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Commentary on Socias *et al.* (2018): Clinical research perspectives on cannabis use in opioid agonist treatment

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Abstract

Research is needed to determine clinical criteria as to who should be using cannabis therapeutically, how to implement therapeutic use of cannabis in opioid agonist treatment (OAT) settings optimally, and other behavioral approaches to improving OAT retention and outcomes.

Keywords

Cannabis; contingency management; opioids; opioid agonist treatment; outcomes; retention

Opioid agonist treatment (OAT) retention is associated with less substance use, health risk and criminal behavior and mortality and better retention in other needed care, social functioning and quality of life [1]. Socias and colleagues found that, among people who initiated OAT, those who used cannabis at least daily were more likely to be retained in OAT than those who did not use cannabis. Thus, cannabis may have a therapeutic role in opioid use disorder treatment, and clinical research is needed on cannabinoids as an adjunctive treatment to OAT [2]. We suggest how this research might address questions likely to be raised by health-care providers treating patients with opioid use disorders with OAT. Questions can be categorized as focusing on the patient and the treatment setting [3].

Clinical research has yielded mixed findings on the existence and nature of a cannabis use—OAT retention association. Some studies found cannabis use to be associated with poorer retention, some found no association and others found intermittent use to be associated with

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better adherence than either no or frequent use [4–8]. Because these studies were observational, it is impossible to know whether effects were due to the impact of cannabis use or to other factors that correlate with cannabis use. Generally, concomitant use of other substances such as alcohol, cocaine and amphetamines is consistently associated with poorer OAT retention [5,9]. Accordingly, findings are also mixed on reasons patients use cannabis during OAT. Patients may be attempting to cope with stress, self-medicate symptoms of mental health disorders, reduce opioid withdrawal symptoms or 'get high' [9,10].

Given the mixed findings, research is needed to define patient populations for which therapeutic cannabis use would be indicated. Clearly, some patients receiving OAT should not use cannabis, including those who are pregnant, taking some prescribed medications and with a history of heart disease or psychosis. Having excluded these patient groups, it would be necessary to develop clinical criteria as to who should be using cannabis therapeutically. This would include defining when opioid withdrawal and psychological symptoms are severe enough that potential therapeutic benefits of cannabis use outweigh the risks. Frequent marijuana use has its own risks, and adverse effects and can result in addiction [11]. Up to 12% of regular cannabis users develop cannabis use disorder, which often results in significant impairment and disability, psychiatric and medical morbidity, poor cognitive and motor performance and high demand for treatment [12]. To identify groups of patients receiving OAT who could benefit from cannabis, researchers could identify patients at elevated risk for OAT dropout and reporting a symptom for which there is preliminary evidence that cannabis could be effective. For example, because pain could increase risk of OAT dropout, and controlled laboratory experiments provide initial support for the shortterm analgesic effects of cannabis, OAT patients with pain could be a potential target for research on cannabis use and OAT retention [13,14].

A second area of research is needed to identify how to implement therapeutic use of cannabis optimally in OAT settings. Most of these settings use joint multi-disciplinary delivery models, such as counseling in specialty addiction services combined with medical management [15,16]. Practically, to reduce patients' confusion, it would probably be necessary to have different treatment tracks—one for those using cannabis therapeutically, and another in which therapeutic use is proscribed—which would challenge many settings. Research is needed on how to overcome clinician resistance to endorsing cannabis use, given marijuana's history as an illicit substance, and providers' biases against allowing substance use among patients seeking recovery. Another obstacle to implementation in the United States is that cannabis use is illegal in some states, and at the federal level marijuana remains classified as a Schedule I substance, making distribution a federal offense.

While these questions are pursued, research on other behavioral approaches to improving OAT retention and outcomes would also address providers' concerns. Our systematic review of retention in OAT [17] suggested that contingency management shows promise to increase retention and should be examined further. Similarly, a review of randomized controlled trials of adding behavioral interventions to buprenorphine maintenance treatment supported contingency management's efficacy for retention [18]. Further, behavioral treatments for pain have strong empirical support in other settings and could address underlying pain in OAT patients, without potential risks of cannabis use [19]. Long-term studies are critically

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needed demonstrating the therapeutic use of cannabis and other methods to increase OAT retention.

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