STASH Vol. 11(9) – Sharing isn't caring: Troubling substance use among those who illegally obtain medical marijuana

September 9, 2015

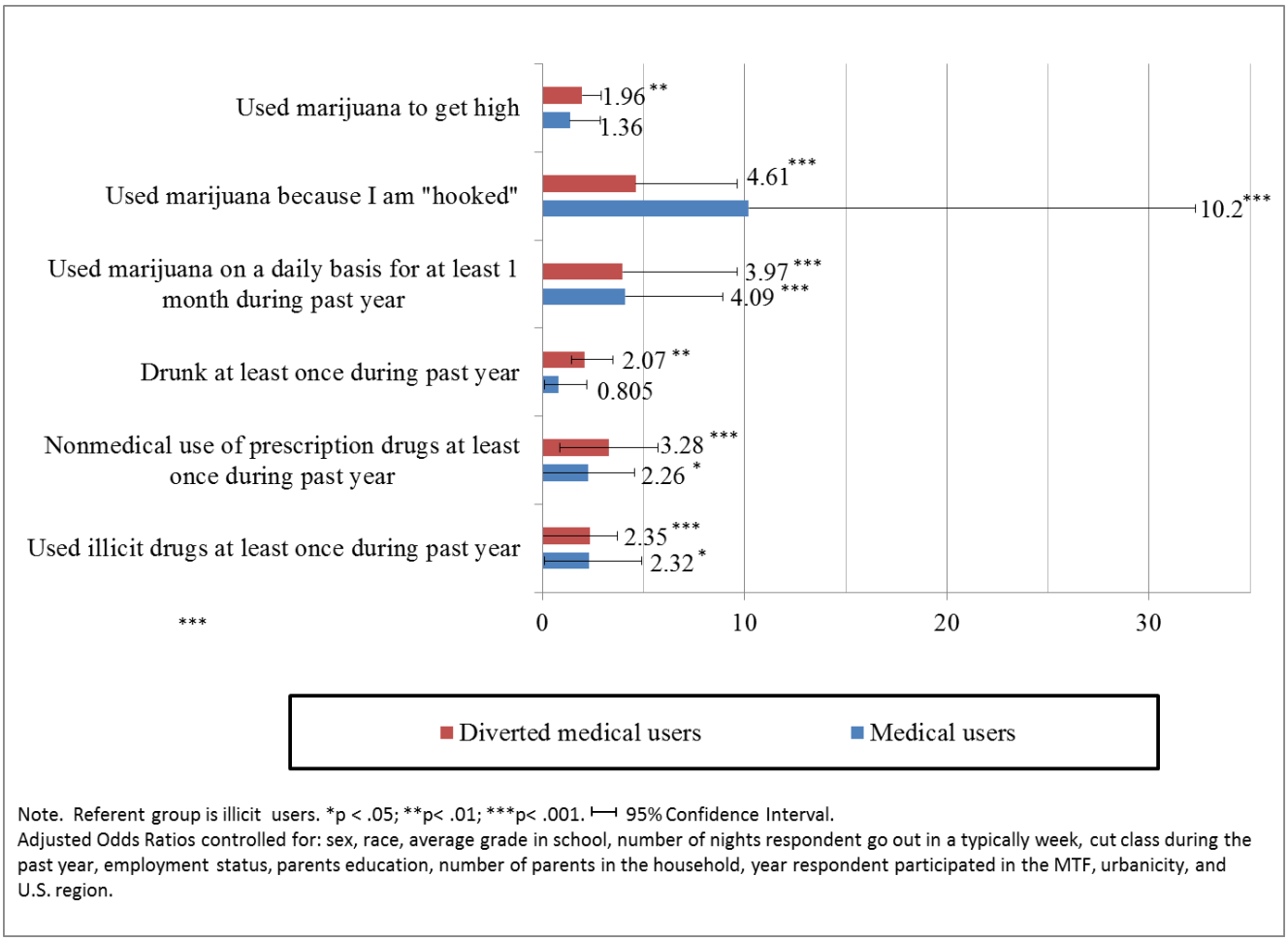
According to the National Conference of State Legislatures, 23 states have legalized the medicinal use of marijuana. With the increased legal access to marijuana comes the potential for unintended consequences, such as drugged driving. This week's STASH reviews a recent study by Boyd and colleagues (2015) which examined whether teens who use medical marijuana — prescribed to them or someone else — report riskier substance use than those who use illicit marijuana.

Methods

- Researchers using a cross-sectional study design conducted secondary data analysis of the Monitoring the Future (MTF) data from 2012 and 2013 (Johnston, O'Malley, Bachman, & Schulenberg, 2013).
- The final sample for this study was a weighted sample of 4,394 12th grade students from the U.S.
- Students described their marijuana use in terms of past year frequency, recentness of daily or almost daily use, and motivations for using.
- Students also reported past 12 month use of other substances, including:
    - Being drunk or high from alcohol;
    - Nonmedical use of prescription drugs including amphetamines, narcotics, sedatives, and tranquilizers; and
    - Other illicit drug use including "crack," cocaine in any other form, heroin, LSD, and Hallucinogens other than LSD.
- The researchers used binary logistic regression to compute adjusted odds ratios for the outcomes of interest (i.e., marijuana use, motivation for using marijuana, and other substance use).

Results

- Among 12th grade students, 1,577 (35.9%) reported past year marijuana use.
    - Among marijuana users, 80% were illicit users, 3% were medical users, and 17% used marijuana prescribed to someone else (i.e., diverted medical users).
- As Figure 1 shows, compared to illicit marijuana users, diverted medical marijuana users were 2 times more likely to report using marijuana to get high and 4.6 times more likely to report using marijuana because they "were hooked."
- Compared to illicit marijuana users, medical marijuana users were 10 times more likely to report using marijuana because they were hooked.
- Both groups were approximately 4 times more likely than illicit drug users to report a month-long period with daily marijuana use in the past year.
- Finally, both groups were significantly more likely than illicit marijuana users to also try illicit drugs and nonmedical use of prescription drugs in the past year.



Note. Referent group is illicit users. *p < .05; **p< .01; ***p< .001. ⊢ 95% Confidence Interval.
Adjusted Odds Ratios controlled for: sex, race, average grade in school, number of nights respondent go out in a typically week, cut class during the past year, employment status, parents education, number of parents in the household, year respondent participated in the MTF, urbanicity, and U.S. region.

Figure. Adjusted Odds Ratios for marijuana and other substance use and motivations for using marijuana between medical users and diverted medical

users. Click image to enlarge.

Limitations

- The cross-sectional nature of the study does not allow researchers to explore cause and effect. For example, the teens who used marijuana prescribed to them or someone else might have been using other alcohol or other prescription drugs before they began using medical marijuana.
- This sample only includes students. Those who drop out of school might be at greater risk for drug use.

Conclusion

The pattern of substance use among students who either legally or illegally use medical marijuana is troubling. Compared to illicit marijuana users, both groups of medical marijuana users were more likely to report heavy marijuana and other drug use, and to report using marijuana because they are "hooked." It is possible that the associations observed in this study are confounded by something not measured in this study. Future research will need to explore these associations more carefully using a longitudinal study design. In the meantime, efforts should be undertaken to reduce students' illegal access to medical marijuana using strategies already implemented with nonmedical use of other prescriptions (e.g., locking up prescriptions, discarding unused portions).

— John Kleschinsky

What do you think? Please use the comment link below to provide feedback on this article.

References

Boyd, Carol J, Veliz, Philip T, & McCabe, Sean Esteban. (2015). Adolescents' use of medical marijuana: a secondary analysis of monitoring the future data. *Journal of Adolescent Health, 57*(2), 241-244.

Johnston, L.D., O'Malley, P.M., Bachman, J. G., & Schulenberg, J.E. (2013). *Monitoring the Future: A continuing study of American youth (12th-grade survey), 2012: Base year question index, 1976-2012*.