Patterns of concurrent substance use among nonmedical ADHD stimulant users: Results from the National Survey on Drug Use and Health

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Aims
To examine patterns of concurrent substance use among adults with nonmedical ADHD stimulant use.

Methods
We used latent class analysis (LCA) to examine patterns of past-year problematic substance use (meeting any criteria for abuse or dependence) in a sample of 6,103 adult participants from the National Surveys on Drug Use and Health 2006-2011 who reported past-year nonmedical use of ADHD stimulants. Multivariable latent regression was used to assess the association of socio-demographic characteristics, mental health and behavioral problems with the latent classes.

Results
A four-class model had the best model fit, including 1) participants with low probabilities for any problematic substance use (Low substance class, 53.3%); 2) problematic users of all types of prescription drugs (Prescription drug class, 13.3%); 3) participants with high probabilities of problematic alcohol and marijuana use (Alcohol/Marijuana class, 28.8%); and 4) those with high probabilities of problematic use of multiple drugs and alcohol (Multiple substance class, 4.6%). Participants in the 4 classes had distinct socio-demographic, mental health and service use profiles with those in the Multiple substance class being more likely to report mental health and behavioral problems and service use.

Conclusion
Nonmedical users of ADHD stimulants are a heterogeneous group with a large subgroup with low prevalence of problematic use of other substances. These subgroups have distinct patterns of mental health comorbidity, behavior problems and service use, with implications for prevention and treatment of nonmedical stimulant use.