Adolescents’ Prescription Stimulant Use and Adult Functional Outcomes: A National Prospective Study

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DOI: http://dx.doi.org/10.1016/j.jaac.2016.12.008

Abstract

Objective
To assess the prospective 17-year relationship between the medical and nonmedical use of prescription stimulants during adolescence (age 18) and educational attainment and substance use disorder (SUD) symptoms in adulthood (age 35).

Method
A survey was self-administered by nationally representative probability samples of US high school seniors from the Monitoring the Future study; 8,362 of these individuals were followed longitudinally from adolescence (age 18, high school senior years of 1976-1996) to adulthood (age 35, 1993-2013).

Results
An estimated 8.1% reported medical use of prescription stimulants while 16.7% reported nonmedical use of prescription stimulants by age 18. Approximately 43% of adolescent medical users of prescription stimulants had also engaged in nonmedical use of prescription stimulants during adolescence. Among past-year adolescent nonmedical users of prescription stimulants, 97.3% had used at least one other substance during the past year. Medical users of prescription stimulants without any history of nonmedical use during adolescence did not differ significantly from population controls (i.e., non-attention-deficit/hyperactivity disorder [ADHD] and non-stimulant-medicated ADHD during adolescence) in educational attainment and SUD symptoms in adulthood. In contrast, adolescent nonmedical users of prescription stimulants (with or without medical use) had lower educational attainment and more SUD symptoms in adulthood, compared to population controls and medical users of prescription stimulants without nonmedical use during adolescence.

Conclusion
Nonmedical use of prescription stimulants is common among adolescents prescribed these medications. The findings indicate youth should be carefully monitored for nonmedical use because this behavior is associated with lower educational attainment and more SUD symptoms in adulthood.