Prenatal alcohol use as a risk for attention-deficit/hyperactivity disorder

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Abstract

The objective of the study was to investigate the association between alcohol use during pregnancy and mental disorders in childhood, controlling for confounding risk factors by a longitudinal study of pregnant women and their offspring. The initial cohort comprised pregnant women attending an obstetric service. From the initial sample of 449 pregnant women, 81 mother-child pairs agreed to participate. After 12 years, mother-child pairs were assessed through self-administered questionnaires and semi-structured interviews. The Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL) was used to assess the presence of any mental disorders in the children. The mothers were assessed by the Self-Reporting Questionnaire (SRQ) and the Alcohol Use Disorders Identification Test (AUDIT). Furthermore, data on the mother's alcohol use collected during pregnancy were analysed. A logistic regression tested the influence of alcohol consumption in all trimesters and binge drinking on the occurrence of attention-deficit/hyperactivity disorder (ADHD), controlling for covariates. Binge drinking at any time during pregnancy or low-moderate alcohol consumption in all trimesters of pregnancy was associated with a fivefold increased odds of child ADHD. The combination of both patterns of alcohol use added an increase of 19% in the variance of ADHD's occurrence. The episodic use of at least four drinks or the regular use of low-moderate alcohol doses during pregnancy was associated with significantly increased odds of subsequent child ADHD. Reducing binge drinking and regular alcohol use of pregnant women may lead to a significant decrease in their children developing ADHD.