Marijuana and Children



Position Statement

SUMMARY

Registered professional school nurses (hereinafter referred to as school nurses) promote wellness and disease prevention to improve health outcomes for our nation's children. It is the position of the National Association of School Nurses (NASN) that the marijuana plant remain under the United States Drug Enforcement Agency's (DEA) Schedule I category of the Controlled Substances Act (CSA), 21 U.S.C. § 801, et seq. (DEA, 2011, p.2). To date there is not sufficient scientific evidence for U.S. Food and Drug Administration (FDA) to approve the smoked marijuana plant for medical use. NASN believes any marijuana made available for the purpose of adult recreational use facilitates youth access and is not in the best interest of the health and well-being of students.

BACKGROUND

In 1970, Congress enacted laws against marijuana based in part on the conclusion that marijuana has no scientifically proven medical value. The Food and Drug Administration (FDA), responsible for approving drugs as safe and effective medicine, has thus far declined to approve smoked marijuana for any condition or disease. The FDA has noted "there is currently sound evidence that smoked marijuana is harmful" and "that no sound scientific studies support medical use of marijuana for treatment in the United States, and no animal or human data support the safety or efficacy of marijuana for general medical use" (DEA, 2011, p.3). Although the Federal law remains, beginning in 1996, with the State of California passing Proposition 215, twenty states have legalized marijuana for medical use. Two of these states, Washington and Colorado, have enacted recent laws that legalize recreational use. For more information regarding federal and state laws, resources from The National Conference of State Legislators can be accessed at http://www.ncsl.org/issues-research/health/state-medical-marijuana-laws.aspx (National Conference of State Legislators, 2013).

RATIONALE

The National Institute on Drug Abuse (NIDA) (2012) summary below outlines the safety risks of smoked marijuana use and the physical and mental health consequences. These repercussions affect the health, safety and education of adolescents.

Acute (present during intoxication)

- Impairs short-term memory
- Impairs attention, judgment, and other cognitive functions
- Impairs coordination and balance
- Increases heart rate
- Creates psychotic episodes

Persistent (lasting longer than intoxication but may not be permanent)

- Memory and learning skills impairment
- Sleep impairment

Long-term (cumulative effects of chronic abuse)

- Can lead to addiction
- Increases risk of chronic cough, bronchitis
- Increases risk of psychosis, schizophrenia in vulnerable individuals
- May increase risk of anxiety, depression

"Because it seriously impairs judgment and motor coordination, smoked marijuana also contributes to accidents while driving. A recent analysis of data from several studies found that marijuana use more than doubles a driver's risk of being in an accident. Further, the combination of marijuana and alcohol is worse than either substance alone with respect to driving impairment" (NIDA, 2012, para. 12).

The statistics below from the Office of National Drug Control Policy (ONDCP) (2010a, p.1) illustrate trends in the perception of harm from smoking marijuana also have been declining over the same period of time. Prior research indicates that declines in these perceptions are predictive of increases in use.

- Past-month use of marijuana among 10th graders increased from 13.8% in 2008 to 17.6% in 2011.
- Past-month use of marijuana among 12th graders increased from 18.3% in 2006 to 22.6% in 2011.
- Drug use has increased among certain youth minority populations. Illicit drug use has increased by 43 percent among Hispanic boys and 42 percent among African American teen girls since 2008.

Marijuana is a frequent precursor to the use of more dangerous drugs and signals a significantly enhanced likelihood of drug problems in adult life. One study found that among adults (age 26 and older) who had used cocaine, 62 percent had initiated marijuana use before age 15. The same study showed less than one percent of adults who never tried marijuana went on to use cocaine (Gfroerer et al., 2002). Furthermore, long-term studies on patterns of drug usage among young people show that very few of them use other drugs without first starting with marijuana (ONDCP, 2010b, p.11). The American Academy of Pediatrics' (AAP) position statement on the issue of marijuana legalization based on their technical report (AAP, 2004b) states that "any change in the legal status of marijuana, even if limited to adults, could affect the prevalence of use among adolescents" (AAP, 2004a, p. 1825).

A study from the University of Pittsburgh illustrates how the adolescent brain may be more vulnerable to addictions. The study found "a strong reward-related activation in the adolescent but not in the adult dorsal striatum, a structure associated with the formation of habits and the adaptive control of behavioral patterns" (Moghaddam & Sturman, 2012, p.4). Another recent study demonstrated the neurotoxic effects of cannabis on the adolescent brain. Adolescents with cannabis dependence (before age 18) became more persistent users compared to adult persistent users and demonstrated a marked decrease in IQ score (Meier & Caspi, 2012). Furthermore, "cessation of cannabis did not fully restore neuropsychological functioning among adolescent onset former persistent cannabis users" (Meier & Caspi, 2012, p. 5).

School nurses are in a strategic position to educate students about the life-long effects and legal consequences of smoking marijuana. According to NIDA (2010), risk of drug abuse increases greatly during times of transition such as changing schools, moving, or divorce. If we can prevent drug abuse, we can prevent drug addiction. In early adolescence, when children advance from elementary through middle school, they face new and challenging social and academic situations. "Often during this period, children are exposed to abusable substances such as cigarettes and alcohol for the first time. When they enter high school, teens may encounter greater availability of drugs, drug abuse by older teens, and social activities where drugs are used." (NIDA, 2010, p. 11).

As advocates for students, school nurses may choose to engage in public policy conversations surrounding legal reform. Bipartisan organizations such as Smart Approaches to Marijuana (SAM) provide a suggested framework that includes appropriate referral for driving under the influence of marijuana and increased intervention and prevention (SAM, 2013).

CONCLUSION

NASN recognizes this overwhelming evidence about the significant negative effects of marijuana use among young people. Therefore, NASN supports that the health and wellness of children in the United States is best served by

adhering to medical evidence that smoked marijuana for medicinal use is not recommended for this age group. Additionally, NASN recognizes that marijuana made available for adult recreational use poses the potential for increased prevalence and abuse potential among youth. The well-documented, serious cognitive effects; health implications; and safety concerns of recreational marijuana use lead NASN to conclude that the legal availability of marijuana presents more accessibility to the student population and, therefore, puts students at higher risk of use and health consequences.

REFERENCES

- American Academy of Pediatrics (AAP), Committee on Substance Abuse and Committee on Adolescence. (2004a). Legalization of marijuana: Potential impact on youth. *Pediatrics, 113(6), pp. e632 -e638*. Retrieved from http://pediatrics.aappublications.org/content/113/6/1825.full.pdf+html
- American Academy of Pediatrics, Committee on Substance Abuse and Committee on Adolescence. (2004b). Technical report: Legalization of marijuana: Potential impact on youth. *Pediatrics 2004, 113*(6). Retrieved from http://www.pediatrics.org/cgi/content/full/113/6/e632
- Drug Enforcement Administration (DEA). (2011). *The DEA position on marijuana*. U.S. Department of Justice Publication. Retrieved from http://www.justice.gov/dea/docs/marijuana_position_2011.pdf
- Gfroerer, J. C., Wu, L.-T., & Penne, M. A. (2002). *Initiation of marijuana use: Trends, patterns and implications*.

 Analytic Series: A-17, DHHS Publication No. SMA 02-3711. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. Retrieved from http://www.samhsa.gov/data/mjinitiation/mjinitiation.pdf
- Meier M.H., & Caspi, A. (2012). Persistent cannabis users show neuropsychological decline from childhood to midlife. Proceedings of the National Academy of Sciences of the United States of America (PNAS), 109 (40), E2657–E2664, published ahead of print August 27, 2012. doi:10.1073/pnas.1206820109. Retrieved from http://www.pnas.org/content/109/40/E2657.full
- National Conference of State Legislators (NCSL). (2013). *State medical marijuana laws*. Retrieved from http://www.ncsl.org/issues-research/health/state-medical-marijuana-laws.aspx
- National Institute on Drug Abuse (NIDA). (2010). *Drugs, brains and behavior, the science of addiction*. (Chapter 2, p.11). Retrieved from http://www.drugabuse.gov/sites/default/files/sciofaddiction.pdf
- National Institute on Drug Abuse (NIDA). (2012). *Drug facts: Marijuana*. Retrieved from http://www.drugabuse.gov/publications/drugfacts/marijuana
- Office of National Drug Control Policy (ONDCP). (2010a). Fact sheet. Marijuana: Know the facts. Retrieved from http://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/marijuana_fact_sheet_jw_10-5-10.pdf
- Office of National Drug Control Policy (ONDCP). (2010b). What Americans need to know about marijuana.

 Retrieved from https://www.ncjrs.gov/ondcppubs/publications/pdf/mj_rev.pdf
- Smart Approaches to Marijuana (SAM). (2013).Retrieved from http://learnaboutsam.com/legal-reform-3/
- Sturman D.A., & Moghaddam B. (2012). Striatum processes reward differently in adolescents versus adults.

 Proceedings of the National Academy of Sciences of the United States of America (PNAS). Published ahead of print January 17, 2012. doi:10.1073/pnas.11141

 37109. Retrieved from

 http://www.pnas.org/content/early/2012/01/09/1114137109.full.pdf+html

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