

The Association Between Prenatal Stress and Externalizing Symptoms in Childhood: Evidence from the Avon Longitudinal Study of Parents and Children.

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Abstract

BACKGROUND:

It has been suggested that prenatal maternal stress may increase the risk of childhood externalizing disorders, yet no large cohort study has investigated this association across a large range of acute stressors. Our objective was to estimate the association between prenatal stressful events and risk of offspring conduct disorder and hyperactivity.

METHODS:

We used data from 10,184 mother-offspring pairs from the United Kingdom-based Avon Longitudinal Study of Parents and Children. Mothers self-reported 42 prenatal stressful life events at 18 weeks' gestation. Symptoms of conduct disorder and hyperactivity in their offspring were measured at 6, 9, 11, 13, and 16 years of age using the Strengths and Difficulties Questionnaire. The primary outcome was membership in high-symptom trajectories of 1) conduct disorder and 2) hyperactivity throughout childhood, identified using latent class growth modeling. Multinomial logistic regression models estimated the association between prenatal stress and both conduct disorder and hyperactivity, after adjusting for sex, parental education, low birth weight, preterm birth, parental social class, maternal smoking and drinking, maternal mental health, offspring stressful life events, and offspring depressive and anxious symptoms.

RESULTS:

Those exposed to the highest quartile of prenatal stress were more likely to belong to the high symptom trajectory for hyperactivity ($B = 0.46$, $p < .05$) and conduct disorder ($B = 0.88$, $p < .01$), respectively. Prenatal stress further demonstrated a positive, dose-response relationship with symptoms of externalizing disorders at independent time points.

CONCLUSIONS:

The findings suggest that prenatal stressful events may be an independent risk factor for offspring externalizing symptoms, regardless of maternal mental health and offspring internalizing.