Association between adolescent substance use and obesity in young adulthood: A group-based dual trajectory analysis.


**Association between adolescent substance use and obesity in young adulthood: A group-based dual trajectory analysis.**

**Huang DY, Lanza HI, Anglin MD.**

**Source**

UCLA Integrated Substance Abuse Programs, Semel Institute for Neuroscience and Human Behavior, 11075 Santa Monica Blvd., Suite 200, Los Angeles, CA 90025, USA. Electronic address: yhuang@ucla.edu.

**Abstract**

**PURPOSE:**

This study investigated whether and how trajectories of substance use in adolescence were associated with obesity trajectories in young adulthood. We hypothesized that: (1) exposure to persistent substance use throughout adolescence may heighten obesity risk in young adulthood; and (2) such associations may differ once gender, ethnicity, socioeconomic status, and obesity status in adolescence, are considered.

**METHODS:**

The study included 5141 adolescents from the child sample of the 1979 National Longitudinal Survey of Youth and utilized biennial data across the 12 assessments (1986-2008) to examine trajectories of substance use behaviors (i.e., cigarette smoking, alcohol use, and marijuana use) from ages 12 to 18 and obesity trajectories from ages 20 to 24. Group-based dual trajectory modeling was applied to examine sequential associations of trajectories of each type of substance use behavior with obesity trajectories.

**RESULTS:**

Three distinctive trajectory patterns were respectively identified for cigarette smoking, alcohol use, and marijuana use from ages 12 to 18, as well as for obesity status (BMI≥30) from ages 20 to 24. Taking into account gender, ethnicity, socioeconomic status, and obesity status in adolescence, adolescents with the most problematic smoking trajectory (High-decreasing) were more likely to exhibit a High-obesity trajectory from ages 20 to 24. Also, adolescents with an Increasing marijuana use trajectory were more likely to exhibit an Increased obesity trajectory in young adulthood.

**CONCLUSIONS:**

The current study demonstrates that adolescent substance use is associated with subsequent obesity in young adulthood. The associations appear to differ based on the type of substance use and patterns of use.

© 2013.

**KEYWORDS:**

Adolescence, Alcohol use, Cigarette smoking, Drug use, Obesity, Young adulthood