Counseling Parents and Adolescents About Marijuana

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Marijuana (cannabis) is now legal for medical use in 29 states and Washington, DC, and for recreational use for adults 21 years and older in nine states and Washington, DC. It is likely that more states will legalize marijuana for medical and recreational use because many U.S. adults approve of marijuana legalization. Although it remains illegal for those younger than 21 years, recreational marijuana use among adolescents is common, with 5.4% of 8th graders, 14.0% of 10th graders, and 22.0% of 12th graders having used it at least once in the past 30 days. Marijuana is the second most-used substance for adolescents after alcohol. About one-half of U.S. adults have used marijuana at least once in their lives, with approximately 24 million Americans 12 years and older having used marijuana within the past month.

Physicians are increasingly likely to be asked by adolescents or their parents whether recreational marijuana use is safe. Although many adults view marijuana as benign, there are major concerns about its use in adolescents because all illicit drug use, including marijuana, may have negative consequences. With ongoing legalization, adolescent use may increase because of perceptions of low or no harm, as well as the pervasive advertising and marketing of marijuana products.

Regular, heavy, or daily use of marijuana, and younger age at first use, can lead to adverse medical, mental health, psychosocial, and cognitive outcomes, likely due to abnormal changes in brain development. Brain maturation is not complete until the early to mid-20s; therefore, the risk of developing problem use is greater in younger adolescents. Regular use (10 to 19 times per month), heavy use (20 or more times per month), and daily use (currently 6% of 12th graders are daily users) are associated with an increased risk of developing problem use or addiction, with related adverse outcomes, including the following: decreased reaction time and impaired motor coordination, leading to higher rates of serious and fatal motor vehicle crashes; poor school and work performance, with higher rates of school dropout; depression and anxiety; psychotic disorders, including schizophrenia in those with a predisposition; and cognitive impairments, such as short-term memory loss and possible IQ decline.

Other than a positive family history of problem use or addiction, it is difficult to predict which adolescents who try marijuana will progress to regular, heavy, or daily use. Evidence shows that marijuana is an addictive substance. Overall, 9% of those experimenting with marijuana will continue regular use, based on the Diagnostic and Statistical Manual of Mental Disorders, 5th ed., criteria for dependence. This percentage increases to 17% among those who first use marijuana in adolescence and to 25% to 50% among adolescents who use marijuana daily. It should be noted that most adolescents addicted to marijuana do not have lifelong addiction because of a maturing-out phenomenon that is poorly understood. However, significant effects on cognitive and psychosocial function may occur during the period of dependency, which may last up to a decade. For this reason, early intervention strategies are key to preventing the development of problem marijuana use.

One important issue related to medical marijuana is lack of regulation by the U.S. Food and Drug Administration, making it difficult to verify purity; tetrahydrocannabinol (THC), cannabidiol (CBD), and other cannabinoid content; dosage; and adverse effects of the particular product, whether smoked, vaped, eaten, drank, or used topically. The concentration of THC, the psychoactive substance in the marijuana plant, has grown considerably, from approximately 4% in 1995 to 12% in 2014, increasing the potential for adverse effects and addiction.

There are anecdotal reports of the successful use of medical marijuana for the treatment of a variety of health conditions in children and adolescents, including attention-deficit/hyperactivity disorder, anxiety and depression, intractable seizures, autism, anorexia, chronic pain, and postchemotherapy nausea and vomiting. However, there are no published randomized controlled studies on the use of medical marijuana in these populations.

Just as efforts have been made to discourage adolescents from smoking cigarettes and educational outreach has emphasized the highly addictive properties and significant adverse health effects of tobacco use, access to marijuana should be restricted and education about its hazards should be disseminated as evidence accrues. Counseling points for parents and adolescents are provided in an accompanying handout. Additional information on marijuana from the American Academy of Pediatrics’ Committee on Substance Use and Prevention is available at https://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/substance-use/Pages/marijuana.aspx.

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References