

The persisting effect of maternal mood in pregnancy on childhood psychopathology.

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Abstract

Developmental or fetal programming has emerged as a major model for understanding the early and persisting effects of prenatal exposures on the health and development of the child and adult. We leverage the power of a 14-year prospective study to examine the persisting effects of prenatal anxiety, a key candidate in the developmental programming model, on symptoms of behavioral and emotional problems across five occasions of measurement from age 4 to 13 years. The study is based on the Avon Longitudinal Study of Parents and Children cohort, a prospective, longitudinal study of a large community sample in the west of England (n = 7,944). Potential confounders included psychosocial and obstetric risk, postnatal maternal mood, paternal pre- and postnatal mood, and parenting. Results indicated that maternal prenatal anxiety predicted persistently higher behavioral and emotional symptoms across childhood with no diminishment of effect into adolescence. Elevated prenatal anxiety (top 15%) was associated with a twofold increase in risk of a probable child mental disorder, 12.31% compared with 6.83%, after allowing for confounders. Results were similar with prenatal depression. These analyses provide some of the strongest evidence to date that prenatal maternal mood has a direct and persisting effect on her child's psychiatric symptoms and support an in utero programming hypothesis.