# When and How to Treat Possible Cannabis Use Disorder



Annie Lévesque, MD, MSca, Bernard Le Foll, MD, PhDb,c,d,e,f

#### **KEYWORDS**

- Cannabis use disorder Treatment Psychosocial Pharmacologic
- Synthetic cannabinoid

#### **KEY POINTS**

- Psychosocial interventions are the first-line for the treatment of cannabis use disorder.
- The most effective available treatments are cognitive—behavioral therapy and motivational enhancement therapy, with greater benefits found when combining approaches.
- Adding contingency management to these interventions can provide further benefit.
- There is no pharmacotherapy approved for the treatment of cannabis use disorder.
- Cannabinoid analogues and gabapentin have been tested with preliminarily positive results. Further research is warranted to clarify the potential role of these medications.

#### INTRODUCTION

Cannabis is the most frequently used illicit drug worldwide. The lifetime probability of developing cannabis use disorder after a first exposure to the substance is approximately 9%. Moreover, the likelihood of developing cannabis use disorder increases significantly if an individual starts using cannabis during adolescence. In the United States, 4 million individuals were estimated to fulfill criteria for cannabis use disorder in the past year, representing approximately 1.5% of the American population aged 12 or older in 2015.

Disclosure Statement: The authors have no conflict of interest to declare.

E-mail address: annie.levesque@mountsinai.org

Med Clin N Am 102 (2018) 667–681 https://doi.org/10.1016/j.mcna.2018.02.009 0025-7125/18/© 2018 Elsevier Inc. All rights reserved.

<sup>&</sup>lt;sup>a</sup> Department of Psychiatry, Mount Sinai West Hospital, 1000 10th Avenue, Suite 8C-02, New York, NY 10019, USA; <sup>b</sup> Translational Addiction Research Laboratory, Centre for Addiction and Mental Health (CAMH), 33 Russell Street, Toronto, Ontario M5S 2S1, Canada; <sup>c</sup> Addiction Division, Addiction Medicine Service, Centre for Addiction and Mental Health, Toronto, Ontario M6J 1H4, Canada; <sup>d</sup> Department of Pharmacology and Toxicology, Institute of Medical Sciences, University of Toronto, Toronto, Ontario M5S 1A8, Canada; <sup>e</sup> Department of Psychiatry, Institute of Medical Sciences, University of Toronto, Toronto, Ontario M5S 1A8, Canada; <sup>f</sup> Department of Family and Community Medicine, Institute of Medical Sciences, University of Toronto, Toronto, Ontario M5S 1A8, Canada

<sup>\*</sup> Corresponding author.

The plant Cannabis sativa contains approximately 60 identified cannabinoid compounds, some of which exert an effect in the human body via interaction with the CB<sub>1</sub> and CB<sub>2</sub> receptors, located predominantly in the central nervous system and in the immune system, respectively.<sup>6,7</sup> The main psychoactive properties of cannabis are attributed to the cannabinoid compound delta-9-tetrahydrocannabinol (THC), a partial agonist of the CB<sub>1</sub> and CB<sub>2</sub> receptors, that has been associated with the high produced by cannabis use and with its effects that lead to the development of addiction. 6,8,9 Recently, there has been a growing interest in cannabidiol, a nonpsychotropic component also present in different strains of cannabis. Cannabidiol has been shown to have antiepileptic properties in well-conducted clinical trials, and preclinical studies suggest it may have possible therapeutic properties, including its ability to decrease THC induced paranoia and euphoria, in addition to exerting a positive impact on anxiety and depression. <sup>6,10–15</sup> It should be noted that, so far, only the antiepileptic effect of cannabidiol has been tested properly in human subjects, and the other properties of cannabidiol remain to be evaluated in rigorous large-scale clinical trials.15

Cannabis is often used recreationally for its euphoria-producing effects. Other symptoms and signs of acute cannabis intoxication include increased appetite, tachycardia, tachypnea, high blood pressure, ocular erythema, dry mouth, and altered judgment. Cannabis use has been associated with a number of deleterious health outcomes, including worsening of respiratory problems, worsening of bipolar disorder-associated symptoms, short-term impairment of learning and memory, and higher risks of death from motor vehicle accidents. 16 There is also substantial evidence regarding the association between frequent cannabis use and psychosis, including schizophrenia, although the exact interplay remains controversial.<sup>16</sup> It is possible that exposure to cannabis may precipitate an earlier occurrence of psychotic symptoms in predisposed subjects, as suggested by the transient occurrence of symptoms that resemble those of a psychosis after THC administration in human laboratory studies.<sup>17</sup> However, the fact that the prevalence of schizophrenia has been stable over time while the use of cannabis and the potency of cannabis used has increased does not support a causal relationship between cannabis use and schizophrenia.

A diagnosis of cannabis use disorder as defined by the fifth edition of the *Diagnostic* and *Statistical Manual of Mental Disorders* (DSM-5) is made when there is a problematic pattern of use leading to significant impairment or distress, as manifested by at least 2 of the symptoms listed in the DSM-5, occurring within a 12-month period. <sup>18</sup> Discontinuation of cannabis use after regular, prolonged use is associated with a withdrawal syndrome that is recognized by the DSM-5, characterized by the emergence of symptoms such as anxiety, dysphoria, sleep disturbance, irritability, and anorexia. <sup>18,19</sup> Although cannabis withdrawal can be distressing, it is not life threatening. Nonetheless, the experience of withdrawal symptoms makes cannabis cessation more challenging and individuals experiencing a higher number of withdrawal symptoms have greater risks of rapid relapse to cannabis use compared with those experiencing fewer symptoms. <sup>20</sup>

Demand for cannabis-related health care services has been increasing in most regions of the world, including North America. This finding may partly be explained by a significant increase over the past decades in the concentration of THC in cannabis as well as by the emergence of synthetic cannabinoid, a group of chemically synthesized highly potent cannabinoid analogues that are often associated with more severe use-related outcomes. Moreover, the recent legalization of marijuana use in numerous US states has contributed to easier access to the substance. Hence,

### Download English Version:

## https://daneshyari.com/en/article/8762172

Download Persian Version:

https://daneshyari.com/article/8762172

<u>Daneshyari.com</u>