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# Cannabis Use Disorder

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## Description of Cannabis use Disorder

Cannabis use disorder is diagnosed when a problematic pattern of cannabis use results in significant impairment. Problematic and significant impairment is defined as meeting at least two of 11 *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013) criteria within a 12-month period. The *DSM-5* (APA, 2013) criteria include: 1) more use than intended; 2) desire or unsuccessful attempts to cut down; 3) significant time spent acquiring, using, or recovering from cannabis; 4) cravings; 5) failure to fulfill major obligations; 6) continued use despite related social and interpersonal problems; 7) reduction or elimination of important activities due to use; 8) use in physically hazardous situations; 9) continued use despite knowledge of experiencing physical or psychological consequences; 10) tolerance; and 11) withdrawal. The severity of the disorder may be classified as mild (i.e., 2-3 symptoms), moderate (i.e., 4-5 symptoms), or severe (i.e., 6 or more symptoms). Further specifiers include: *in early or sustained remission*, and the use *occurs in a controlled environment*.

Early onset cannabis use increased the likelihood of later development of cannabis use disorder in the U.S. (Le Strat, Dubertret, & Le Foll, 2015). Weekly cannabis users were at greater risk for experiencing impairment in social, physical, marital, financial, and employment domains compared to those who use less often (Davis, Thomas, Jesseman, & Mazan, 2009). The main chemical in cannabis, delta-9-tetrahydrocannabinol (THC), targets and over-activates the brain's cannabinoid receptors, resulting in an altered sense of time; impaired motor and cognitive functioning such as impaired coordination, compromised thinking, decision making, and problem solving; diminished learning; and problems with memory (NIDA, 2015b). Smoking marijuana long-term may contribute to respiratory system damage (NIDA, 2015b).

Across the globe, 181.8 million people used cannabis in 2013 (United Nations Office of Drugs and Crime, 2015). Cannabis is the most commonly used illicit drug in the United States (U.S.) with approximately 8% of those 12 years and older using cannabis in the past month (National Institute of Drug Abuse [NIDA], 2014). Researchers indicate 9% of cannabis users will develop cannabis use disorder (Budney, Roffman, Stephens, & Walker, 2007). The prevalence rate for cannabis use disorder among 12 to 17 years olds is 3.4% and 1.5% among adults over 18 years of age (APA, 2013).

### Resources:

National Institute of Health's Drug Facts: Marijuana: <http://www.drugabuse.gov/publications/drugfacts/marijuana>

NIDA's Statistics on Marijuana Use: <http://www.drugabuse.gov/drugs-abuse/marijuana>

NIDA's Is Marijuana Medicine? <http://www.drugabuse.gov/publications/drugfacts/marijuana-medicine>

Office of National Drug Control Policy's State Laws Related to Marijuana: <https://www.whitehouse.gov/ondcp/state-laws-related-to-marijuana>

Smart Approaches to Marijuana: Public Policy: <https://learnaboutsam.org>

## IDENTIFICATION/ASSESSMENT STRATEGIES

Cannabis use alone does not indicate problematic use. Therefore, counselors should determine the impact of use via screening instruments, clinical interviews, and use of the *DSM-5* criteria when assessing for cannabis use disorder. Brief screening instruments to assess for cannabis use disorder include:

- **Alcohol, Smoking, Substance Involvement Screening Test** (ASSIST; World Health Organization ASSIST Working Group, 2002): a 8-question brief screener designed to determine a client's suitability for a variety of levels of treatment ranging from no intervention to brief intervention to more intensive treatment based on the desire to use and consequences of use. See [http://www.who.int/substance\\_abuse/activities/en/Draft\\_The\\_ASSIST\\_Guidelines.pdf](http://www.who.int/substance_abuse/activities/en/Draft_The_ASSIST_Guidelines.pdf)
- **Cannabis Abuse Screening Test** (CAST; Legleye, Karila, Beck, & Reynaud, 2007): a 5-item scale designed to identify patterns of cannabis use leading to negative consequences. See <http://www.ofdt.fr/BDD/publications/docs/eisasst9.pdf>
- **Cannabis Use Disorders Identification Test** (CUDIT; Adamson & Sellman, 2003): a 10-item scale that aligns with the cannabis use disorder criteria in the DSM. See [http://www.bpac.org.nz/BPJ/2010/June/docs/addiction\\_CUDIT-R.pdf](http://www.bpac.org.nz/BPJ/2010/June/docs/addiction_CUDIT-R.pdf)
- **Severity of Dependence Scale** (SDS; Gossop, Darke, Griffiths, Hando, Powis, Hall, & Strang, 1995): a 5-item scale designed to determine a client's feelings of impairment and preoccupation with drug use. See <http://public-files.prbb.org/publicacions/82a92fd0-c44e-012b-a7a8-000c293b26d5.pdf>
- **Problematic Use of Marijuana** (PUM; Piontek, Kraus, & Klempova, 2008): a 8-item scale developed by Okulicz-Kozaryn, available in an English translation by the original author, is aligned to the International Classification of Diseases-10 standards of Cannabis Use Disorder. See <http://www.biomedcentral.com/content/pdf/1747-597X-3-25.pdf>

More in-depth scales include:

- **Cannabis Problems Questionnaire** (CPQ; Copeland, Gilmour, Gates, & Swift, 2005): a 22-item questionnaire that assess treatment outcome. See <https://ncpic.org.au/assets/downloads/workforce/cannabisinfo/assessment-tools/cannabis-problems-questionnaire.pdf>
- **Marijuana Screening Inventory** (MSI-X; Alexander, 2003): a 39-item inventory with 31 items seeking to categorize the client with no problem, normal or experimental use, potentially problematic use, or problematic use of marijuana.
- **Substance Dependence Severity Scale** (SDSS; Miele, Carpenter, Smith, Trautman, Blaine, & Hasin, 2000): a semi-structured interview designed to obtain a measure of severity of dependence on a variety of drugs including marijuana. See [http://pubs.niaaa.nih.gov/publications/AssessingAlcohol/InstrumentPDFs/67\\_SDSS.pdf](http://pubs.niaaa.nih.gov/publications/AssessingAlcohol/InstrumentPDFs/67_SDSS.pdf)

Resource:

Short scales to assess cannabis-related problems: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2636780/>

## INTERVENTION STRATEGIES

Outpatient treatments are the current level of care of choice for those who have Cannabis Use Disorder, and more than 20 years of evidence-based research suggests that behavioral treatments and family based treatments are most effective in treating those who have cannabis use disorders (Budney, Roffman, Stephens, & Walker, 2007; NIDA, 2015c). According to Jhanjee's (2014) review of the literature on evidence based psychosocial interventions, cognitive behavior therapies (CBT), motivational interviewing, and interventions which address relapse prevention are the most effective interventions across all drug categories.

### **Cognitive Behavioral Therapies (CBT)**

CBT interventions are based on the assumption that erroneous ways of thinking and perceiving can be systematically altered and that problematic behaviors can be unlearned and healthy behaviors learned (Jhanjee,

2014). When using CBT approaches clients are taught to learn new and adaptive ways of thinking and behaving accordingly in order to relinquish the use of cannabis. From the cognitive viewpoint, vicarious learning that leads to irrational thinking about cannabis use and perceptions that elicit emotional distress leading to cannabis use are addressed. From the behavioral perspective, common practices in relapse prevention strategies include craving management, cue exposure to monitor high-risk relapse situations, improvement of social skills (i.e., assertive communication and refusal skills), and coping with any relapses (Jhanjee, 2014; NIDA, 2015c).

### **Contingency Management (CM)**

Contingency management requires the use of operant conditioning principles, usually the systematic positive reinforcement of the absence of cannabis use and the punishment of the presence of cannabis use (Jhanjee, 2014). To execute these procedures with success, counselors need to complete some or most of the following: a) operationalize cannabis use; b) identify behavioral objectives; c) determine if an increase or decrease in the objectives are desired; d) develop metrics for objectives; e) identify the contingencies that maintain cannabis use; f) establish a precise reward and penalty process; and g) monitor and evaluate the plan as related to cannabis use.

### **Motivational Enhancement Therapy (MET)**

Motivational enhancement therapy (MET) is based on the assumption that the client is responsible for change. This therapy targets client ambivalence related to cannabis use treatment and mobilizes internal motivation to change (Miller, Zweben, DiClemente, & Rychtarik, 1999). Unlike other therapies, there is no attempt to systematically guide the client through the recovery process. Instead, clinicians using MET systematically intervene to produce rapid, internally motivated change. First, counselors use the stages of change to determine the stage in which the client is currently. Then, through empathic listening (i.e., using open and close ended questioning as well as reflecting, paraphrasing and rephrasing), the counselor develops discrepancy in the client's stated goals and current course in life. Increasing awareness of the consequences of cannabis use is one method counselors use to cultivate discrepancy. During this process, counselors refrain from using argumentative confrontation. Instead, the counselor works with the resistance by inviting the client to develop new ways of thinking and perceiving situations that might result in a more productive solution. A final step is for the client to develop self-efficacy and hope that change is possible.

Resource:

Marijuana Anonymous: <http://www.marijuana-anonymous.org/>

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