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The Changing Landscape of Adolescent Marijuana Use Risk

Christopher P. Salas-Wright, PhD¹ and Michael G. Vaughn, PhD²

¹ *School of Social Work, Boston University, Boston, MA, United States*

² *School of Social Work, College for Public Health and Social Justice, Saint Louis University, St. Louis, MO, United States*

* Corresponding Author: Christopher P. Salas-Wright, Address: 264 Bay State Rd, Boston, MA 02215. Email: cpsw@bu.edu, Phone: (617) 353-3750

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Recent years have witnessed tremendous change with respect to the medicalization, decriminalization, and legalization of marijuana in the United States (US). At present, twenty-five states and the District of Columbia have enacted medical marijuana laws, recreational marijuana use is legal in several states, and more than half of American adults support the legalization of marijuana [1]. Advocates note that marijuana legalization promises to offer a number of social and economic benefits, including but not limited to: decreasing the number of drug-related arrests and shrinking the criminal justice population; reducing burden on law enforcement and the justice system; and expanding economic opportunity and increasing tax revenue [2,3]. In our assessment, these are compelling arguments in favor of legalization; however, one critical question that remains is: What do changes in the distribution and use of marijuana mean for young people?

The articles in this issue by Fleming et al. [4] and Bailey et al. [5] provide a timely contribution as we grapple to understand adolescent marijuana use risk in a twenty-first century context. Fleming et al.—in examining youth surveillance data collected in Washington State between 2000 and 2014—identified meaningful increases in marijuana-specific risk factors (e.g., low perceived harm, favorable attitudes about use) among public high school students, but found that the prevalence of marijuana use has remained stable over time. This is consistent with a recent data from the Healthy Kids Colorado Survey which found that the prevalence of adolescent marijuana use has remained stable since the Centennial State legalized marijuana for recreational use in 2012 [6]. Bailey et al. complement this epidemiological research by examining the multigenerational relationship between grandparental, parental, and child marijuana and alcohol use in a prospective sample collected primarily in Washington State. Notably, they found current parental use of marijuana to be associated with an increased

likelihood of marijuana and alcohol use. All in all, these studies paint a rather complex picture in terms of changing perceptions, family relationships, and adolescent marijuana use.

Several points should be rendered to better contextualize the findings of the aforementioned studies. First, the patterns of youth marijuana perception and use are largely consistent with epidemiological data on adolescents in the US in general. Evidence from the National Youth Risk Behavior Survey (YRBS) and Monitoring the Future (MTF) suggests that marijuana use among adolescents has decreased slightly over the last two decades [7,8]. Our research using data from the National Survey on Drug Use and Health (NSDUH) also points to decreases in marijuana use among adolescents between 2002 and 2013 [9]. However, contrary to Fleming et al., we did not observe an increase in marijuana-related risk factors among adolescents (at least not the risk factors we examined); indeed, we found a meaningful increase in *disapproval* of youth marijuana use among adolescents ages 12 to 14 and found that disapproval remained stable among adolescents age 15 to 17.

A second point is that the stable (Washington, Colorado) or downward (US) trends observed with respect to adolescent marijuana use should be interpreted in light of broader trends occurring in youth risk behavior more generally. That is, a number of recent studies employing national-level data suggest that the proportion of adolescents involved in behaviors such as smoking, underage drinking, unprotected sex, and other drug use has steadily dropped over the last decade [10,11]. As Fleming et al. [4] point out, it seems likely that this overall trend is an important part of understanding the current trends in marijuana use. Indeed, it is certainly plausible that any increases we might expect to see in marijuana use—in Washington, Colorado, or elsewhere—might be dampened by an overall decrease in health-risk behavior among youth.

Thirdly, while there is a certain degree of “good news” about marijuana use among youth, the takeaway with young adults and adults in general is far less cheery. For instance, our research on marijuana trends using the NSDUH data found that the proportion of young adults (ages 18 to 25) reporting disapproval of marijuana use dropped by more than 25% between 2002 and 2013 [9]. While we did not observe a large trend increase in marijuana use among young adults, other studies seem to indicate that adult marijuana use is on the rise. Evidence from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) suggests that, among adults ages 18 and older, marijuana use and cannabis use disorder are both up substantially since 2001-2002, with particularly troublesome levels of use and morbidity among young adults [12-14]. While it is difficult to determine why we see different patterns among adolescents and adults with respect to marijuana use, the trend among adults is nevertheless troubling and suggests that continued monitoring is paramount.

In sum, despite important policy changes related to the use and distribution of marijuana, we simply have not seen a noteworthy spike in marijuana use among American adolescents. The best information we have available suggests that this is the case in Washington State and in Colorado, and among adolescents in general in the US. This is, without any doubt, good news for youth and good news for society. In the same breath, however, it is important that we not lose sight of the fact we have seen disconcerting changes in terms of marijuana-specific risk factors among adolescents [4] and young adults [9], and that emerging evidence suggests that marijuana use among American adults is on the rise [12-14]. In light of the present evidence, our assessment is that removing marijuana from the sphere of the criminal justice system and regulating its use and distribution likely brings more benefits than costs (or perhaps solves more problems than it is likely to create). But we should be very clear that marijuana is by no means a

“harmless pleasure” but rather a psychoactive drug of abuse that can lead to serious adverse developmental and health consequences, particularly among young people [15]. We appear to be at a critical juncture in the history of drug use in America, one in which those concerned about the health and wellbeing of young people do well to actively educate youth and their families about the risks of using marijuana—be it legal or illegal.

References

1. Motel S. 6 facts about marijuana. Available from: <http://www.pewresearch.org/fact-tank/2015/04/14/6-facts-about-marijuana/> Accessed: June 23, 2016.
2. Drug Policy Alliance. Marijuana legalization and regulation. Available from: <http://www.drugpolicy.org/marijuana-legalization-and-regulation> Accessed: June 23, 2016.
3. Roffman R. Legalization of cannabis in Washington State: How is it going? *Addiction*. 2016; 111; 1139-1140. doi:10.1111/add.13247
4. Fleming CB, Guttmanova K, Cambron C, Rhew IC, Oesterle S. Examining the divergence in trends for adolescent marijuana use and marijuana-specific risk factors in Washington State. *J Adolesc Heal*.
5. Bailey JA, Hill KG, Guttmanova K, Epstein M, Abbott RD, Steeger CM, Skinner, ML. Associations between parental and grandparental marijuana use and child substance use norms in a prospective, three-generational study. *J Adolesc Heal*.
6. Salley M. Survey: Parent biggest influence on youth health behaviors. Available from: <https://www.colorado.gov/pacific/cdphe/news/HKCS2015> Accessed: June 23, 2016.
7. Johnson RM, Fairman B, Gilreath T, Xuan Z, Rothman EF, Parnham T, Furr-Holden CDM. Past 15-year trends in adolescent marijuana use: Differences by race/ethnicity and sex. *Drug Alcohol Depend*. 2015; 155: 8-15.
8. Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. Monitoring the Future national survey results on drug use: 1975-2013: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, The University of Michigan; 2015.

9. Salas-Wright CP, Vaughn MG, Todic J, Córdova D, Perron BE. Trends in the disapproval and use of marijuana among adolescents and young adults in the United States: 2002–2013. *Am J Drug Alcohol Abuse*. 2015; *41*(5): 392-404.
10. Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance — United States, 2015. *MMWR Surveill Summ* 2016; *65*(SS-6):1–174. doi:
<http://dx.doi.org/10.15585/mmwr.ss6506a1>.
11. Vaughn MG, Nelson EJ, Salas-Wright CP, Qian Z, Schootman M. Racial and ethnic trends and correlates of non-medical use of prescription opioids among adolescents in the United States 2004-2013. *J Psychiatr Res*. 2016;*73*:17-24. doi:10.1016/j.jpsychires.2015.11.003.
12. 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. doi:10.1001/jamapsychiatry.2015.1858.
13. Hasin DS, Kerridge BT, Saha TD, et al. Prevalence and Correlates of DSM-5 Cannabis Use Disorder, 2012-2013: Findings from the National Epidemiologic Survey on Alcohol and Related Conditions–III. *Am J Psychiatry*. 2016;*(34)*:appi.ajp.2015.1. doi:10.1176/appi.ajp.2015.15070907.
14. Hasin DS, Grant B. NESARC findings on increased prevalence of marijuana use disorders—consistent with other sources of information. *JAMA Psychiatry*. 2016;*73*(5):532.
15. Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse health effects of marijuana use. *N Engl J Med*. 2014;*370*:2219-2227. doi:10.1056/NEJMra1402309.