

# Maternal Depression Is a Public Health Crisis: The Time to Act Is Now

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Maternal depression can have negative impacts during early childhood, which is a crucial period for neurodevelopment.<sup>1</sup> Compelling evidence has demonstrated the harmful effects of maternal depression on the physical health, cognitive skills, and social-emotional development of children.<sup>2</sup> The widespread prevalence of maternal depression in the United States and worldwide, with estimates ranging from 3% to 60%, constitutes a public health crisis, particularly one affecting low-income women and their children.<sup>3,4</sup>

In this month's issue of *Pediatrics*, Wall-Wieler et al<sup>5</sup> provide further evidence of these risks by showing that children exposed to maternal depression before age 5 had 17% greater odds of developmental vulnerability compared with children not exposed. The authors used a large population-based cohort with linked data to census demographics, physician and hospital claims, and results of the Early Development Instrument. They examined how specific developmental domains are differentially affected by exposure to maternal depression before age 5, finding the strongest association with difficulties in social-emotional development. Furthermore, they demonstrated that exposure to maternal depression during two "sensitive periods" had the strongest association with developmental vulnerability: before age 1 and the year before school entry.

Although this study improves our understanding of the detrimental effects of maternal depression on child

development, it also engenders further questions because several important potential confounders were not included in the analysis, such as the presence of prenatal depression, severity and chronicity of maternal depression, comorbidities, and familial factors such as parenting practices and involvement of fathers and partners.

Many women with maternal depression manifest symptoms prenatally. Recent studies have suggested that prenatal depression may influence early child development through altered stress hormone and immune functioning that negatively affect developing brain architecture.<sup>1,2,6,7</sup> Surprising to some, prenatal depression is more common than postpartum depression and may be a major, unexplored contributor to the developmental vulnerability of the children in the sample.<sup>6</sup>

In the current study, maternal depression was determined by medical record review documenting antidepressant prescriptions, hospitalizations, or office visits. Such classification does not distinguish mothers who are adequately treated versus those still experiencing depression. Recent studies have demonstrated that persistent and severe postnatal depression as well as co-occurring mental health diagnoses such as anxiety, posttraumatic stress disorder, and substance use disorder substantially raise the risk for adverse outcomes. Consequently, differentiating the severity and chronicity of depression as well as including comorbidities would be important for future studies.<sup>1,8</sup> Moreover, because

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only 15% of women with postnatal depression receive professional care, using treatment as the defining measure may significantly underestimate its adverse effects.<sup>9</sup>

A strength of this study is the large cohort size; however, the methodology of data collection (using existing records rather than direct observation) limited the ability to include characteristics of the familial milieu that are important moderating factors for children exposed to maternal depression such as parenting practices and involvement of fathers and partners. Unsurprisingly, research has revealed that maternal depression can have a negative effect on the quality of mother-child interactions, which may lead to adverse child developmental outcomes.<sup>10-12</sup> Although the mother-child dyad has been the primary focus of research, the important role of fathers and partners on child health deserves more attention. Partners can positively affect their child's development through the quality of their interactions with the child or their support to the mother and home environment; conversely, poor paternal mental health or lack of involvement can exacerbate developmental vulnerability in the setting of maternal depression.<sup>2,13-15</sup>

An especially encouraging finding in this study is that ~70% of children exposed to maternal depression did not have developmental vulnerability in any domain. This speaks to the resiliency of children and serves as a reminder that adverse outcomes are in no way inevitable. What helps some children succeed? As the authors suggest, investigating potential protective factors is essential to understanding how we can best support children by buffering them from adverse risks and optimize their potential.

We are facing a public health crisis. Maternal depression is widespread and not limited to the perinatal

period. We have a role as pediatricians to work toward diminishing the deleterious effects of depression on mothers and their children. What can we as pediatricians do? First, we need to do a better job of screening for depression in mothers, beginning at the prenatal visit and continuing into the postpartum period, infancy, and beyond. Second, we need to work toward improving access to mental health care. Currently, too few mothers who are identified with depression receive care. We need to promote practices that integrate behavioral health into the pediatric medical home, and we need to support Medicaid expansion programs so low-income women have insurance to access care. Third, we need to support parents (mothers but also partners) by investing in evidence-based home-visiting programs as well as positive parenting programs that are culturally sensitive and inclusive of vulnerable populations such as communities of color, immigrants, and those struggling with homelessness. We must also build supportive social systems that incorporate known protective factors by supporting antiracist policies, antipoverty programs, and paid parental leave for mothers as well as fathers and partners. The task at hand is vast and the work will be laborious, but the driving force behind it, our children, is more than worth it.

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