Commentary: Adolescent Marijuana Use and Mental Health Amidst a Changing Legal Climate

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Abstract

Objective The purpose of this commentary was to briefly summarize the literature on the relationship between adolescent marijuana use and mental health and how policy changes surrounding marijuana decriminalization and legalization might impact this relationship. Methods A comprehensive literature search on adolescent marijuana use, mental health, and the impact of decriminalization and legalization was conducted. Findings are briefly summarized and discussed. Results Although there is a great deal of ambiguity regarding the causal direction of marijuana use and mental health problems, what can safely be gleaned from this body of research is that early and frequent use of marijuana during adolescence is associated with the development of more psychiatric-related problems than occasional use or nonuse. Conclusions Until there is greater clarity in this domain, clinicians should continue to screen adolescent patients for marijuana use as well as mental health difficulties, but may need to be more thoughtful about screening among early adolescents, if in fact a shift in the age of marijuana uptake occurs amidst policy changes.

Key words: adolescents; drug abuse and exposure; mental health.

The article by Elkington and colleagues in this volume of the Journal of Pediatric Psychology highlights the challenges of understanding the bidirectional nature of marijuana use and psychiatric disorders as well as the need for further research in this area given ongoing policy changes surrounding decriminalization and legalization of marijuana. Notably, marijuana is the most widely used illicit drug among adolescents within the United States (Johnston, O’Malley, Bachman, & Schulenberg, 2013). Marijuana legalization has been linked to both increases in adolescent marijuana use (Thurstone, Lieberman, & Schmiege, 2011; Wall et al., 2011) and acceptance among adolescents (Miech et al., 2015). These relationships are especially concerning given the association of use with mental health difficulties.

Specifically, evidence suggests a relationship between increased marijuana use and risk for development of psychosis and mood-related disorders (Casadio, Fernandes, Murray, & Di Forti, 2011; Moore et al., 2007; Radhakrishnan, Wilkinson, & D’Souza, 2014). However, directional effects and the impact of early marijuana use versus greater frequency of use are still at odds. For example, a meta-analysis demonstrated that patients who reported marijuana use experienced an earlier onset of psychotic symptoms compared with those who never used marijuana (Large et al., 2011), whereas other research suggests that heavier use is more important to the development of psychosis rather than age of onset (Stefanis et al., 2013). Further complicating matters is evidence indicating marijuana use and psychosis is a bidirectional
relationship (Griffith-Lendering et al., 2013), as well as findings suggesting that use may simply exacerbate symptoms (Bechtold, Simpson, White, & Pardini, 2015).

In the domain of mood disorders, the picture is even more mixed. Similar to psychosis, marijuana use during adolescence has been inconsistently related to increased risk of experiencing affective-related symptoms later in life (Moore et al., 2007). For both depression and anxiety, early marijuana use has been linked to later symptoms (Moore et al., 2007), as well as worsening of symptoms in those already experiencing mood-related problems (Buckner, Leen-Feldner, Zvolensky, & Schmidt, 2009; Marmorstein et al., 2010). Although there is a great deal of ambiguity regarding the causal direction of marijuana use and mental health problems, what can safely be gleaned from this body of research is that early and frequent use of marijuana during adolescence is associated with the development of more psychiatric-related problems than occasional use or nonuse. Although decriminalization likely leads to an increase in the acceptability of marijuana use and that prevalence of marijuana use among youth is expected to increase following legalization (Palamar, Ompad, & Petkova, 2014), it remains to be seen how this shift will impact the rates of mental health disorders.

Relatively, given the initial focus on legalization of medical marijuana, it is unclear how these changes will affect the use of marijuana for pain or disease management (e.g., for gastrointestinal disorders) among pediatric populations. It is possible that as the climate moves to a more positive or neutral regard of marijuana use, pediatric medical providers may begin to prescribe medical marijuana more frequently. Alternatively, with the larger social shift in the normalization of use, parents and adolescent patients may begin to request this type of intervention and be unaware of the potential impact that use can have on mood symptoms. This may be particularly problematic among pediatric populations who are already at heightened risk of developing mood disorders related to their medical diagnoses. These hypotheses will obviously need further research before any strong conclusions can be drawn.

In an effort to increase awareness of these changes, pediatric psychologists should consider becoming more knowledgeable of the potential negative consequences of marijuana on the populations that we serve. Readers are encouraged to review the detailed commentary on the potential impact of marijuana legalization on youth by Joffe and Yancy (2004) in Pediatrics. Although this article was published more than a decade ago, only a handful of studies have been published since, with findings suggesting that as marijuana becomes more available and attitudes become more tolerant, adolescents are beginning to perceive marijuana as more beneficial and are more likely to use (Cerda, Wall, Keyes, Galea, & Hasin, 2012; Friese & Grube, 2013).

Until there is greater clarity in this domain, clinicians should continue to screen adolescent patients for marijuana use as well as mental health difficulties, but may need to be more thoughtful about screening among early adolescents, if in fact a shift in the age of marijuana uptake occurs. Additionally, from an intervention standpoint, clinicians in pediatric settings may need to become more knowledgeable of efficacious substance use intervention approaches and develop a better understanding of how to incorporate these approaches into their work in medical settings. For example, motivational interviewing aimed at reducing substance use in adolescents with psychiatric comorbidity has been successful in reducing marijuana use compared with treatment as usual (Brown et al., 2015) and may be a promising, brief treatment to incorporate in pediatric settings. Lastly, as educators, we should be highlighting concerns related to marijuana use in adolescence and its potential impact on mental health with our medical colleagues with the greater goal of improving care for our pediatric patients.

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**References**


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