Associations between neurodevelopmental disorders and factors related to school, health, and social interaction in schoolchildren: Results from a Swedish population-based survey.

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Abstract

BACKGROUND:
Children and adolescents with autism spectrum disorder (ASD) or attention-deficit/hyperactivity disorder (ADHD) are more likely to be surrounded by different risk factors. In order to work preventively with decreasing ADHD and ASD symptoms, there is a need of more knowledge concerning risk factors.

OBJECTIVE:
This study aimed to investigate school, health, lifestyle and social interactions association with autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD) among schoolchildren aged 6-17 years.

METHODS:
Data for 18,416 children and adolescents aged 6-17 years in the county of Värmland, Sweden, from the school year 2012/2013 and 2013/2014 were obtained from the Student Health Database, which includes information on health examinations by school nurses and self-reported information of mental and physical health, social relations, physical activity, and school conditions.

RESULTS:
Of all participants, 2.4% reported only ADHD and 1.6% reported only ASD. The results confirmed that ADHD or ASD was significantly associated with worse school experiences, lower socioeconomic status, less physical activity, more substance use, weaker social network and more impairments than those without ADHD or ASD.

CONCLUSIONS:
Knowledge of risk or protective factors during school years is needed to develop interventions to reduce symptoms of neurodevelopmental disorders in children and adolescents.