Children with ADHD have higher risk of teenage obesity and physical inactivity

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Children with attention deficit hyperactivity disorder (ADHD) are more likely to become obese and sedentary teenagers, according to new research.

Previous studies have suggested a link between ADHD and obesity, but whether one leads to the other is unclear. One way to better understand the link is to follow children through to adolescence.

The new study, which followed almost 7000 children in Finland, found that those who had ADHD symptoms at age eight had significantly higher odds of being obese at age 16. Children who had ADHD symptoms were also less physically active as teenagers.

Researchers from Imperial College London reported the findings in the *Journal of the American Academy of Child and Adolescent Psychiatry*.

ADHD affects two to five per cent of school-aged children and young people in the UK and is related to poor school performance. The main symptoms are inattentiveness, hyperactivity and impulsivity. ADHD is complex to diagnose, but screening questionnaires can give an indication of a probable diagnosis, based on a child's behaviour.

Conduct disorder, a condition related to ADHD and linked to tendencies towards delinquency, rulebreaking and violence, was also found to increase risk of obesity and physical inactivity among teens.

The nine per cent of children in the study who had positive results on an ADHD screener at age 8 were at higher risk of obesity at age 16. Senior author, visiting Professor Alina Rodriguez, from the School of Public Health at Imperial College London, said: "Obesity is a growing problem that we need to watch out for in all children and young people, but these findings suggest that it's particularly important for children with ADHD.

"It appears that lack of physical activity might be a key factor. We think encouraging children with ADHD to be more physically active could improve their behaviour problems as well as helping them to stay a healthy weight, and studies should be carried out to test this theory."

Furthermore, children who were less inclined to take part in physically active play as 8 year-olds were more likely to have inattention as teenagers. Binge eating, which was also investigated as a possible factor that could contribute to the link with obesity, was not more prevalent in children with ADHD.

According to Public Health England around 28% of children aged 2 to 15 are overweight or obese. Obesity in childhood and adolescence is linked to a wide variety of short- and long-term health risks, including type 2 diabetes, heart and circulatory disease, and mental health conditions.

The study used questionnaires completed by parents and teachers to assess 6934 children for ADHD and conduct disorder symptoms at ages eight and 16.

Body mass index was calculated based on parents' reports of their children's height and weight at age seven. At age 16, the participants had health examinations that recorded their height, weight, waist and hip measurements.

More information: N. Khalife et al, 'Childhood Attention-Deficit/Hyperactivity Disorder Symptoms are Risk Factors for Obesity and Physical Inactivity in Adolescence', *Journal of the American Academy of Child & Adolescent Psychiatry* (2014), DOI: 10.1016/j.jaac.2014.01.009