Medical Marijuana: What a Physician Needs to Know

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Medical Marijuana Symposium

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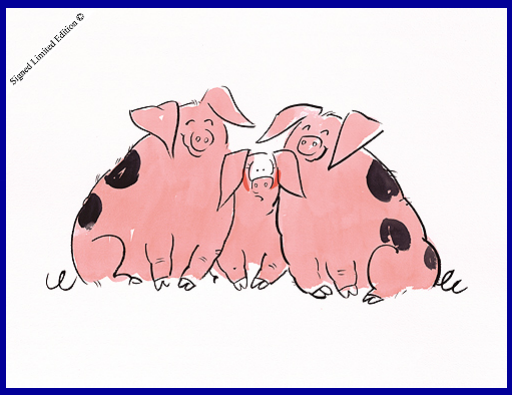
Disclosure

I have no financial relationship with a commercial entity producing health-care related products and/or services.

Three Areas of Focus

- Clinical work: McLean Substance Abuse consultation service, private practice.
- Clinical research: 3 clinical trials (2 marijuana, 1 tobacco cigarettes).
- Educational outreach: Science vs. public perception, official community partner to Boston Public Schools, book on marijuana to be released in early 2015.

In The Middle



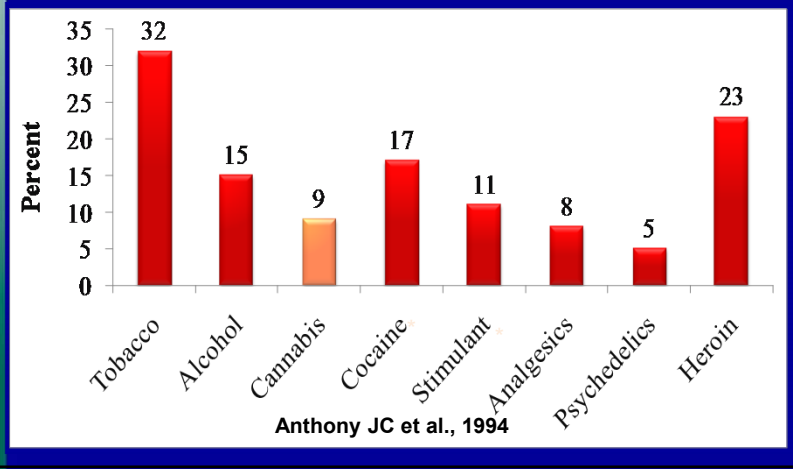
Marijuana Use: Scope of the Problem

Context of Current Laws- National Statistics

- Over 18 million Americans used marijuana in the past year.
- Powerful messages– medical marijuana, legalization, pop culture.
- Some messages off the mark, contribute to gap between science and public perception.

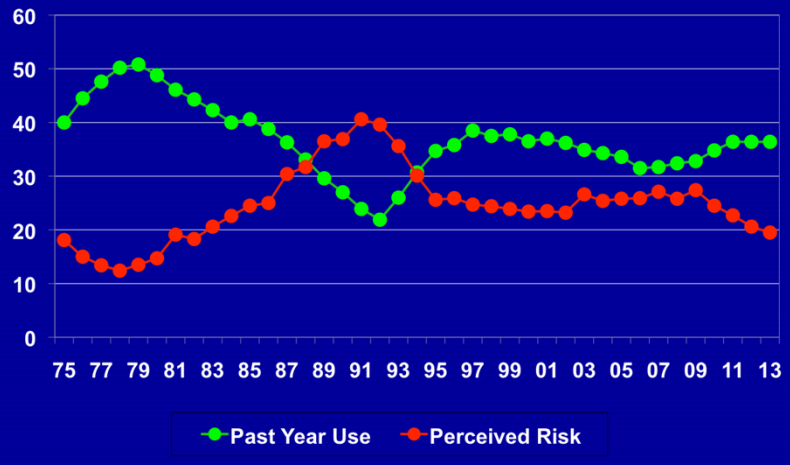
Development of Problems:
About 9% of users may become dependent; 1 in 6 who start use in adolescence

Estimated Prevalence of Dependence Among Users



Anthony JC et al., 1994

12th Graders' Past Year Marijuana Use vs. Perceived Risk of Occasional Marijuana Use



SOURCE: University of Michigan, 2013 Monitoring the Future Study

Why So Complicated?

- Can't paint with a broad brush.
- Many misguided by their own experiences.
- Math can be tricky.

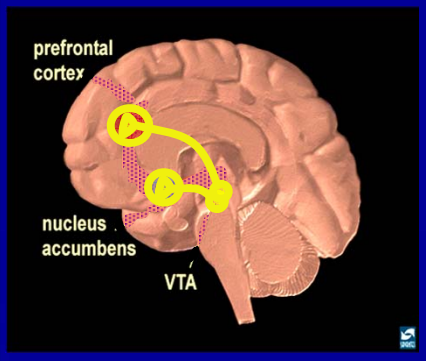
Marijuana Myths

- Not harmful
- Not addictive
- No withdrawal

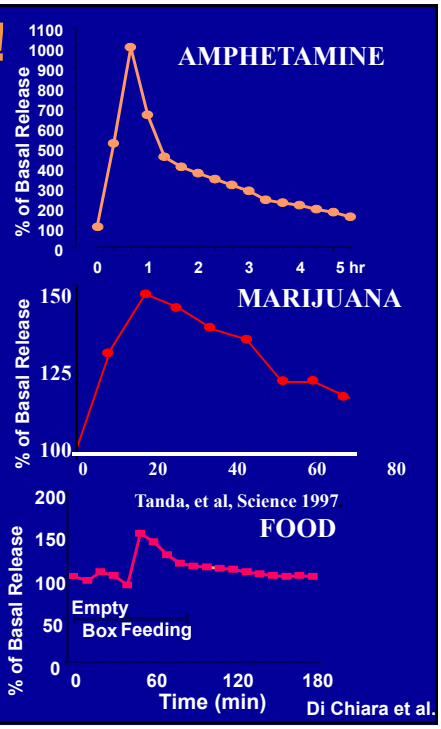
IT IS HARMFUL!

- Early onset → poor cognitive function, IQ decline (Pope 2003, Gruber 2011, Meier 2012)
- ↑ anxiety (Crippa 2009)
- ↑ depression (Degenhardt 2003)
- ↑ risk of psychosis (Kuepper 2011, Large 2011)

IT IS ADDICTIVE!

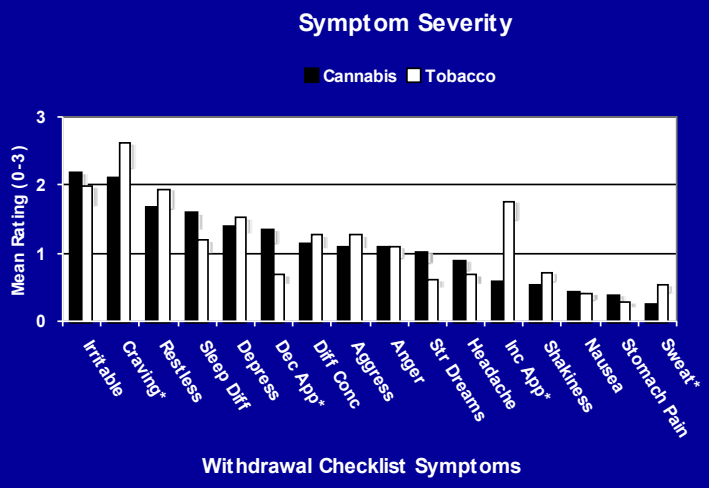


Drugs of abuse increase DA in the Nucleus Accumbens….triggers the neuroadaptions that result in addiction?



There is Withdrawal!

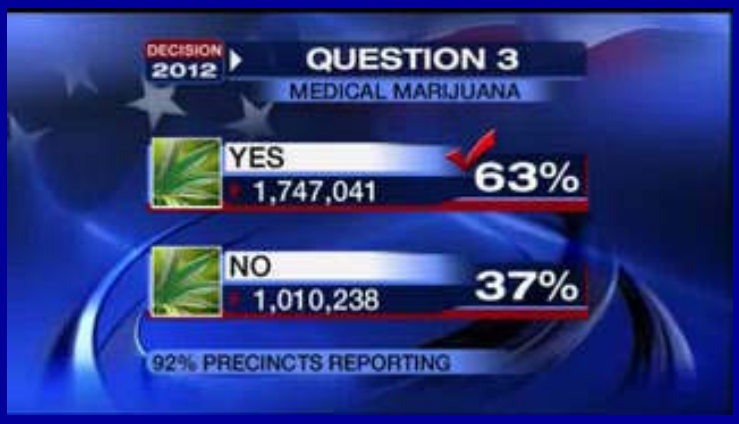
(Vandrey et al., 2005; Vandrey et al. 2008, Budney et al., 2009)



Marijuana Policy in the Commonwealth: A Trend Toward Increased Access

2008- Decriminalization of less than an ounce in MA

2012 MMJ Ballot Initiative



Legalization in 2016?

State of the Science: Medical Marijuana

Pharmacology of Marijuana

- 60 pharmacologically-active cannabinoids.
- THC: euphoria, anti-inflammatory, psychosis.
- CBD: non-psychoactive, anti-anxiety, antipsychotic?
- Anti-oxidant, neuroprotective?

Medical Marijuana- Composition

- Very different from the marijuana of the 60s,70s,80s- many are misguided by their own experiences.
- Average THC content 13%, but upper 20s possible.
- Strains adjust THC:CBD, but high THC is what sells.

FDA-Approved Cannabinoids

- Dronabinol (Marinol)- oral THC.
- Nabilone (Cesamet)- CB_1 agonist.
- FDA-Approved for 1)Nausea and vomiting associated with chemotherapy 2) Appetite stimulation in wasting illnesses like AIDs.
- Maybe CBD, and cannabis therefore, offer some things that dronabinol and nabilone don't.

Medical Indications According to Laws

- MA- “debilitating conditions.”
- Laws in various states--Cancer, glaucoma, AIDs, Hep C, ALS, Crohn’s Disease, Parkinson’s, multiple sclerosis.
- Keep in mind that data suggests that the majority of people with medical marijjuana cards do not have one of the above conditions.

Medical Indications According to Science

- Over 50 clinical trials of cannabinoids, including marijuana.
- Aside from the FDA indications for dronabinol and nabilone, the best data (approx. half of studies positive) are for chronic pain, neuropathic pain, and spasticity associated with Multiple Sclerosis.
- Other data is not positive.

Kleber and DuPont, AJP, 2012

- MMJ laws challenge physicians to recommend use of a schedule I illegal drug of abuse with no scientific approval, dosage control, or quality control.
- Opposed by APA, AMA, ASAM.

3 Reasons You Need to Know about MMJ

1 Your patients will ask about it.

2 Your colleagues will ask about it.

3 You may be asked to consult on whether a colleague should certify one of their patients for MMJ.

Whatever you decide, make informed decisions

MMJ: What is in place NOW

Medical Marijuana Details

- Not covered by insurance.
- Recommendations cannot be used to buy marijuana in other states.
- Many doc-in-a-box, stand-alone clinics.

Regulations: Some good, some not so good

- Thorough efforts that addressed most of the key issues.
- MMTC qualifications, use of PMP.
- Several points that could stand modification (age limits, advertising, edible products).

Top 3 Issues

Issue #1

- MA: 60 day supply = 10 ounces
- BUT 725.010 “A certifying physician may determine and certify that a qualifying patient requires an amount of marijuana exceeding ten ounces as a 60-day supply and shall document the amount and the rationale in the medical record and in the written certification. For that qualifying patient, that amount of marijuana constitutes a 60-day supply.”
- My studies: 2.1 oz. per month ± 3.0 oz.

Issue #2

- MA: “Debilitating medical condition” such as cancer, glaucoma, AIDS or HIV, Hep C, Crohn’s, Parkinson’s, MS…
- Or other conditions as determined in writing by physician.
- Suggestion: other conditions upon approval by DPH (like medication PAs).

Issue #3

- Automatic hardship for MassHealth, SSI patients.
- They are granted hardship to grow their own.
- Will this lead to unintended consequences?

Hypothetical Scenario

- Mr. A, a patient on MassHealth, gets MMJ card to treat his migraine headaches.
- He smokes ¼ ounce a week, or 2 ounces per 60 days.
- He recognizes that he can grow another 8 ounces (approximate street value of $3200, or $19,200 per year).

MMJ: Suggestions on what you should do

If a patient asks about MMJ

Policies

- Facility/group practice/individual practice-policy can be helpful.
- Clear, united front on a controversial topic.
- We have discussed a MMJ policy at McLean that addresses key questions.

Does the scientific literature support the use of marijuana as medicine?

- Right now, no.
- Some positive studies, more negative studies, more research needed to earn FDA approvals.
- Are there better, safer alternatives?
- No major medical organization (AMA, APA, ASAM, AACAP) supports the use of medical marijuana.

Marijuana as medicine? Part 2

- MMJ circumvents FDA process.
- Safety: Potency, purity, composition.
- Doctor-patient relationships are constrained by time already, will MMJ collaborations be held to an even lower standard?

I have read through the scientific evidence, but I still would like to pursue a recommendation for medical marijuana. How can I do this?

- By definition, our psychiatric patients are unlikely candidates for MMJ.
- Psychiatrists are probably not treating them for conditions that might benefit from MMJ.
- Referral to oncologist, specialist, or other physician that might treat the debilitating condition.

Yes, you qualify…

- Discussion, documentation of pros and cons (impaired driving, mood).
- Written recommendation.
- More frequent visits- monitor for side effects.

My son/daughter/spouse wants medical marijuana, but I worry that he/she wants it because he/she is already addicted to it. What can I do?

- This is an area where we are better equipped to help.
- Lengthier phone conversation and likely consultation.
- Direct to appropriate educational resources (http://www.drugabuse.gov/publications/drugfacts/marijuana)

If a colleague asks about MMJ

Consults on Question of Certification

- You can “just say no”—but I hope you won’t. This is an opportunity to provide a service.
- Assess substance abuse risk.
- Careful history– always keep in mind that you may be taking the most thorough history ever for this patient.

Consults on Question of Certification, Part 2

- Treat this as you would the question of other addictive medications (stimulants, benzos) in this patient.
- History of drug use disorders, psychiatric co-morbidities, psychosocial stressors.
- DPH criteria/criteria from other state.

Other Issues

- How do facilities handle MMJ?
- Programs funded by DPH Bureau of Substance Abuse Services cannot refuse admission to patients with MMJ recommendation.
- Use not allowed on site. Use dronabinol or nabilone as a substitute.

If You Don't Know What To Do?

- Never worry alone.
- Addiction psychiatrists, McLean, etc.

Policy Ahead of the Science

- Feasible, but implementation thus far has not inspired confidence.
- We can work to get answers to inform choices or we can continue to sling rhetoric back and forth.

Critical Period

- Trends are ominous- MTF data.
- We can provide a service to colleagues by being informed and thoughtful on this topic.
- How we respond to MMJ can have an impact on these rates.
- There still may be an opportunity to shape the MMJ regulations.

Acknowledgments

- Alan Wartenberg
- Max Hurley-Welljams-Dorof
- Roger Weiss

Questions?

Recruiting line:
617 855 3823

Nabilone for Cannabis Dependence

- Possible agonist pharmacotherapy for cannabis dependence (not unlike methadone or buprenorphine for heroin and nicotine patch for tobacco).
- Funded by NIDA and Adam Corneel Young Investigator Fellowship.
- Clinicaltrials.gov NCT 01347762, IND granted by the FDA.

Synthetics

- K2, Spice, and a host of other names.
- Synthetic cannabinoids sprayed onto herbs.
- Synthetic Drug Abuse Prevention Act of 2012- makers a step ahead.
- Access and groups who will be tested.

More Dangerous Than Regular Marijuana?

- Never really sure what you are getting.
- Not detectable with standard urine testing.
- More likely to precipitate psychosis?

State of the Science: Treatment

Current Treatment Options in Psychiatry
DOI 10.1007/s40501-014-0013-6

Substance Use Disorders (RD Weiss and HS Connery, Section Editors)

Behavioral Interventions and Pharmacotherapies for Cannabis Use Disorder

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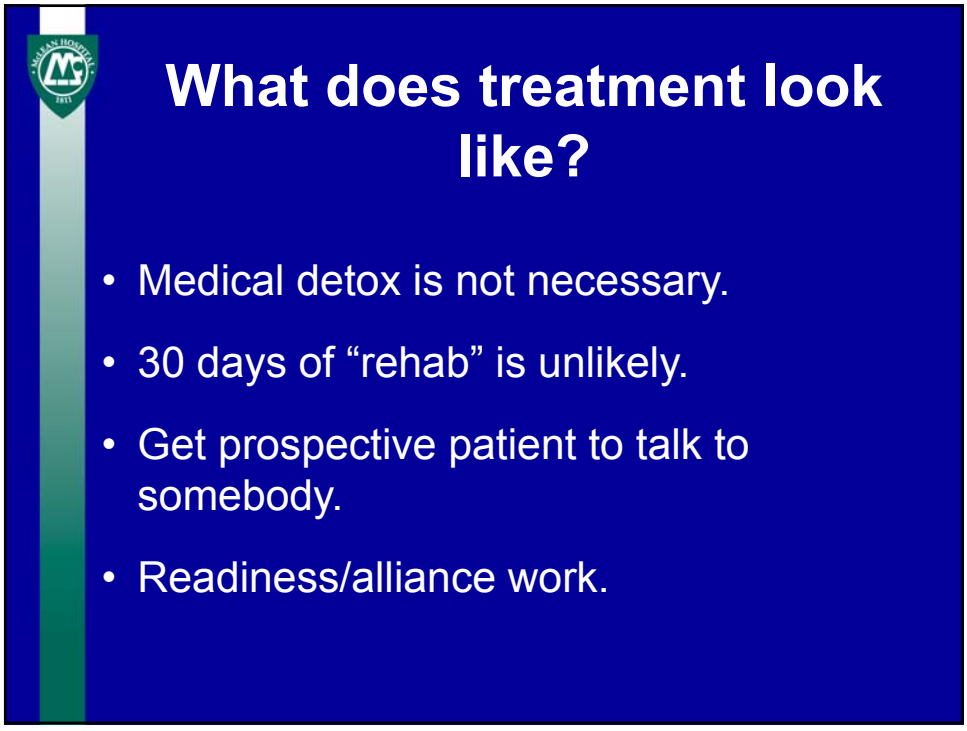

What does treatment look like?

- Medical detox is not necessary.
- 30 days of “rehab” is unlikely.
- Get prospective patient to talk to somebody.
- Readiness/alliance work.

No FDA-Approved Medications (Yet)

- Gabapentin, N-acetylcysteine– promising medications with positive results thus far.
- Other work being done currently.
- My studies are looking at nabilone, dronabinol, and pending funding, CBD.

Legalization

- WA, CO, likely on the ballot in MA in 2016.
- Addiction vs. Harmless/Personal Freedom/Taxes
- 58% of Americans favor legalization.

Once again, the science suggests we are not ready

- Safety - drugged driving.
- Need a marijuana equivalent of .08 BAC AND technology to test for it in the field.
- Addiction numbers in WA and CO, but they did not set up to efficiently track these outcomes.