiatric hospital for mothers (RR, 0.53) in their sample of women who had a live-born child and no previous psychiatric contact (admission or outpatient) compared with women who were 1 year postpartum. Kendall et al reported a similar lower risk of admission during pregnancy (RR, 0.65). The excess of admissions after childbirth was greater than the apparent deficit of admissions during pregnancy.

Women who have psychiatric illnesses that predate childbearing are likely to differ from those who have not previously had a psychiatric diagnosis. For example, Viguera et al and Cohen et al demonstrated that pregnancy is not protective against recurrent bipolar or major depressive episodes among women who discontinue maintenance medication. Kendall et al also demonstrated that the cohort of women who had psychiatric illness prior to a birth had a higher risk of recurrence postpartum. The risk of readmission was related to diagnosis, with 21.4% of women with bipolar disorder and 13.3% of women with previous depressive illnesses requiring admissions after later birth.

These collective data emphasize the importance of recognizing childbearing as a potent health factor in the life course of women. Childbearing influences the course of any disease state and acts as a biopsychosocial factor that may precipitate new episodes of illness. The data also provide evidence to inform and support universal screening for postpartum mood episodes. The studies converge on the time frame of elevated risk for both hospitalization and outpatient contacts as the first 3 months postpartum, particularly in primiparae, independent of considerations of diagnosis. Both investigative teams identified major mood disorders as the primary diagnoses. Therefore, screening should be implemented as early as 2 weeks after delivery and no later than 12 weeks postpartum to identify episodes of major mood disorder and other mental illnesses. The Edinburgh Postnatal Depression Scale is a 10-item questionnaire that has been validated extensively as a screening tool for postpartum depression.

Effective treatments for these episodes exist. Rapid implementation of treatment is prudent because mood episodes can be lengthy and psychosocial sequela increase with duration. Maternal depression exacts a heavy toll on women’s functioning and the health and well-being of their children. As suggested by the AHRQ report, further research is necessary to determine whether screening results in improved access to treatment and maternal, infant, and family health outcomes.

Satcher emphasized the foundation that emotional well-being provides for health, noting that “mental health is fundamental to health.” Mental health is crucial to a mother’s capacity to function optimally, enjoy relationships, prepare for the infant’s birth, and cope with the stresses and appreciate the joys of parenthood.
REFERENCES


