Symptoms Associated With Attention Deficit/Hyperactivity Disorder and Autism Spectrum Disorders in School-Aged Children Prenatally Exposed to Substances

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Abstract

Prenatal exposure to substances may influence a child’s neurodevelopment and impact on subsequent mental health. In a hospital-based population of school-aged children prenatally exposed to opiates and a number of illicit substances (n = 57), we evaluated mental health symptoms associated with attention deficit/hyperactivity disorder (ADHD) and autism spectrum disorders (ASD) using the Swanson, Nolan, and Pelham Questionnaire, revision IV (SNAP-IV) and the Autism Spectrum Screening Questionnaire (ASSQ) and compared the scores to a reference group which comprised children from the population-based Bergen Child Study (n = 171). Prenatally exposed children had significantly higher SNAP-IV scores associated with ADHD symptoms in both areas of inattention and hyperactivity/impulsivity and also reported a higher ASSQ score related to an increased number of symptoms associated with ASD, compared with the reference group. Of tested predictors of mental health outcomes in the exposed group, the intelligence quotient was a strong predictor of most mental health outcomes, and neonatal abstinence syndrome was a predictor of inattention. In conclusion, prenatally exposed children had more mental health symptoms associated with ADHD and ASD, compared with the reference group.