Published in final edited form as:

JAMA Psychiatry. 2016 May 1; 73(5): 532. doi:10.1001/jamapsychiatry.2015.3158.

# NESARC Findings on Increased Prevalence of Marijuana Use Disorders—Consistent With Other Sources of Information

### Deborah S. Hasin, PhD and Bridget Grant, PhD, PhD

Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, New York (Hasin); Laboratory of Epidemiology and Biometry, Division of Intramural Clinical and Biological Research, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Rockville, Maryland (Grant)

### To the Editor

We appreciate the thoughtful research letter by Grucza et al.<sup>1</sup> They speculated that owing to increasing social acceptability of marijuana, the substantial increases in the prevalence of marijuana use and marijuana use disorder (MUD) in the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC) III compared with NESARC<sup>2</sup> were owing to reporting differences, not true increases in prevalence. Grucza et al<sup>1</sup> reasoned that because of changes in social desirability, participants were more willing to report marijuana use to a NESARC interviewer in 2012–2013 than in 2001–2002, while suggesting that the privacy of National Survey on Drug Use and Health (NSDUH) audio computer-assisted self-interviews would preclude the effects of changing social desirability on reporting. We think that changing social desirability could also affect NSDUH audio computer-assisted self-interview reporting, resulting in the modest NSDUH increases in use. However, the important point is whether the larger NESARC/NESARC-III increases are real. One way to assess this is by triangulating in other sources of information that do not rely on survey self-report data or interview methods.

Three such studies are relevant. The first, analyzing Veterans Administration medical record data,<sup>3</sup> showed an increase of more than 50% in the prevalence of cannabis use disorders from 2002 to 2009, and an increase of 115% in the prevalence of cannabis use disorders only (no other substances). The second, analyzing substances involved in US emergency department visits,<sup>4</sup> indicated a 62% increase in marijuana involvement from 2004 to 2011. The third,<sup>5</sup> analyzing data from the Fatality Analysis Reporting System, showed that positive test results for a cannabis metabolite nearly tripled from 1999 to 2010. None of these studies required reporting marijuana to an interviewer, yet all were consistent with our findings on substantial increases in MUDs<sup>2</sup> during a similar period. The consistency of these large-scale studies with NESARC results supports the validity of NESARC/NESARC-III

Corresponding Author: Deborah S. Hasin, PhD, Department of Psychiatry, Columbia University Medical Center, 1051 Riverside Dr, 123, New York, NY 10032 (dsh2@cumc.columbia.edu).

Conflict of Interest Disclosures: Dr Hasin reports a contract from Campbell Alliance. No other disclosures were reported.

Hasin and Grant Page 2

findings showing substantial increases in marijuana use and MUDs between 2001-2002 and 2012-2013.

Many adults can use marijuana without harm.<sup>2</sup> However, the increasing risk for MUDs as the number of US marijuana users increases has substantial policy implications pertaining to prevention efforts, provision of services, and whether treatment development should be supported. From a public health perspective, the increased prevalence of MUDs should be taken seriously rather than dismissed. Only by doing so will attention be focused on identifying malleable individual- and group-level risk factors for prevention efforts, increasing service availability and public education about the utility of such services, and developing more effective treatments for MUDs.

## **Acknowledgments**

**Funding/Support:** The National Epidemiologic Survey of Alcohol and Related Conditions was sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), with supplemental support from the National Institute on Drug Abuse (NIDA). This work was supported by the intramural program, NIAAA, the New York State Psychiatric Institute, and by grant R01DA034244 from the NIDA (Dr Hasin).

**Role of the Funder/Sponsor:** The funders had no role in the preparation, review, or approval of the manuscript, or decision to submit the manuscript for publication.

#### References

- Grucza RA, Agrawal A, Krauss MJ, Cavazos-Rehg PA, Bierut LJ. Recent trends in the prevalence of marijuana use and associated disorders in the United States [published online February 10, 2016]. JAMA Psychiatry.
- Hasin DS, Saha TD, Kerridge BT, et al. Prevalence of marijuana use disorders in the United States between 2001–2002 and 2012–2013. JAMA Psychiatry. 2015; 72(12):1235–1242. [PubMed: 26502112]
- 3. Bonn-Miller MO, Harris AH, Trafton JA. Prevalence of cannabis use disorder diagnoses among veterans in 2002, 2008, and 2009. Psychol Serv. 2012; 9(4):404–416. [PubMed: 22564034]
- 4. Brady JE, Li G. Trends in alcohol and other drugs detected in fatally injured drivers in the United States, 1999–2010. Am J Epidemiol. 2014; 179(6):692–699. [PubMed: 24477748]
- Substance Abuse and Mental Health Services Administration. Drug Abuse Warning Network, 2011: National Estimates of Drug-Related Emergency Department Visits: HHS Publication No (SMA) 13-4760 (Table 9): DAWN Series D-39. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.