Maternal depressive symptoms during and after pregnancy are associated with attention-deficit/hyperactivity disorder symptoms in their 3- to 6-year-old children.


Abstract

Maternal depressive symptoms during pregnancy have been associated with child behavioural symptoms of attention-deficit/hyperactivity disorder (ADHD) in early childhood. However, it remains unclear if depressive symptoms throughout pregnancy are more harmful to the child than depressive symptoms only during certain times, and if maternal depressive symptoms after pregnancy add to or mediate any prenatal effects. 1,779 mother-child dyads participated in the Prediction and Prevention of Pre-eclampsia and Intrauterine Growth Restriction (PREDO) study. Mothers filled in the Center of Epidemiological Studies Depression Scale biweekly from 12+0-13+6 to 38+0-39+6 weeks+days of gestation or delivery, and the Beck Depression Inventory-II and the Conners' Hyperactivity Index at the child's age of 3 to 6 years (mean 3.8 years, standard deviation [SD] 0.5). Maternal depressive symptoms were highly stable throughout pregnancy, and children of mothers with consistently high depressive symptoms showed higher average levels (mean difference = 0.46 SD units, 95% Confidence Interval [CI] 0.36, 0.56, p < 0.001 compared to the low group), and proportion (32.1% vs. 14.7%) and odds (odds ratio = 2.80, 95% CI 2.20, 3.57, p < 0.001) of clinically significant ADHD symptoms. These associations were not explained by the effects of maternal depressive symptoms after pregnancy, which both added to and partially mediated the prenatal effects. Maternal depressive symptoms throughout pregnancy are associated with increased ADHD symptomatology in young children. Maternal depressive symptoms after pregnancy add to, but only partially mediate, the prenatal effects. Preventive interventions suited for the pregnancy period may benefit both maternal and offspring mental health.