POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

American Academy of Pediatrics
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The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update

COMMITTEE ON SUBSTANCE ABUSE, COMMITTEE ON ADOLESCENCE

abstract

This policy statement is an update of the American Academy of Pediatrics policy statement "Legalization of Marijuana: Potential Impact on Youth," published in 2004. Pediatricians have special expertise in the care of children and adolescents and may be called on to advise legislators about the potential impact of changes in the legal status of marijuana on adolescents. Parents also may look to pediatricians for advice as they consider whether to support state-level initiatives that propose to legalize the use of marijuana for medical and nonmedical purposes or to decriminalize the possession of small amounts of marijuana. This policy statement provides the position of the American Academy of Pediatrics on the issue of marijuana legalization. The accompanying technical report reviews what is currently known about the relationships of marijuana use with health and the developing brain and the legal status of marijuana and adolescents' use of marijuana to better understand how change in legal status might influence the degree of marijuana use by adolescents in the future.

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DEFINITIONS

For the purpose of clarifying terminology, the following are definitions used in this policy statement and the accompanying technical report[1]:

Legalization

Allowing cultivation, sale, and use of cannabis (restricted to adults ≥21 years of age).

Legalization of Medical Marijuana

Allowing the use of marijuana to treat a medical condition or symptom with a recommendation from a physician.

Decriminalization
Reducing penalties for cannabis-related offenses to lesser criminal charges or to civil penalties.

INTRODUCTION

Marijuana is the most commonly used illicit substance among adolescents.[2] Recreational sale and possession of marijuana by adults remain illegal in most states and remain illegal under federal law. However, a number of states and local jurisdictions have decriminalized the possession of marijuana for recreational use by adults, reducing penalties to misdemeanors or citations. Many states also have legalized medical marijuana for adults who receive recommendations for use by physicians. Almost all states with medical marijuana laws allow access by minors, though often with greater regulation. States in which marijuana is legal prohibit marijuana sales to and use by minors, but changes in the legal status of marijuana, even if limited to adults, may affect the prevalence of use among adolescents. Although the epidemiologic data are not consistent across states and time periods, with the exception of Michigan and New Mexico, in all states where medical marijuana has been legalized, marijuana use by minors has been stable or has decreased.[3] Youth substance use rates depend on a number of factors, including legal status, availability and ease of access of the substance, and perception of harm. For example, although tobacco is easily accessible, youth tobacco use rates have decreased substantially since the 1990s, in conjunction with aggressive public health campaigns warning of the medical consequences of smoking. In Colorado, the passage of the amendment to legalize recreational marijuana occurred in November 2012. Although sales of recreational marijuana did not start in Colorado until January 1, 2014, the postlegalization 2013 rates of youth use increased.[4] It is possible that public health campaigns that effectively communicate the harms associated with teen marijuana use could reduce youth use despite legalization. Legalization campaigns that imply that marijuana is a benign substance present a significant challenge for educating the public about its known risks and adverse effects. Therefore, it is unclear what the impact of legalization of marijuana for adults will have on the prevalence of marijuana use by adolescents, especially if the implementation of legalization includes messaging that minimizes the health and behavioral risks.

Substance abuse by adolescents is an ongoing health concern. Marijuana remains classified in the Controlled Substances Act (21 USC §801-971 [2012]) as a schedule I drug. This classification implies that it has a high potential for abuse, has no currently accepted medical use in the United States, and lacks accepted safety for use under supervision by a physician. Despite this classification by the federal government, marijuana has been legalized for medical purposes in a number of states, in direct opposition to federal law. Since the first policy statement from the American Academy of Pediatrics (AAP) on the legalization of marijuana was published in 2004, limited research has been performed to examine the potential therapeutic effects of marijuana for adults, specifically the class of chemicals known as cannabinoids, which are responsible for most of the medicinal effects of marijuana. This research has demonstrated that both the drugs approved by the US Food and Drug Administration and other pharmaceutical cannabinoids, such as cannabidiol, can be helpful for adults with specific conditions, such as increasing appetite and decreasing nausea and vomiting in patients with cancer and for chronic pain syndromes,[5,6] although side effects of dizziness and dysphoria may also be experienced. There are no published studies on the use of medicinal marijuana or pharmaceutical cannabinoids in pediatric populations.

EFFECTS OF MARIJUANA

The adverse effects of marijuana have been well documented, and studies have demonstrated the potential negative consequences of short- and long-term recreational use of marijuana in adolescents. These consequences include impaired short-term memory and decreased concentration, attention span, and problem solving, which clearly interfere with learning. Alterations in motor control, coordination, judgment, reaction time, and tracking ability have also been documented[7]; these may contribute to unintentional deaths and injuries among adolescents (especially those associated with motor vehicles if adolescents drive while intoxicated by marijuana).[8] Negative health effects on lung function associated with smoking marijuana have also been documented, and studies linking marijuana use with higher rates of psychosis in patients with a predisposition to schizophrenia have recently been published,[9] raising concerns about longer-term psychiatric effects. New research has also demonstrated that the adolescent brain, particularly the prefrontal cortex areas controlling judgment and decision-making, is not fully developed until the mid-20s, raising questions about how any substance use may affect the developing brain. Research has shown that the younger an adolescent begins using drugs, including marijuana, the more likely it is that drug dependence or addiction will develop in adulthood.[10] A recent analysis of 4 large epidemiologic

trials found that marijuana use during adolescence is associated with reductions in the odds of high school completion and degree attainment and increases in the use of other illicit drugs and suicide attempts in a dose-dependent fashion that suggests that marijuana use is causative.[11]

DECRIMINALIZATION EFFORTS AND EFFECTS

The illegality of marijuana has resulted in the incarceration of hundreds of thousands of adolescents, with overrepresentation of minority youth.[12] A criminal record can have lifelong negative effects on an adolescent who otherwise has had no criminal justice history. These effects can include ineligibility for college loans, housing, financial aid, and certain kinds of jobs.[13] In states that have passed decriminalization laws, marijuana use is still illegal, although the consequences of possession and use are less punitive. Although these laws are not applicable to adolescents in all states, the changes in the law are intended to address and reduce the long-term effects that felony charges can have on youth and young adults.[13] Continued efforts to address this problem are based on issues of social justice, given the disparate rate of adjudication for drug offenses for youth of racial minority groups compared with white youth. Advocates of decriminalization have also sought to increase the availability of drug treatment services.[14]

CONCLUSIONS

Ultimately, the behavioral and health risks associated with marijuana use by youth should be the most salient criteria in determining whether policies that are enacted are effective in minimizing harm. More information, including the legal status of marijuana for both recreational and medical use, the effect of legal status on rates of use by adolescents and young adults, research on medical marijuana and the adverse effects of marijuana use, the impact of criminal penalties particularly on minority teens and communities, and adolescent brain development related to substance use, is available in the accompanying technical report.[1]

RECOMMENDATIONS

1. Given the data supporting the negative health and brain development effects of marijuana in children and adolescents, ages 0 through 21 years, the AAP is opposed to marijuana use in this population.
2. The AAP opposes "medical marijuana" outside the regulatory process of the US Food and Drug Administration. Notwithstanding this opposition to use, the AAP recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate.
3. The AAP opposes legalization of marijuana because of the potential harms to children and adolescents. The AAP supports studying the effects of recent laws legalizing the use of marijuana to better understand the impact and define best policies to reduce adolescent marijuana use.
4. In states that have legalized marijuana for recreational purposes, the AAP strongly recommends strict enforcement of rules and regulations that limit access and marketing and advertising to youth.
5. The AAP strongly supports research and development of pharmaceutical cannabinoids and supports a review of policies promoting research on the medical use of these compounds. The AAP recommends changing marijuana from a Drug Enforcement Administration schedule I to a schedule II drug to facilitate this research.
6. Although the AAP does not condone state laws that allow the sale of marijuana products, in states where recreational marijuana is currently legal, pediatricians should advocate that states regulate the product as closely as possible to tobacco and alcohol, with a minimum age of 21 years for purchase. Revenue from this regulation should be used to support research on the health risks and benefits of marijuana. These regulations should include strict penalties for those who sell marijuana or marijuana products to those younger than 21 years, education and diversion programs for people younger than 21 years who possess marijuana, point-of-sale restrictions, and other marketing restrictions.
7. In states where marijuana is sold legally, either for medical or recreational purposes, regulations should be enacted to ensure that marijuana in all forms is distributed in childproof packaging, to prevent accidental ingestion.
8. The AAP strongly supports the decriminalization of marijuana use for both minors and young adults and encourages pediatricians to advocate for laws that prevent harsh criminal penalties for possession or use of marijuana. A focus on treatment for adolescents with marijuana use problems should be encouraged, and adolescents with marijuana use problems should be referred to treatment.
9. The AAP strongly opposes the use of smoked marijuana because smoking is known to cause lung damage,[15] and the effects of secondhand marijuana smoke are unknown.
10. The AAP discourages the use of marijuana by adults in the presence of minors because of the important influence of role modeling by adults on child and adolescent behavior.

LEAD AUTHORS

Seth D. Ammerman, MD, FAAP
Sheryl A. Ryan, MD, FAAP
*William P. Adelman, MD, FAAP

COMMITTEE ON SUBSTANCE ABUSE, 2014–2015

Sharon Levy, MD, MPH, FAAP, Chairperson
Seth D. Ammerman, MD, FAAP
Pamela K. Gonzalez, MD, FAAP
Sheryl A. Ryan, MD, FAAP
Lorena M. Siqueira, MD, MSPH, FAAP
Vincent C. Smith, MD, MPH, FAAP

LIAISONS

Vivian B. Faden, PhD – *National Institute of Alcohol Abuse and Alcoholism*
Gregory Tau, MD, PhD – *American Academy of Child and Adolescent Psychiatry*

STAFF

James Baumberger, MPP
Katie Crumley, MPP
Renee Jarrett, MPH

COMMITTEE ON ADOLESCENCE, 2014–2015

Paula K. Braverman, MD, FAAP, Chairperson
*William P. Adelman, MD, FAAP
Elizabeth Meller Alderman, MD, FSAHM, FAAP
Cora C. Breuner, MD, MPH, FAAP
David A. Levine, MD, FAAP
Arik V. Marcell, MD, FAAP
Rebecca Flynn O'Brien, MD, FAAP

LIAISONS

Margo Lane, MD, FRCPC – *Canadian Pediatric Society*
Benjamin Shain, MD, PhD – *American Academy of Child and Adolescent Psychiatry*
Julie Strickland, MD – *American College of Obstetricians and Gynecologists*
Lauren B. Zapata, MD, PhD, MSPH – *Centers for Disease Control and Prevention*

STAFF

James Baumberger, MPP
Karen S. Smith

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