Integrated cognitive behavioral therapy for cannabis use and anxiety disorders: Rationale and development

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1. Introduction

Cannabis use disorders (CUD) are more common than all other illicit substance use disorders (SUD) combined (Stinson et al., 2006). Quitting cannabis is very difficult (Moore & Budney, 2003) and situations involving negative affect (NA) are among the most difficult situations in which to abstain (Buckner, Zvolensky, & Ecker, 2013). Anxiety is one common type of NA that is systematically and uniquely related to CUD (see Buckner, Heimberg, Ecker, & Vinci, 2013) and greater anxiety at treatment termination predicts greater post-treatment cannabis use and related problems (Buckner & Carroll, 2010). On the other hand, decreases in anxiety during CUD treatment are related to better outcomes (Buckner & Carroll, 2010). The high rates of co-occurring anxiety and SUD and the poorer outcomes among these patients have led to explicit calls for the development of treatments for dually diagnosed patients (National Insitute of Drug Abuse, 2013), including treating anxiety and

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SUD in an integrated fashion that addresses the reciprocal nature of these disorders (Stewart & Conrod, 2008).

False Safety behavior Elimination Treatment (FSET; Schmidt, Buckner, Pusser, Woolaway-Bickel, & Preston, 2012) is a trans-diagnostic anxiety CBT that addresses several anxiety disorders simultaneously by addressing False Safety Behaviors (FSB), or behaviors that help one avoid or alleviate false threats (i.e., phobic stimuli). FSBs are highly utilized across anxiety conditions because they often temporarily alleviate anxiety (e.g., avoiding a phobic stimulus). Yet, repeated use of FSBs can contribute to the maintenance of anxiety disorders (Salkovskis, Clark, & Hackmann, 1991). Thus, FSET involves the identification and elimination of FSBs and has been found to decrease anxiety and depression and improve quality of life (Schmidt et al., 2012).

FSET appears particularly well-suited for integration with CUD treatment given that for many anxious individuals cannabis is used to help manage anxiety and related NA (e.g., Buckner, Bonn-Miller, Zvolensky, & Schmidt, 2007; Buckner, Heimberg, Matthews, & Silgado, 2012; Zvolensky et al., 2009). Regardless of whether anxiety or cannabis use begins first, if anxious people use cannabis to manage their NA, they may experience perceived short-term relief, but long-term increases in anxiety related to cannabis use (e.g., anxiety associated with withdrawal), resulting in a positive feedback loop between anxiety and cannabis use. In the absence of adaptive coping strategies, anxious cannabis users may rely on cannabis to manage NA. Yet, continued cannabis use may increase NA via a number of routes, including cannabis withdrawal. Thus, anxious people who use cannabis to cope with NA in the short-term may paradoxically increase their anxiety and cannabis use-related problems in the long-term.

The primary aim of the Cannabis REduction and Anxiety Treatment Enhancement (CREATE) project is to compare motivation enhancement therapy (MET) combined with CBT to Anxiety and Cannabis Cessation Treatment (ACCT). ACCT integrates MET-CBT with FSET to simultaneously treat CUD and anxiety disorders. MET-CBT and ACCT will be compared on cannabis use, use-related problems, cannabis use to manage NA, quality of life, and remission of CUD and anxiety disorders. A secondary aim is to identify putative mechanisms (e.g., cannabis use motives, FSB use) by which treatment improves outcomes.

2. Method

2.1. Participants

Participants ($N = 60$) will be recruited through our ongoing flow of patients, as well as through advertisements and community outreach. Eligibility criteria include: (a) DSM-5 CUD; (b) co-occurring DSM-5 anxiety disorder; (c) cannabis use to reduce anxiety; (d) cannabis as substance of choice for anxiety management; and (e) age of 18–65. Exclusion criteria include: (a) severe comorbid SUD requiring in-patient treatment; (b) history of schizophrenia, bipolar disorder, neurocognitive disorder, or intellectual disability; (c) high suicide risk; (d) prior simultaneous CBT for CUD and anxiety disorders; (e) legally mandated for treatment; and (f) intent to participate in additional anxiety or SUD treatment during the study. Concurrent use of psychotropic medications is permitted as long as patients have been on a stable dose for at least three months prior to enrollment and they are willing to remain on a stable dose. Additionally, participants must be capable and willing to adhere to study protocol.

2.2. Procedures

Prospective participants will undergo a prescreening (assessing cannabis use, anxiety, motivation to quit cannabis and reduce anxiety, and other inclusion/exclusion criteria) and

will be brought in for a baseline clinical interview if they appear eligible. Eligible participants will provide informed consent prior to enrollment. Enrolled participants will be randomized to either ACCT or MET-CBT using urn randomization (Stout, Wirtz, Carbonari, & Del Boca, 1994) by gender, age, cannabis use frequency, and CUD and anxiety disorder severity.

2.3. Conditions

The Institutional Review Board of Louisiana State University approved the protocol. Treatments will consist of individual treatment sessions and patients will complete assessments of cannabis and NA at Weeks 0, 6, and 12.

CBT-MET consists of 9 weekly sessions as per the manual developed by the Marijuana Treatment Research Project Group (see Steinberg et al., 2005). Sessions include *Motivational Interviewing* (MI; Miller & Rollnick, 2002) techniques to explore and resolve ambivalence about quitting cannabis as well as psychoeducation regarding cannabis and teaching of skills designed to help patients achieve cannabis abstinence. Techniques specific to FSET will be proscribed. After the Week 12 assessment, MET-CBT patients will be offered ACCT without charge.

ACCT consists of 12 sessions integrating two established treatment manuals: CBT-MET for CUD (Steinberg et al., 2005) and FSET for anxiety disorders (Schmidt et al., 2012). Patients receive psychoeducation on FSBs' relations to anxiety and cannabis use. FSET techniques identify and eliminate reliance on FSBs (including cannabis use) related to anxiety and cannabis use. CBT techniques for quitting cannabis will be integrated with FSET to teach patients skills to achieve their cannabis-related goals while simultaneously working to reduce anxiety. ACCT is conducted in an MI spirit. ACCT patients will complete an additional assessment at Week 36 to assess maintenance of gains.

3. Conclusions

If ACCT is effective, CREATE could begin to change the treatment landscape by providing an empirically supported treatment for dually diagnosed patients and as a model for future work aimed at improving treatment for other dually diagnosed patients.

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