



Cannabis Use Disorder

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MOA Conference

Disclosures

- None

Objectives

- Discuss relative risk of different addictive substances
- Provide Definition of Cannabis Use Disorder
- Provide basics of THC and CBD effects
- Provide rationale for Michigan Medical Marijuana Program Physician Certifications

Deaths per year

- 480,000 Tobacco related deaths in 2017
 - CDC
- 119,909 Excess deaths from obesity
 - 2005 JAMA 293 (15):1861-1867
- 88,000 alcohol related deaths in 2017
 - National Institute on Alcohol Abuse and Alcoholism
- 70,200 Drug overdose deaths in 2017
 - CDC



Marijuana-Attributable Deaths

- Few reports on deaths linked to marijuana
- From 1997-2005 the FDA recorded 279 marijuana-related deaths
 - March 19, 2015: www.familycouncil.org
- Recent Vaping deaths
 - ?attributed to marijuana
 - The dose makes the poison
 - Paracelsus

Vaping is safer (ernnng)!



Epidemiology

- Cannabis Use rates
- 4% of the global population in 2015
 - “Cannabis Use Disorder” – StatPearls-NCBI Bookshelf
- 15% for ages 12 or older in the US in 2018
 - NIDA

Cannabis Use Disorder

- DSM-5 diagnosis that describes a behavioral disorder that can occur with chronic cannabis use.

Table DSM 5 criteria for cannabis use disorder severity

- Used for longer periods in larger amounts
- Unable to cut down use
- Excessive time spent acquiring, using and recovering from cannabis use
- Strong urge to use cannabis
- Problems fulfilling work, school, and family obligations due to cannabis use
- Continued use despite persistent interpersonal problems caused by cannabis use
- Decrease in important social and recreational activities because of cannabis use
- Repeated use in physically dangerous situations
- Ongoing use despite worsening physical and psychological problems that are likely to have been caused by cannabis
- Have to use increased amount for the same desired effect
- Withdrawal reaction upon cessation

Mild: 2–3 symptoms; moderate: 4-5 symptoms; severe: ≥ 6 symptoms.

Treatment/Management

- The aim should be to improve the individual's function. Supportive treatment, counseling, and detox are treatment options.
- As cannabis strains become more potent and accessible, the risk will increase for frequency and severity of adverse reactions.
- No available MAT!
 - “Cannabis Use Disorder” – StatPearls-NCBI Bookshelf

CBD vs. THC

- Cannabidiol and delta-9-tetrahydrocannabinol are both Cannabinoids
- Only THC crosses the blood brain barrier
- Only THC is psychoactive, mood altering
- Cannabinoids possess anti-oxidant abilities and protect neurons by absorbing ROS following glutamate receptor activity
 - ROS: Reactive oxygen species

Effects of Marijuana ...

Table 1. CNS and cardiovascular effects of THC and CBD.

	THC	CBD
Anticonvulsant	+	++
Muscle relaxant	++	+
Analgesic	++	+
Anxiolytic	±	++
Antipsychotic	—	++
Neuroprotective	+	++
Antiemetic	++	+
Sedation	+	—
Bradycardia	—	+
Tachycardia	+	—
Hypertension	+	—
Hypotension	—	+

Adapted from Russo E, Guy GW. A tale of two cannabinoids: the therapeutic rationale for combining tetrahydrocannabinol and cannabidiol. *Medical Hypotheses*. 2005 Dec 31;66(2):234-46.

Michigan Medical Marihuana Program
Application Instructions and Checklist
(517) 284-8400 | www.michigan.gov/mmmp

Instructions for applying to the Michigan Medical Marihuana Program

Instructions

- Mail only **one** complete application and **all** required documentation (see below) in **one** envelope to:
Michigan Medical Marihuana Program
PO Box 30083
Lansing, MI 48909
- **Make checks or money orders payable to: State of Michigan-MMMP**
- This application is for a person who is 18 years of age or older and a resident of Michigan.
- Please type or print legibly when completing the application.
- The original signed Application Form and Physician Certification Form must be submitted to the MMMP. Make sure to keep copies for your records.

Checklist

- ☐ **Application Form for Registry Identification Card**
 - Any use of white-out or alterations to the Application Form will result in the denial of your application.
 - If you are acting as either the legal guardian or Medical Durable Power of Attorney (MDPOA) for the applicant, you must submit a copy of proof of legal guardianship or MDPOA with signatory authority with the application. The MDPOA or legal guardian must also submit a copy of their valid photo ID (see copy of valid photo ID below).
- ☐ **Patient Fee: \$60**
- ☐ **Caregiver Fee: \$25**
- ☐ **Copy of Valid Photo ID** (Michigan Driver's license, Michigan ID card, or other acceptable form of ID)
 - The copy of the photo ID must be clear and legible.
 - If you submit a copy of a photo ID that is not a Michigan driver's license or Michigan ID card, you must also submit a copy of your Michigan voter's registration card as proof of residency.
- ☐ **Physician Certification Form**
 - A complete Physician Certification Form must be completed and signed by a Medical Doctor or Doctor of Osteopathic Medicine and Surgery who is fully licensed by the State of Michigan.
 - Any use of white-out or alterations to the Physician Certification Form will result in the denial of your application.

Qualifying Conditions in Michigan

Section C: Patient's Debilitating Medical Condition(s) <i>(REQUIRED)</i>		
<p>This patient has been diagnosed with the following debilitating medical condition(s): (A minimum of one box must be checked in at least one of the following categories.)</p>		
Category A	Category B	Category C
<input type="checkbox"/> Cancer <input type="checkbox"/> Glaucoma <input type="checkbox"/> HIV Positive <input type="checkbox"/> AIDS <input type="checkbox"/> Hepatitis C <input type="checkbox"/> Amyotrophic Lateral Sclerosis <input type="checkbox"/> Crohn's Disease <input type="checkbox"/> Agitation of Alzheimer's Disease <input type="checkbox"/> Nail Patella	<p>A chronic or debilitating disease or medical condition or its treatment that produces 1 or more of the following:</p> <input type="checkbox"/> Cachexia or Wasting Syndrome <input type="checkbox"/> Severe and Chronic Pain <input type="checkbox"/> Severe Nausea <input type="checkbox"/> Seizures (Including but not limited to those characteristic of epilepsy) <input type="checkbox"/> Severe and Persistent Muscle Spasms (Including but not limited to those characteristic of multiple sclerosis)	<input type="checkbox"/> Post Traumatic Stress Disorder <input type="checkbox"/> Obsessive Compulsive Disorder <input type="checkbox"/> Arthritis <input type="checkbox"/> Rheumatoid Arthritis <input type="checkbox"/> Spinal Cord Injury <input type="checkbox"/> Colitis <input type="checkbox"/> Inflammatory Bowel Disease <input type="checkbox"/> Ulcerative Colitis <input type="checkbox"/> Parkinson's Disease <input type="checkbox"/> Tourette's Syndrome <input type="checkbox"/> Autism <input type="checkbox"/> Chronic Pain
Section D: Certification, Signature, and Date <i>(REQUIRED)</i>		

Get Legal In Ohio Today!



Medical Marijuana Is Available For The Following Conditions:

AIDS & HIV	Parkinson's Disease
Amyotrophic Lateral Sclerosis	Post-Traumatic Stress Disorder
Alzheimer's Disease	Sickle Cell Anemia
Cancer	Spinal Cord Disease or Injury
Chronic Traumatic Encephalopathy	Tourette's Syndrome
Crohn's Disease	Traumatic Brain Injury
Epilepsy or another seizure disorder	Ulcerative Colitis
Fibromyalgia	Hepatitis C
Glaucoma	Inflammatory Bowel Disease
Pain (chronic & severe or intractable)	Multiple Sclerosis

Rationale for Physician Certification

- Note: this is not a prescription
- Physician attests that person may benefit from use of marijuana for an approved condition
- Ability to go to dispensary vs drug dealer
- Reduce potential legal exposure for card holder

Documentation in Plan

- “Completed Michigan Medical Marihuana Physician Cert form. Recommended use of oral or topical vs. smokable product with higher cbd vs THC content. Discussed Risk vs. Benefit of using medical marijuana.”
 - Amazing Charts Plan Template created by David Best, DO

Thank You

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