

10:35 – 11:35 AM

Cannabis: Medicine, Myth, or Mistake?

SPEAKER
Timothy Fong, MD

Recent Case at UCLA

- 20 year old female admitted for violent outbursts, screaming after losing Instagram account
- Could not settle down in ER and required restraints
- 6 days to calm down in hospital, with meds (irritable, hostile, poor sleep, not learning / adapting)

Learning Objectives

- Recognize how cannabis is consumed in the current landscape of legalization
- Describe best practices in the screening and treatment of cannabis use disorder
- Increase awareness of the physical, mental, and social impact of cannabis use on primary care patients
- Review efficacy data of cannabis for medical conditions

Recent Case at UCLA

- History revealed
 - Initiated cannabis use at age 17
 - Daily use of cannabis since age 18
 - Grades declined, limited friends, isolates, aggressive toward family, slept poorly, stalled life development
 - Never tried to quit / stop

Terminology

- *Cannabis* is the botanical term for the hemp plant *cannabis sativa*.
- *Marijuana* is a cultural term for the cannabis plant

National Trends

- Topic of National Discussion
- Since 2008, perception of harm among 12th graders has decreased leading to increased use
- Emergence of “Big Weed”
 - Environmental, economic, political power
- Cannabis Medicine as a specialty

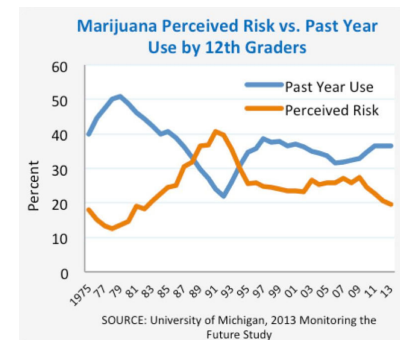
Cannabis

>500 distinct compounds

Cannabinoids:

- Class of compounds that act on cannabinoid receptors
- THC (Psychoactive)
- CBD (Non-psychoactive)

Adolescent considerations





The California Cannabis Story

1996

- In 1996, voters approved Proposition 215, which legalized the use of medicinal cannabis in California.
- Since the proposition was passed most regulation was done by local governments.



Current policy: Federal

- Schedule I Controlled Substance by the United States Drug Enforcement Agency
- Substances in this schedule have no currently accepted medical use in the United States,
 - a lack of accepted safety for use under medical supervision, and a high potential for abuse
- Heroin, lysergic acid diethylamide (LSD), peyote, Ecstasy

2016

In November of 2016, voters approved Proposition 64, the Adult Use of Marijuana Act (AUMA). Under Proposition 64, adults 21 years of age or older can legally grow, possess, and use cannabis for non-medicinal purposes, with certain restrictions.



2018

- January 1, 2018:
 - AUMA makes it legal to sell and distribute cannabis through a regulated business.



Current Cannabis Regulations



California Offices

- **Bureau of Cannabis Control**
 - The Bureau is responsible for regulating commercial cannabis licenses for retailers, distributors, microbusinesses, testing laboratories, and temporary cannabis events.
- **California Dept. of Public Health**
 - Medical Marijuana Program
 - Manufactured Cannabis Safety Branch



What Should We Know?

Legal to possess, process, transport, purchase, obtain, or give away to persons 21 or older, not more than one ounce of cannabis or 8 grams of concentrated cannabis

What Should We Know?

- It is legal to...
...**Cultivate, possess, plant, harvest, dry or process not more than six live plants** and possess the produce of the plants

Cannabis as Medicine

What You Can't Do

- Smoke, vaporize or ingest cannabis or cannabis products in any public place or non-smoking area (\$100 infraction)
- Consume cannabis or possess an "open container of cannabis while driving or riding - must be locked and not visible
- Possess or use cannabis on the grounds of a school, day care or youth center while children are present.

Accepted Therapeutic Use

- Marinol (synthetic THC)
 - Chemotherapy-induced nausea and vomiting
- Epidiolex (CBD)
 - Pediatric seizures
- Sativex (THC and CBD)
 - Muscle Spasticity (MS); non-USA

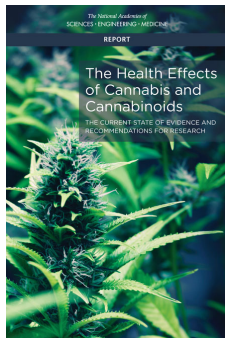
Why do People Use Medical Marijuana?

REASON FOR USE	% REPORTING REASON
Pain Relief	82.6%
To Sleep	70.6%
To Relax	55.6%
Muscle Spasms	41.3%
Anxiety	38.1%
To Stimulate Appetite	38.0%
Nausea	27.7%
Depression	26.1%

SOURCE: Reinarman C, et al. J Psychoactive Drugs. 2011 Apr-Jun;43(2):128-35. (reference list).

Expert, ad hoc committee of the National Academies of Sciences, Engineering, and Medicine presents nearly 100 conclusions related to the health effects of cannabis and cannabinoid use

2017 State of Evidence



- Health and Medicine division of the National Academy of Sciences (Formerly the Institute of Medicine)
- Emphasis on review of research since 2011

Therapeutic Effects of Cannabis: Conclusive / Substantial

- There is conclusive or substantial evidence that cannabis or cannabinoids are effective:
 - For the treatment for chronic pain in adults (cannabis)
 - Antiemetics in the treatment of chemotherapy-induced nausea and vomiting (oral cannabinoids)
 - For improving patient-reported multiple sclerosis spasticity symptoms (oral cannabinoids)

Therapeutic Effects: Moderate

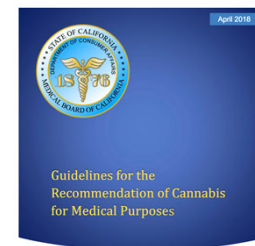
- There is moderate evidence that cannabis or cannabinoids are effective:
 - Improving short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea
 - Syndrome, fibromyalgia, chronic pain, and multiple sclerosis (cannabinoids, primarily nabiximols)

Questions That Come Up

- Isn't this less toxic than opioids, antidepressants, or benzos?
- If it's legal, it must be safe?
- What dose do you recommend?
- Do I need a medical marijuana card?
- What's the best way to take it?
- I hear it's good for . . .

What should I say to the patient that inquires about cannabis as medicine?

Current Standards of Practice



MEDICAL BOARD OF CALIFORNIA

Edward G. Brown, Jr., Governor
Don Cranshaw, M.D., President, Medical Board of California
Kimberly Kitching, Executive Director, Medical Board of California

Guidelines

- Appropriate patient-physician relationship
- Patient examination
- Informed and Shared Decision Making
 - R/B, review current legal practices
- Treatment Plan
- Ongoing Monitoring
- Record Keeping

Current Standards of Practice

- A physician may not recommend a specific cannabis product or a specific dispensary, or otherwise help the patient obtain cannabis.
- Documentation of discussion to prevent pediatric exposures and diversion

Current MBC Stance

- Recommending cannabis for any medical conditions, however, is at the professional discretion of the physician acting within the standard of care.
- California physicians cannot dispense or prescribe Schedule I drugs, but they can “recommend” cannabis use to patients.

Future Questions

- Should cannabis medicine be its own medical specialty?
- Should there be required training or certification?
- Where are the most credible training and educational sources for cannabis medicine?

Choosing Wisely Recommends

Myths about Cannabis

The screenshot shows the 'Choosing Wisely' website. The header includes the logo and navigation links: 'Our Mission', 'Clinician Lists' (underlined), 'For Patients', 'Getting Started', and 'Success Stories'. A search bar is on the right. Below the header, a breadcrumb trail reads: 'Home > Getting Started > Lists of Recommendations > Search Recommendations'. The main heading is 'Clinician Lists'. A note states: 'Complete lists of recommendations by society can be found by clicking the society name or via individual recommendation pages.' Below this is a green message box: 'Your search did not return any results'. A table with two columns, 'Society' and 'Recommendation', is shown but is empty. To the right is a 'Search Recommendations' sidebar with filters for KEYWORD (cannabis), SOCIETY, TOPIC AREA, AGE, SETTING, and SERVICE, each with a dropdown menu. At the bottom of the sidebar are 'SEARCH' and 'Clear Filters' buttons.

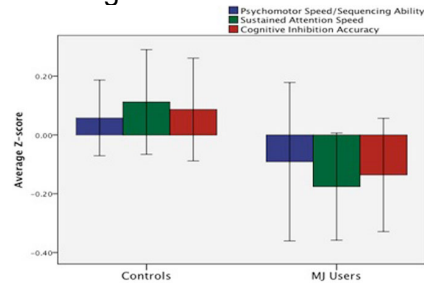
Selected Myths About Cannabis

- Cannabis is not addictive
- Cannabis doesn't have side effects
- Cannabis does not lead to death
- Cannabis is safer than opiates or benzodiazepines
- Cannabis is harmless

Cannabis and the Adolescent Brain

- Human studies suggest early onset use associated with more severe cognitive consequences.

- Poorer attention
(Ehrenreich et al., Psychopharmacology, 1999)
- Executive functioning
(sustained attention, cognitive inhibition, abstract reasoning)



National Academy: CUD risk

Substantial Evidence

- Initiating cannabis use at an earlier age is a risk factor for the development of problem cannabis use
- Greater frequency of cannabis use increases the likelihood of developing problem cannabis use

National Academy: Mental Health Risks

Substantial Evidence for association of cannabis use with:

- The development of schizophrenia or other psychoses, with the highest risk among early and the most frequent users

Cannabis Use Disorder (CUD)

DRUG	LIFETIME RISK OF DEPENDENCE
Nicotine	32%
Heroin	23%
Cocaine	17%
Alcohol	15%
Cannabis	9%

SOURCE: Bostwick, Mayo Clin Proc. 2012 Feb;87(2):172-86 (reference list).

Cannabis-Related Disorder

- Cannabis Use Disorder
- Cannabis Intoxication
- Cannabis Withdrawal
- Other Cannabis-Induced Disorders
- Unspecified Cannabis-Related Disorder

Cannabis Use Disorder

1. _____ is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control _____ use.
3. A great deal of time is spent in activities necessary to obtain _____, or recover from its effects.
4. Craving, or a strong desire or urge to use _____.
5. Recurrent _____ use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued _____ use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
7. Important social, occupational, or recreational activities are given up or reduced because of _____ use.
8. Recurrent _____ use in situations in which it is physically hazardous.
9. _____ use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
10. Tolerance, as defined by either of the following:
 1. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
 2. A markedly diminished effect with continued use of the same amount of _____
11. Withdrawal, as manifested by either of the following:
 1. The characteristic withdrawal syndrome for alcohol (refer to Criteria A and B of the criteria set for alcohol withdrawal).
 2. _____ is taken to relieve or avoid withdrawal symptoms.

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Cannabis Intoxication

- Clinically significant problematic behavioral or psychological changes (e.g., impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal) that developed during, or shortly after, cannabis use.

Cannabis Withdrawal

- Three (or more) of the following signs and symptoms develop within approximately 1 week:
 - Irritability, anger, or aggression.
 - Nervousness or anxiety.
 - Sleep difficulty (e.g., insomnia, disturbing dreams).
 - Decreased appetite or weight loss.
 - Restlessness.
 - Depressed mood.
- At least one of the following physical symptoms causing significant discomfort: abdominal pain, shakiness/tremors, sweating, fever, chills, or headache.

Could Expanding Access and Acceptability of Cannabis Be a Big Mistake?(and how to avoid it)

- What might happen in 10, 20, 30 years?
 - Public Health Impact
 - Car accidents, environmental impact,
 - Addiction and Mental Health
 - Cannabis epidemic?
 - Medical Impact
 - Research must guide treatment
 - Without proper education, mythology persist

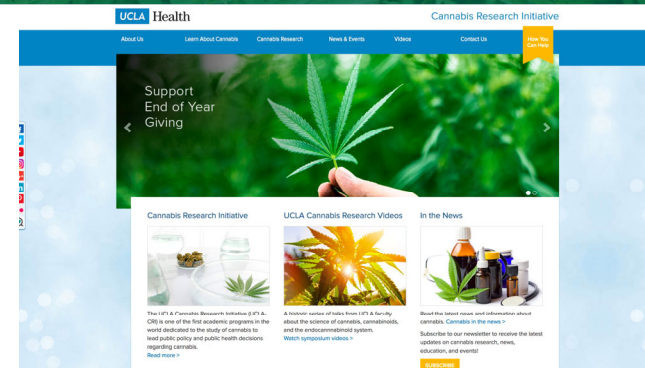
The UCLA Cannabis Research Initiative

- To investigate the therapeutic potential and health risk of cannabis through the interdisciplinary study of all facets of cannabis' effect on society, including legal, economic, and social impact.
- UCLA-CRI will provide timely education, research, and service to lead public policy and public health decisions regarding cannabis.

Roadmap for Clinicians

- No cannabis for under anyone under 21
- Focus on changing perception of risk
 - “Respect the power of cannabis”
- Screen for cannabis use
 - Cannabis Use Disorders Identification Test
- Follow the lead of professional societies
- Discuss storage and disposal

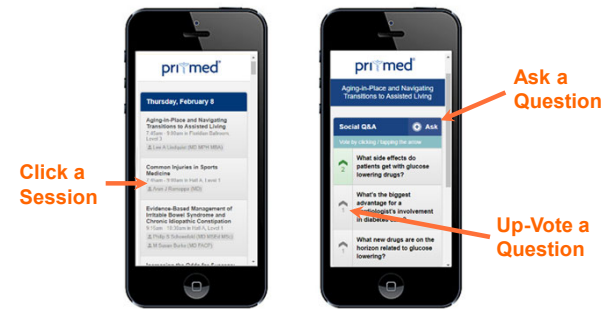
uclahealth.org/cannabis



Summary

- Cannabis has therapeutic potential and adverse effects
- Each individual provider must inform themselves and follow standards of care
- Recognition of addiction and mental health impacts from cannabis is crucial
- So much more must be understood

ASK QUESTIONS USING OUR
NEW SOCIAL Q&A FEATURE!
Navigate to www.west.cnf.io



pri:med



UCLA Health
Cannabis Research Initiative

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