Cannabis and Cannabis Use Disorder: What Providers Need to Know

Bari K Platter, MS, RN, PMHCNS-BC, FIAAN
Laura Martin, MD
The presenters do not have any disclosures to declare for this presentation
Objectives

- Be able to talk with your patients about potency levels of THC in marijuana products
- Be prepared to speak with patients about the risks and benefits of marijuana for physical and emotional health
- Have the ability to identify problematic cannabis use and Cannabis Use Disorder (CUD)
Please see slide at Presentation
Cannabis Use in the US

SAMHSA.gov, National Survey on Drug Use and Health 2015 and 2016
Colorado Cannabis: THC Content

- 40 yo professional female, recently moved to CO from Iowa
- Occasional cannabis user, “I smoke a joint with friends about 1-2 times a month.”
- Reports feeling tightness in chest, increased anxiety and nausea after smoking a joint with friends at a party in Colorado.
Does the potency of cannabis products (% of THC) vary among states?

- [ ] YES
- [ ] NO
National Potency Changes

Figure 4. Δ9-Tetrahydrocannabinol (THC) potency distribution of cannabis samples from Drug Enforcement Administration specimens and average THC by year, 1995–2014.

Mahmoud A. ElSohly, Zlatko Mehmedic, Susan Foster, Chandrani Gon, Suman Chandra, James C. Church


http://dx.doi.org/10.1016/j.biopsych.2016.01.004
Average THC and CBD Levels in the U.S. 1960-2011
Average THC Levels in CO 2010-2016

RMHIDTA, 2016
Commercialization of Cannabis Increases THC Content

Hasin, 2018; Sevigny et al 2014; Compton et al 2004
Cannabis and Pain Management

- 47 year old male with chronic back pain presents with worsening pain in the context of opioid taper prescribed by previous PCP
- “I’m wondering if marijuana will help my pain better than opiates?”
Cannabis is more effective than opiates for the management of chronic pain

- TRUE
- FALSE
Effect of Cannabis Use in People with Non-cancer Pain Prescribed Opioids: Findings From a 4-year Prospective Cohort Study

Association of Cannaboid Administration with Experimental Pain in Health Adults: Systematic Review and Meta-Analysis

DeVita et al JAMA Psychiatry September 2018 e1-e10
Therapeutic Effects of Cannabis

Whiting, Wolff, Deshpande, et al, 2015 (JAMA)
“Trial of Cannabidiol for Drug-Resistant Seizures in the Dravet Syndrome”

“Trial of Cannabidiol for Drug-Resistant Seizures in the Dravet Syndrome”

Pharmacological Interactions

- 57 y/o male with CAD with recent stent replacement, recurrent thromboembolic disease and seizure D/O presents with persistent nose bleeds that started two weeks prior to appointment
- Stable on warfarin therapy for 10 years, suddenly has INR of 10
- Bloodwork WNL with exception of positive for THC
- On interview patient reports increase of .5 to 2.5 grams per week of smoked cannabis
Possible Medication Interactions

Increased risk of bleeding

Affects blood sugar

Increases drowsiness

Affects the liver’s cytochrome P450 enzyme system

SAMHSA, 2017
24 y/o male presents for annual PE

No acute medical problems, no personal or family history of substance use disorder

Enjoys the effects of cannabis and wants advice regarding safest delivery method
What is the safest delivery method for cannabis?

A. Smoking plant-based cannabis

B. Vaping

C. Edibles

D. There is no “safest” delivery method for cannabis
High Level of Cannabis Use within Colorado Cannabis Industry

Budtenders are not health care providers, despite their willingness to offer recommendations

Dickson et al Obstetrics and Gynecology June 2018 131 (6) 1031-1038
67 y/o female presents with Stage 4 ovarian cancer
Endorses significant acute pain, up to five times a day with intensity up to 9/10
Requests prescription for Medical Marijuana, stating it helps with pain and will save her money
Cannabis and Sleep

• 56 y/o female presents with hypertension (well controlled with medication), post-menopausal, c/o insomnia x one year

• Wants to try marijuana to help her sleep and asks which type of marijuana will work best
Please see slide at Presentation
Sleep and Cannabis

Vigil et al Medicines 2018 5(75) 1-10
Cannabis and Screening

• 28 yo male with prior diagnosis of attention deficit hyperactivity disorder presents for monthly appointment
• Urine dip is positive for THC
• Patient states he uses marijuana daily and doesn’t think it is a problem
• Patient appears to be disorganized and easily distracted in interview
Why is it important to screen for cannabis use?

A. Cannabis is the third most commonly used substance, after nicotine and alcohol

B. It is unhelpful to screen for cannabis use because so many people use it

C. Cannabis use is associated with significant medical problems

D. A & C
Screening and Brief Intervention

SAMHSA, 2017
35 y/o male presents with complaint of frequent nausea and vomiting
Patient has no active medical problems and doesn’t take any prescription medications
On interview patient endorses daily use of cannabis with dabs and vaping
Acute Adverse Effects of Cannabis Use

Whiting, Wolff, Deshpande, et al, 2015 (JAMA)
Other Adverse Effects

Temporarily increases HR and BP
Chronic bronchitis
Depression
Anxiety/panic attacks
Suicidal ideation and suicide attempts
Psychosis
Infertility
Cannabinoid Hyperemesis Syndrome
Other Effects of Cannabis

Reviewed in Hall, 2014; Reviewed in Volkow et al 2014; Hodcroft et al 2014; Asbridge et al 2014; Monte et al 2014
I did stop using. That test came back positive because my friends are still using marijuana.
Yes, “Hotboxing,” Is Real

Stanciu et al Journal of Alcoholism and Drug Dependence 2017 5(5): 1-4
Cannabis and Psychosis

• 35 year old male, successful real estate developer in Northern Colorado.
• Does not drink alcohol, began smoking marijuana in HS and continued through college and after
• Being seen after 72-hour hold at the ED
• Using marijuana daily x three years with worsening symptoms of paranoia, disorganized and threatening bx and auditory and visual hallucinations
Does psychosis remit after cannabis use is stopped?

A. YES

B. NO

C. UNCLEAR
Cannabis and Psychosis

Spencer, 1970; Degenhardt & Hall, 2002
Cannabis Use and Psychosis

Hall, 2014; Di Forti et al 2014, Giordano et al 2014
Cannabis Use Disorder

- 45 y/o male construction worker with chronic back pain has been working with PCP x two years
- Currently uses Butane Hash Oil (BHO) per vape up to 10x daily
- Unable to decrease and has actually increased use in past month
- Recently fired for poor attendance and his girlfriend broke up with him
National Cannabis Use Levels

Development of a Cannabis Use Disorder in Adults who use Cannabis: 1 in 11

Development of a Cannabis Use Disorder in Adults who use Cannabis daily: 1 in 2

(Keeping in mind that this is based on THC content <12%)

Impaired control
1. Using for longer periods of time than intended/using larger amounts than intended
2. Wanting to reduce use, yet being unsuccessful
3. Spending excessive time getting/using/recovering
4. Cravings that are so intense it is difficult to think about anything else

Social impairment
5. Continued use despite work, family/social obligations
6. Continued use despite interpersonal problems
7. Important/meaningful social/recreational activities reduced or given up

Risky use
8. Repeatedly uses in physically dangerous situations
9. Continued use even though there is awareness of physical and psychological problems

Physiological indicators
10. Tolerance
11. Withdrawal
Cannabis Withdrawal Syndrome

Withdrawal symptoms are a negative reinforcement for continued use and are associated with less treatment adherence

Bonnet and Pruess, 2017
The Natural Course of Cannabis Use Disorders

Farmer et al 2015
Treatment

Only 7% with a cannabis use disorder in the past year report having received some sort of treatment or involvement in mutual support groups

Hasin et al 2016
Treatment of Cannabis Use Disorder

• Outpatient vs residential treatment

• Psychosocial Interventions

• Pharmacotherapy
Psychosocial Interventions and Outcomes

Interventions
• CBT
• MET
• Contingency Management
• Self Help Support Groups-12 Step Groups, SMART Recovery

Outcomes
• Enhance motivation to reduce or end use
• Improve social skills
• Improve social support and interpersonal functioning
• Manage painful feelings
• Education about consequences of use

Gorelick, Saxon and Hermann, 2017
Pharmacotherapy

• NO MEDICATION has been approved for the treatment of Cannabis Use Disorder by the FDA or any other national regulatory agency

Gorelick, Saxon and Hermann, 2017
Treatment- Pharmacotherapy

Summary

• Commercialized cannabis THC potency (the substance that makes you high) is often higher than cannabidiol potency (the substance that is most protective)
• Cannabis may be most helpful for the emotional components of pain; prospective controlled studies show no benefit for chronic pain
• Many positive studies in the literature are industry associated studies
• Any use of cannabis can cause physical and emotional side effects; chronic use can lead to addiction