

Therapeutic Uses of Medical Cannabis

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Disclosures

- ***Research/Grants:*** National Institute of Drug Addiction (NIDA), World Health Organization
- ***Other Financial Interest:*** Hazelden Publishing and Wolter-Kluwer

Learning Objective 1

Discuss the current state of the evidence for the therapeutic use of cannabis.



Learning Objective 2

Review acute and chronic risks of cannabis use.



Learning Objective 3

Identify challenges associated with the increasing popularity of cannabidiol.



Three Areas of Focus



- **Clinical work:** Director of Addiction Psychiatry, private practice, pro sports teams and leagues
- **Clinical research:** cannabis clinical trials
- **Educational outreach:** Science vs. public perception, schools, policymakers

Why Cannabis?

- Addiction treatment: 40% alcohol, 40% opioids, 20% everything else
- Around 60%: time when smoked cannabis daily for years
- How many of these folks would you see down the road if an effective cannabis intervention existed?





SIPLES

State of the Science: Medical Cannabis



New Online

Views **10,183** | Citations **0** | Altmetric **224**

JAMA Insights

August 9, 2019

Medical Use of Cannabis in 2019

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» Author Affiliations

JAMA. Published [online](#) August 9, 2019. doi:10.1001/jama.2019.11868

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THE LANCET
Psychiatry

COMMENT | VOLUME 6, ISSUE 2, P88-89, FEBRUARY 01, 2019

Therapeutic cannabis use in 2018: where do we stand?

Kevin P Hill  • Matthew D Palastro • Tony P George

Published: February, 2019 • DOI: [https://doi.org/10.1016/S2215-0366\(18\)30417-6](https://doi.org/10.1016/S2215-0366(18)30417-6) •

 Check for updates

FDA-Approved Cannabinoids



- Dronabinol (Marinol)¹ - oral THC
- Nabilone (Cesamet)² - CB1 agonist
- FDA-Approved
 - Nausea and vomiting associated with chemotherapy
 - Appetite stimulation in wasting illnesses like AIDs
- CBD-negative allosteric modulator³
- FDA-approved for 2 pediatric epilepsy syndromes⁴

1. https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/018651s029lbl.pdf.

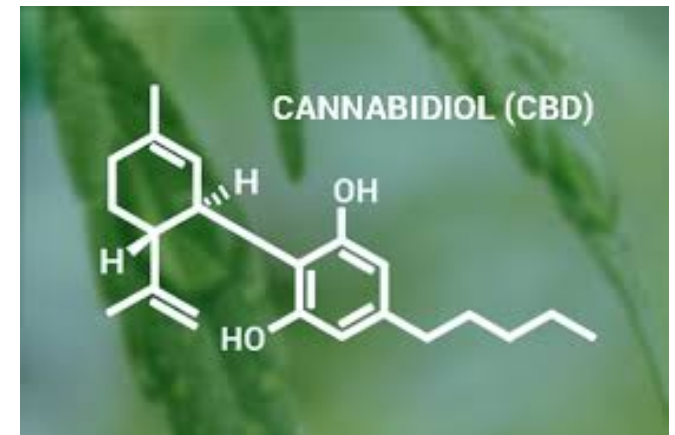
2. https://www.accessdata.fda.gov/drugsatfda_docs/label/2006/018677s011lbl.pdf.

3. Laprairie RB, et al. *Br J Pharmacol*. 2015;172(20):4790-4805.

4. https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/210365lbl.pdf

Cannabidiol (CBD)

- 95% of CBD used is not cannabidiol (Epidiolex)
- Promising, but most evidence pre-clinical¹
- Not regulated, often mislabeled^{2,3}



1. Pisanti S, et al. *Pharmacol Ther.* 2017;175:133-150.
2. Bonn-Miller MO, et al. *JAMA* 2017;318(17):1708-1709.
3. Poklis JL, et al. *Forensic Sci Int.* 2019;294:e25-e27.

Medical Indications According to Laws

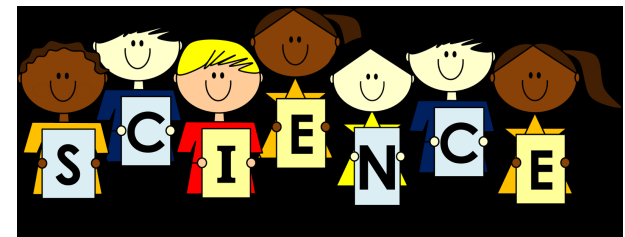
- Laws in various states—Cancer, glaucoma, AIDs, hepatitis C, amyotrophic lateral sclerosis (ALS), Crohn's disease, Parkinson's disease, multiple sclerosis (MS)
- Many of the same conditions, but 53 conditions overall
- Data suggest that majority of people with medical cannabis cards do not have one of the above conditions



Medical Indications Based on Good Quality Evidence

- Over 50 clinical trials of cannabinoids, including cannabis
- High quality evidence (approximately half of studies positive) for
 - Chronic pain
 - Neuropathic pain
 - Spasticity associated with MS (Hill JAMA 2015)

Hill KP. *JAMA* 2015;313(24):2474-2483.



Public Release

Health Effects of Cannabis and Cannabinoids

*Current State of
Evidence and
Recommendations for
Research*

This report will be available to
download as a free pdf:
[Nationalacademies.org/CannabisHealthEffects](https://doi.org/10.17226/24625)

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



National Academies of Sciences, Engineering, and Medicine. 2017. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24625>. Accessed February 17, 2020.

Other reviews

- Conclusive or substantial evidence that cannabis or cannabinoids are effective:
 - Chronic pain in adults
 - Chemotherapy-induced nausea and vomiting,
 - Patient-reported multiple sclerosis spasticity symptoms¹ (NASEM 2017)
- Moderate quality: chronic pain and spasticity²

1. National Academies of Sciences, Engineering, and Medicine. 2017. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24625>. Accessed February 17, 2020.;

2. Whiting PF, et al. *JAMA* 2015;313(24):2456-2473.

Practical Considerations



Problems: Regulations

- Many conditions not evidence-based
- Recommended amounts
- Creating new drug dealers?
- Specificity/loopholes



Most Medical Cannabis Permits Issued for Undisclosed Conditions

90% of Massachusetts Recipients Do Not Have One of the 8 Allowable Diagnoses

Who's Getting Certificates? ¹ Massachusetts Medical Marijuana Certificates	
ALS	18
Parkinson's disease	41
Glaucoma	227
HIV/AIDS	265
Crohn's disease	276
MS	347
Hepatitis C	403
Cancer	756
Other	22,130

Medical Marijuana-Eligible Patients in New England ¹		
State	Licenses/Certificates	Population
Maine	26,388	1,330,089
Massachusetts	24,463	6,745,408
Rhode Island	12,202	1,055,173
Connecticut	5,357	3,596,677
Vermont	2,200	626,562
New Hampshire ²	8,566	1,360,000

1. Feathers T. Published 9/28/15. <https://www.lowellsun.com/2015/09/28/most-medical-pot-permits-issued-for-undisclosed-conditions/> Accessed 2/17/20. 2. Crowe M. Published 10/22/19. <https://mjbizdaily.com/new-hampshires-new-satellite-dispensary-law-aims-to-boost-medical-marijuana-program-chart/>. Accessed 2/17/20.

Problems: Practice



- Small number of doctors writing majority of certifications
- Has anyone heard of patients who have been turned down for medical cannabis cards?
- “Budtender” at times playing larger role than doctor
- Follow-up?

Medical Cannabis: Suggestions on What You Should Do

- Have a policy!
- Engage in conversation about why the patient feels this may help.
- Be open to evaluating patients who want it—yours or colleagues’



Evaluation of a Patient for Medical Cannabis Certification

- Comprehensive evaluation
- Doctor treating the debilitating condition
- Risk/benefit discussion that relies on your best clinical judgement
- Full informed consent



The Appropriate Candidate



- Debilitating condition with evidence
- Multiple failed trials of first- and second-line treatments
- Failed trial of FDA-approved cannabinoid
- No active condition (of *DSM-IV* Axis I variety)

Case

- “Susan” is a 74-year-old married woman with PMH of osteoarthritis and chronic back pain (L4-L5)
- She and her husband bring a list of medications and procedures that have been tried in collaboration with her PCP and the hospital pain clinic
- PCP would like to know whether she is an appropriate candidate for medical cannabis



Your Assessment



- Risk: Benefit
- Not a first- or second-line treatment
- Who will write certification if appropriate?
- Follow-up?

SMART Goals

Specific, Measurable, Attainable, Relevant, Timely



- There is evidence supporting the therapeutic use of cannabis beyond the 3 FDA-approved indications, but it pales in comparison to interest and actual use.
- The idea of medical cannabis may be promising, but the implementation has been poor.
- Be open to the evidence in this evolving field.

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