

Postpartum Depression and Its Long-term Impact on Children

Many New Questions

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Just when it seemed that nothing new could be written about the clinical effects of maternal depression on offspring, an article has appeared that deepens our insight and raises new, interesting questions. Using data from the British Avon Longitudinal Study of Parents and Children (ALSPAC), Netsi et al¹



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examine the long-term course and impact of persistent, severe postpartum depression on a child. The ALSPAC is an ongoing population-based study examining the overall health of children. It enrolled all pregnant women in a section of southwest England who delivered between April 1991 and December 1992 (n = 9848), with attrition over the years.

The results show that children of women with persistent and moderate or severe postpartum depression, compared with women with postpartum depression that was neither persistent nor severe, had subsequent adverse outcomes. The ALSPAC study¹ followed the course of maternal illness and child outcomes for 18 years across a large sample while simultaneously using new outcomes and a novel analytic approach. The analysis identified a highly vulnerable group of mothers and their offspring.

The most vulnerable group consisted of women meeting criteria for moderate and severe postpartum depression both at 2 months and 8 months after delivery. These women were more likely to continue to have depression 11 years later; their children also had a 4-fold increased risk of having behavioral problems between ages 3 and 4 years, a 2-fold increased risk of having lower math scores at 16 years, and a 7-fold increased risk of depression at 18 years. These results are important because they suggest a change from the current US Preventive Task Force recommendations² of universal screening for depression in all pregnant women to universal screening for depression beyond pregnancy.

Even observational studies with large samples have shortcomings. As the authors note,¹ the ALSPAC study had a high rate of attrition. However, the authors used imputation and other analyses to test associations between postpartum depression and child outcomes, and their findings on patterns of missing data suggest that the most disadvantaged participants and the participants more likely to experience severe depression were overrepresented in the group with missing data. As a result, the findings are likely an underestimation of the true effect. In addition, the effects of maternal treatment on reducing postpartum depression and improving child out-

comes could not be gleaned from this design. Less than 1% of the sample used antidepressants, and no data were available on whether the women received psychotherapy.

However, the results of this study¹ fill in missing pieces. Epidemiologic studies³ have shown that onset and prevalence of depression is high among women of childbearing years, women who are pregnant, and those in the postpartum period, which means that maternal depression is a problem of large proportion. Other studies⁴ have shown that that school-age offspring who are studied into adulthood and are raised by parents with depression are at long-term risk of depression and other health effects. These effects may be transmitted to the next generation, the grandchildren.⁴

While maternal and paternal depression have an impact on child development, the maternal effect is greater. A recent Swedish study⁵ based on a national birth cohort of more than 1 million children showed that both maternal and paternal depression were associated with a child's poor school performance at 16 years. Maternal depression had the larger effect, especially in daughters. While it is important to consider the clinical states of fathers, there is rationale for focusing on the mother.

Depression in a parent is a modifiable risk factor because symptoms can be treated. There is ample evidence for the efficacy of a range of medication and evidence-based psychotherapy, alone or in combination, for the treatment of depression. Reducing the symptoms of the parent with depression to remission has been shown to reduce adverse effects on children.^{6,7} These effects have been sustained in the children up to 1 year following remission in mothers.⁶ These studies have focused on school-age children and mothers long past the postpartum period. The study by Netsi et al¹ narrows the field to the postpartum period, thus leading to a possible earlier intervention for mothers and those with persistent depression.

Having established a highly vulnerable group of mothers still does not answer the question of what to do about interventions, or who, when, or how to treat. Here the field divides unintentionally. Investigators who mainly treat adults may argue that you need to treat maternal depression first, since a woman with acute depression needs care herself before she can be involved in instruction for parenting and attention to the mother-infant dyad. These investigators might cite the studies that established the value of treatment on the effect of maternal depression remission on school-age children.⁸ Just as credibly, investigators working with women

