The Influence of Health Behaviours in Childhood on Attention Deficit and Hyperactivity Disorder in Adolescence.

Wu X, Ohinmaa A, Veugelers PJ.


Abstract

Attention-deficit and hyperactivity disorder (ADHD) in children and adolescents is a global public health burden. Identification of health-related behavioral risk factors including diet quality and physical and sedentary activities for ADHD is important for prioritizing behavioral intervention strategies to improve mental health. This study aimed to examine the association of diet quality, physical activity, and sedentary behaviours in childhood with ADHD throughout adolescence. We linked data from grade five students aged primarily 10 and 11 years old who participated in a population-based lifestyle survey in the Canadian province of Nova Scotia with their administrative health care data. We applied negative binomial regression methods to examine the associations between health behaviours and ADHD. Of the 4875 students, 9.7% had one or more diagnoses of ADHD between the ages of 10/11 and 18 years. The number of primary diagnoses with ADHD was statistically significantly lower among students with better diet quality, higher levels of physical activity, and those that spent less time playing computers and video games (p < 0.05). These findings suggest that health promotion programs aiming to improve children's diets and active lifestyles may also reduce the public health burden of ADHD.