Attention Deficit Hyperactivity Disorder in Childhood: Healthcare Use in a Danish Birth Cohort during the First 12 Years of Life

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Objectives
To compare the mean number of medical and psychiatric hospital-based services in children with and without attention deficit hyperactivity disorder (ADHD) and to assess the effect of ADHD on hospital-based service use, including child-, parental-, and socioeconomic-related risk factors.

Study design
A Danish birth cohort was followed through 12 years, and children with ADHD were identified using Danish nationwide registries. Poisson regression analyses were used to assess the association of ADHD with service use and to adjust for a comprehensive set of explanatory variables.

Results
Children diagnosed with ADHD used more medical and psychiatric hospital-based healthcare than those without ADHD. In children with ADHD, intellectual disability and parental psychiatric disorder were associated with increased medical and psychiatric service use. Low birth weight and low gestational age were associated with increased medical service use. Psychiatric comorbidity and having a divorced or single parent were associated with increased psychiatric service use.

Conclusions
ADHD independently affected medical and psychiatric hospital-based service use even when adjusting for a comprehensive set of explanatory variables. However, the pattern of medical and psychiatric hospital-based service use is complex and cannot exclusively be explained by the child-, parental-, and socioeconomic-related variables examined in this study.