

Resource Document on Marijuana as Medicine

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Abstract

The medical use of marijuana 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, marijuana 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, additionally does not support the use of marijuana for medical purposes. 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 marijuana for psychiatric indications. It does not cover the use of synthetic cannabis-derived medications such as Dronabinol (Marinol), which has been studied and approved by the FDA for specific indications.

Medical Indications for Marijuana as Medicine

Much of the evidence supporting marijuana use for non-psychiatric medical diagnoses remains anecdotal. The indications with the most evidence include: severe nausea and vomiting associated with cancer chemotherapy (2), cachexia associated with Acquired Immune Deficiency Syndrome (AIDS) (3), spasticity secondary to neurological diseases such as muscular sclerosis (4), management of neuropathic pain (5), and rheumatoid arthritis (6). Several medical organizations have issued statements regarding indications for marijuana as medicine based on scientific evidence.

Contribution of Marijuana to Psychiatric Illness

There is currently no scientific evidence to support the use of marijuana 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 (7-9). This includes the contribution of marijuana to symptoms of mood disorders, anxiety and psychosis, particularly in young adulthood^{10, 11}. Cannabis use is associated with the emergence of mood disorders,

particularly symptoms of bipolar disorder, among those with a family history of mood disorder (12). 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 (13). Among those with a predisposition to psychotic disorders, cannabis may hasten the emergence of both positive and negative psychotic symptoms (14). The use of higher potency cannabis, for longer periods of time and with more frequency, is also associated with increased risk of psychosis (15).

Several studies have demonstrated the link between marijuana 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 adolescents¹⁶. Regular adolescent cannabis use is also associated with increased incidence of anxiety disorders (17). Cannabis use significantly increases the risk of psychotic disorders among young adults (18). Additionally, younger age of cannabis use is associated with an earlier onset of psychosis among those at risk (19). 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 use²⁰. 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.

Serious Adverse Effects of Marijuana Use

Cognitive and Functional

Marijuana use is associated with serious cognitive problems such as short-term memory deficits, poor concentration, attention, and information processing (21). 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 (22, 23). Adolescents with daily cannabis use show deficits in learning up to six weeks after stopping marijuana use (24). This may contribute to significantly decreased academic achievement, including increased rates of school dropout, failure to enter higher education or attain higher degrees (25). Among both adolescents and adults, cannabis significantly impairs driving, particularly as the drug affects automatic driving functions in a highly dose-dependent fashion (26). Cannabis use, particularly in combination with alcohol, greatly increases the risk of motor vehicle crashes due to effects on cognition and coordination (27). 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 (28). 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 (29). Marijuana 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 (30). Individuals with psychotic illness may be more sensitive to both the psychosis-inducing and mood-altering effects of cannabis (31). 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 (32).

Legalization of medical marijuana 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.

Summary

Given the gravity of concerns regarding marijuana 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 (33, 34).

Organizations with Position Statements on Marijuana as Medicine as of April 2013

- American Academy of Child and Adolescent Psychiatry (AACAP)
- American Academy of Pediatrics (AAP)
- American Medical Association (AMA)
- American Society of Addiction Medicine (ASAM)
- American Cancer Society
- National Multiple Sclerosis Society

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