

APA Resource Document

Resource Document on Opposition to Cannabis as Medicine

Approved by the Joint Reference Committee, October 2018

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Prepared by the Council on Addictions

Abstract

The medical use of cannabis has received considerable attention as several states have voted to remove civil and criminal penalties for patients with qualifying conditions. Yet, on a national level, cannabis remains a schedule I substance under the Controlled Substances Act (CSA), the most restrictive schedule enforced by the Drug Enforcement Administration (DEA) (1). The Food and Drug Administration (FDA), responsible for approving treatments after appropriate and rigorous study, has not approved cannabis as a safe and effective drug for any indication (2). This juxtaposition of practice and policy has prompted many professional medical organizations to issue official positions on the topic. This statement reflects the position of the American Psychiatric Association (APA) on the use of cannabis for medical and psychiatric indications, taking into account the current evidence base and statements from other medical organizations. It does not cover the use of synthetic cannabis-derived medications such as Marinol and Syndros (dronabinol), Cesamet (nabilone) or Epidiolex (contains a purified drug substance cannabidiol, one of more than 80 active chemicals in cannabis) which have been studied and approved by the FDA for specific indications.

Complexities of Cannabis

Cannabis is a complex plant with over 500 compounds, where marijuana often refers to the dried leaves, flowers, stems and seeds. There are multiple species of cannabis including *sativa*, *indica* and *rudelaris*. Tetrahydrocannabinol or THC is the main psychoactive compound, and there are numerous other cannabinoids, with cannabidiol (CBD) being the most well-studied and popular one. Other compounds include tetrahydrocannabinolic acid (THCA), tetrahydrocannabivarin (THCV), cannabigerol (CBG), and cannabiol (CBN) (3). Formerly, cannabis was consumed through smoking of dried cannabis flowers or resin. However, newer methods of consumption include inhaling vaporized dried flowers or cannabis oil (known as "vaping") and orally ingesting edible products (known as "edibles"). Emerging methods of use include inhaling vaporized high-potency (THC) butane hash oil concentrate products (known as "wax" and "shatter" or "dabbing" when using a specialized glass device.) (4) Here a highly concentrated THC product is vaporized, rather than just the plant product. Given the variability in product form and potency and onset, dosing as a medication is extremely difficult (5-6).

Medical Indications for Cannabis as Medicine

Much of the evidence supporting cannabis use for non-psychiatric medical diagnoses remains anecdotal and based on small, limited studies. The National Academies of Sciences, Engineering and Medicine report on The Health Effects of Cannabis and Cannabinoids concluded that there was conclusive or substantial evidence that Cannabis or cannabinoids may be effective for the treatment of pain in adults;

chemotherapy-induced nausea and vomiting and spasticity associated with multiple sclerosis. Moderate evidence was found for secondary sleep disturbances. Interestingly, the evidence supporting improvement in appetite, Tourette syndrome, anxiety, posttraumatic stress disorder, cancer, irritable bowel syndrome, epilepsy and a variety of neurodegenerative disorders was described as limited, insufficient or absent." (7) Often these are diagnoses cited as being treated by cannabis. Several other medical organizations have issued statements regarding indications for cannabis as medicine based on scientific evidence.

Contribution of Cannabis to Psychiatric Illness

There is currently no scientific evidence to support the use of cannabis as an effective treatment for any psychiatric illness. Several studies have shown that cannabis use may in fact exacerbate or hasten the onset of psychiatric illnesses, as evidenced by both international trials and meta-analyses (8-10). This includes the contribution of cannabis to symptoms of mood disorders, anxiety and psychosis, particularly in young adulthood (11-12). Cannabis use is associated with the emergence of mood disorders, particularly symptoms of bipolar disorder, among those with a family history of mood disorder (13). Among those with major depressive disorder, co-morbid cannabis use is associated with increased rates of both suicidal ideation and attempts, raising grave safety concerns (14). Among those with a predisposition to psychotic disorders, cannabis may hasten the emergence of both positive and negative psychotic symptoms (15). The use of higher potency cannabis, for longer periods of time and with more frequency, is also associated with increased risk of psychosis (16).

Several studies have demonstrated the link between cannabis use and mood, anxiety and psychotic disorders among adolescents. Cannabis use is associated with increased depression, suicidal ideation, use of other substances and risky behavior among adolescents (17). Regular adolescent cannabis use is also associated with increased incidence of anxiety disorders (18). Cannabis use significantly increases the risk of psychotic disorders among young adults (19). Additionally, younger age of cannabis use is associated with an earlier onset of psychosis among those at risk (20). Adolescents with a history of cannabis use tend to have higher severity of illness, lower psychosocial functioning, less insight, and longer courses of untreated psychosis compared to those without a history of cannabis use (21). These findings are of particular concern as symptoms often persist into adulthood, and therefore cannabis use may increase the risk of lifelong symptoms and disability due to mental illness.

However, some evidence exists that pure, pharmaceutical CBD may have benefit as an adjunctive pharmacotherapy for some psychiatric conditions. Among patients with schizophrenia already stabilized on antipsychotic medication, CBD compared to placebo in a double-blind, placebo controlled trial demonstrated improvements in positive psychotic symptoms on the Positive and Negative Syndrome Scale with no increase in adverse events (22). The potential mechanism of action of CBD for schizophrenia or other psychiatric disorders is not understood, but clearly much more research is needed on this topic.

Serious Adverse Effects of Cannabis Use

Cognitive and Functional

Cannabis use is associated with serious cognitive problems such as short-term memory deficits, poor concentration, attention, and information processing (23). These impairments might be caused by neurotoxic effects of cannabis on the developing brain, the effects of which can lead to long-term cognitive problems well into adulthood (24, 25). Adolescents with daily cannabis use show deficits in learning up to six weeks after stopping cannabis use (26). This may contribute to significantly decreased

academic achievement, including increased rates of school dropout, failure to enter higher education or attain higher degrees (27). Among both adolescents and adults, cannabis significantly impairs driving, particularly as the drug affects automatic driving functions in a highly dose-dependent fashion (28). Cannabis use, particularly in combination with alcohol, greatly increases the risk of motor vehicle crashes due to effects on cognition and coordination (29).

Addiction and burden of psychiatric illness:

Cannabis use is associated with an increased risk of developing a cannabis use disorder. Studies indicate that 9% of users become dependent on cannabis, and this number increases to 25-50% among daily users and to 1 in 6 among adolescents (30). Adolescents remain at particular risk for cannabis use disorder and can experience significant withdrawal symptoms including appetite changes, restlessness, irritability, depression, twitches and shakes, perspiration, and thoughts/cravings of cannabis (31). Cannabis use is also associated with poorer outcomes among those with mental illness. Among individuals with schizophrenia, cannabis use is associated with poorer long-term clinical outcomes (32). Individuals with psychotic illness may be more sensitive to both the psychosis-inducing and mood-altering effects of cannabis (33). This may explain why even among those taking medications for psychotic disorders, cannabis use is associated with an increased risk of relapse into psychotic symptoms (34).

Legalization of medical cannabis may reduce the perceived risks of use, the perception of societal disapproval, or the barriers to access, and potentially increase the incidence of the adverse events noted above.

Assessment and Screening

While screening for lifetime use by asking questions such as “Have you ever used cannabis or weed in any form?” is an initial step, assessment of problematic use will require further questions. Standardized instruments exist to assist in these assessments; for a discussion of various options please see “Screening & Assessment of Cannabis Use Disorders” published by the University of Washington’s Alcohol and Drug Abuse Institute (35). Interview techniques similar to alcohol use disorder assessments may include building a timeline of use over the past 30 days, quantifying use by asking the time it takes an individual to consume a standardized amount, asking about the presence of use related problems, and inquiring about the occurrence of cravings and withdrawals. With respect to quantification of smoked cannabis, one may ask the amount of time to smoke 1/8 of an oz of herb cannabis or how many joints are smoked in a day.

Summary

Given the gravity of concerns regarding cannabis as medicine, professionals in both neurology and psychiatry have emphasized the importance of prospective studies to understand the mechanisms by which cannabis functions and its impact on mental health and behavior before instituting changes in practice and policy (36).

Organizations with Position Statements on Cannabis as Medicine as of August 2018

- American Academy of Child and Adolescent Psychiatry (37) (AACAP)
- American Academy of Pediatrics (38) (AAP)
- American Medical Association (39) (AMA)

- American Society of Addiction Medicine (40) (ASAM)
- American Cancer Society (41) (not a position statement, but information on website)
- National Multiple Sclerosis Society (42) (not a position statement, but information on website)

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