Change in household income and risk for attention deficit hyperactivity disorder during childhood: A nationwide population-based cohort study.


Abstract

BACKGROUND:
Childhood attention deficit hyperactivity disorder (ADHD) is reported to be more prevalent among socioeconomically disadvantaged groups in various countries. The effect of poverty on child development appears to depend on how long poverty lasts. The timing of poverty also seems to be important for childhood outcomes. Lifetime socioeconomic status may shape current health. Thus, we investigated the effects of household income changes from birth to 4 years on the occurrence of ADHD.

METHODS:
Data were obtained from 18,029 participants in the Korean National Health Insurance cohort who were born in 2002 and 2003. All individuals were followed until December 2013 or the occurrence of ADHD, whichever came first. Household income trajectories were estimated using the national health insurance premium and the group-based model. Cox proportional hazard models were used to compare incidence rates between different income trajectory groups after adjustment for possible confounding risk factors.

RESULTS:
Of 18,029 participants, 554 subjects (3.1%) were identified as having ADHD by age 10 or 11. Seven household income trajectories within three categories were found. Children living in decreasing, consistently low, and consistently mid-low income households had an increased risk of ADHD compared to children who consistently lived in the mid-high household income group.

CONCLUSIONS:
Children who live in decreasing income or consistently low-income households have a higher risk for ADHD. Promotion of targeted policies and priority support may help reduce ADHD in this vulnerable group.