Incidence and persistence of cannabis dependence among college students

A. Arria, PhD¹, K. Caldeira, MS¹, K. Vincent, MA¹, K. O'Grady, PhD², E. Wish, PhD¹ Center for Substance Abuse Research (CESAR), U. of Maryland, College Park 2 Dept. of Psychology, U. of Maryland, College Park

Poster presented at the College on Problems of Drug Dependence (CPDD) 70th Annual Scientific Meeting, June 14-19, 2008, San Juan, Puerto Rico

Prior studies have documented the extent of cannabis dependence among college students, as defined by DSM-IV criteria, but prospective data on the incidence or persistence of cannabis dependence in this population are lacking. The present study uses longitudinal data from the College Life Study to: 1) examine the patterns of change in diagnostic status among past-year cannabis users with respect to cannabis dependence during the first three years of college; and, 2) identify correlates of changes in cannabis dependence. At study outset, participants were 1,253 students, ages 17 to 19, attending a large public university in the mid-Atlantic region of the U.S. Participants were assessed for cannabis use, abuse and dependence in three annual personal interviews; 85% participated in all three assessments. Additional information was gathered on demographics, psychological functioning, and other domains. Among 58 cannabis-dependent first-year students, 57% remained dependent in the second year, and 33% were persistently dependent all three years. Among 557 first-year students classified as non-dependent past-year cannabis users, incident cannabis dependence was observed in 8% by the second year and 13% by the third year. Incident dependence was similar across race and gender, but was independently associated with elevated depression scores (as measured by the CES-D) in the first year $(X^2(df)=4.8(1); p<.05)$, holding constant cannabis use frequency and other factors. Not surprisingly, first-year students who met DSM-IV criteria for cannabis abuse were at particularly high risk for subsequent incident dependence (AOR=3.2, 95% CI=1.8-5.7, p=.0001). Future research should investigate the long-term social, psychological, and academic consequences associated with different cannabis dependence trajectories among college students.