Cannabis in an era of increased access: What’s all the fuss?

May 4, 2021 12:30 – 1:30 PM
Marc Fishman MD

Disclosures
Consultant for Alkermes, US World Meds, Drug Delivery LLC, Verily Life Sciences, ASAM, Nat Assoc Drug Court Professionals.

Research funding from Alkermes, US World Meds, NIH, Arnold Foundation.

Outline
- Scope of the problem
- Impacts of cannabis
- Clinical approaches and treatment
- “Medical” cannabis?

Scope of the problem
Cannabis use in youth

Percent of US 12th Graders Reporting Using Substances in Lifetime, 2000-2015

Monitoring the Future Survey 2015


Monitoring the Future Survey 2015
Our Culture

Non-Use Trends
12 graders, lifetime

Why do we care about cannabis?
What’s all the fuss?

Impacts of cannabis
What’s all the fuss?

% WHO USE DAILY

Monitoring the Future Survey 2015


Abstinence all substances (including vaping):
Lifetime 25.3%
Past 30d 50.9%


Vulnerable populations: youth, psychiatric illness, other substance use disorders

Acute consequences of intoxication, eg MVCs

Psychiatric consequences of use
– Depression/ anxiety
– Psychosis
– Cognitive impairment

Progression to cannabis use disorders and other substance use disorders

Impacts of cannabis
What’s all the fuss?

Why do we care about cannabis?
What’s all the fuss?

• Vulnerable populations: youth, psychiatric illness, other substance use disorders
• Acute consequences of intoxication, eg MVCs
• Psychiatric consequences of use
  – Depression/ anxiety
  – Psychosis
  – Cognitive impairment
• Progression to cannabis use disorders and other substance use disorders
MJ use associated with depressive symptoms


CUD dangers in mood disorders

- Youth ages 10-24 with mood disorders, n=200K, Ohio Medicaid claims
- CUD in 10%
- CUD associated with
  - All cause mortality (AHR 1.6)
  - Death by OD (AHR 2.4)
  - Death by homicide (AHR 3.2)
  - Non-fatal self harm (AHR 3.3)
  - Suicide sig only in unadjusted model

Fontanella. JAMA Peds. 2021

Cannabis and psychosis

Prospective exposure cohort study

- 10 yr prospective cohort of 1923 German youth (14-24 at baseline)
- Examination of change over 3 time points


Cannabis and cognitive impairment

- IQ measured age 13, 38; N=1037
- MJ use measured age 18, 21, 26, 32, 38
- IQ decline associated with regular use and dependence, dose response related to persistence

Meier et al. PNAS. 2011

Early initiation confers high risk

- Substantial rates of use disorder in youth soon after initiation
- Cannabis risk higher for adolescents than W's
  - 10.7% vs 6.4% within 1 yr
  - 20.1% vs 10.9% within 3 yrs
- Cannabis risk higher than alcohol for adolescents


Vulnerability in youth

Progression to addiction

- Conditional risk of use disorder in adolescents as high as 40%
- Daily use of MJ <age 17 associated with substantially increased risk of:
  - Persistent MJ Dependence (OR=18)
  - High school drop out (OR=3)
  - Use of other drugs (OR=8)
  - Suicide attempts (OR=7)

Pooled longitudinal studies. N =2537 to N=3765.
The Gateway hypothesis
Stages of increased exposure and risk
- Each milestone confers progressive exposure to risk and progressive likelihood of progression
- Substance A → substance B → substance C
- Possible explanations:
  - Effect of substance
  - Access to substance
  - Exposure to using peers
  - Progression of addictive process and time course

Clinical approaches

Motivational approaches
- Do you know other kids who have been in trouble...
- Do you know why I or your parents might think it’s a problem...
- What are the pro’s and con’s for you...
- What would be evidence in your view that it’s a problem...
- If you could stop anytime, would you be willing to see what it’s like...
- Let’s schedule you to come back and see how it’s going...
- Will you go and see a specialist? Get another opinion?

Digestible messages
“ Weed is not my problem, what’s the big deal?”
- Intoxication impairs judgment, more likely to do something you’ll regret
- Being around people with MJ usually means being around people who are more likely to be trouble (including other substances)
- Intoxication as a psychological and biological habit that progresses. “Sledgehammer” reinforcement by substances. If you keep pushing that button, the pathway gets stronger
- Maybe a little is ok, but is what you’re doing “a little?”
- Maybe it’s not that it’s never ok, but that it’s not right for you now
- Yes you could be the special rare exception but why gamble
- If it’s that good and and that important that you can’t accept this advice, what does that tell you?

Communication and Disclosure
- “This is your private treatment, stays between us unless I’m concerned about your health and safety. I can’t help if I don’t know the whole story”
- “Let’s bring in your parents – do it together, I’ll run interference, they’ll find out anyway, better coming from you.”
- Medical decision making about risk and urgency (imminent harm vs postponement for further discussion)
- Getting to yes

Therapeutic alliance
Engagement, relationship, monitoring
- Care providers have enormous impact on patients and families
- Important to set clear standard: our stance should be that any intoxicant use is unhealthy
- Longitudinal follow-up can hold up a mirror of dynamic change, both pos and neg
Model How to Talk With Your Kids

- Have the conversation(s)
- Practical balancing act: clear limits vs realistic expectations
- Don’t be surprised that “they don’t get it…”
- Pick your battles

[Image: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701098/]

Not In My House

- Parental supervision and leverage
- Empower families to set limits
- Coaching re shaping behavior
- They have more juice than they realize
- Parental Use? (tricky territory)
  - “Not that this applies to you, but some families may use substances socially…”
  - Remind them that kids are mimics

Practical Treatment Approaches

- 95% is just showing up

Some typical CBT sessions

- Refusal skills
- Relapse chain analysis
- Improving your social support network
- Increasing pleasant activities
- Relapse prevention
- Planning for emergencies and coping with relapse
- Managing thoughts about using
- Coping with cravings and urges
- Problem solving
- Communication skills
- Anger awareness
- Anger management
- Coping with depression

Relapse chain analysis

- Problem: What are the antecedents of particular episodes of substance use?
  - The puzzle:
    - Why did you use yesterday? I don’t know.
    - Never mind why, let’s focus on what and how. What were the circumstances that led up to the episode of use? I don’t know. My friend passed me a blunt and I hit it, what am I supposed to do?
  - The solution: chain analysis.
    - “Rewind slo-mo” – break it down into tiny steps.
    - What happened before that, and what happened before that?
    - Perhaps seems trivial to us, but remarkably unintuitive to our patients.

Urine Drug Testing

- Normalize as part of routine testing
- Medicalizes the conversation
- Recognize it can be an inflection point
- Practice your narrative around it
Medications for cannabis

- Gabapentin
- N-Acetyl Cysteine (NAC)
- Sleep remediation for insomnia
- Other symptomatic treatments for withdrawal
- Agonist substitution (dronabinol) – doesn’t work
- Antagonists (none marketed yet)

Reductions in substance use associated with reductions in depression

![Graph showing reductions in substance use](image)

Both Placebo (p<.0001) and Fluoxetine (p<.0003) Responders have significant pre-post reduction in drug use whereas Non-Responders in each group do not. Responders differ significantly from Non-Responders (p < .02).

Riggs et al. Archives of Pediatric and Adolescent Medicine 2007

Medicinal cannabinoids

- Currently available:
  - Dronabinol (synthetic THC)
  - Nabilone (synthetic THC)
  - Nabixmols (extract THC/CBD) approved in UK and Canada, Phase III trials in US
- Indications – What does the evidence show?
  - Cachexia from cancer, AIDS
  - Nausea from cancer chemotherapy
  - Spasticity from MS
  - Maybe analgesic augmentation
  - CBD for infantile seizures (Dravets, Lennox-Gastaut)
- Lots of promising research ahead for pharmacological extracts or synthetics (not so much plant cannabis)

“Medical” cannabis?

- “Medical” cannabis?
- Currently available:
  - Dronabinol (synthetic THC)
  - Nabilone (synthetic THC)
  - Nabixmols (extract THC/CBD) approved in UK and Canada, Phase III trials in US
- Indications – What does the evidence show?
  - Cachexia from cancer, AIDS
  - Nausea from cancer chemotherapy
  - Spasticity from MS
  - Maybe analgesic augmentation
  - CBD for infantile seizures (Dravets, Lennox-Gastaut)
- Lots of promising research ahead for pharmacological extracts or synthetics (not so much plant cannabis)

“Medical” cannabis

- Ticket for access to retail sales, not prescription
- Which medical school did your budtender go to?
- Plant cannabis is at best a folk remedy not a medicine

Medical cannabis dispensaries

- Medical cannabis dispensaries

- Ticket for access to retail sales, not prescription
- Which medical school did your budtender go to?
- Plant cannabis is at best a folk remedy not a medicine
Impact of “medical” cannabis

- Ontario HS students (prior to legalization)
- 19% overall current cannabis use, 7% medical use
- Those with medical cannabis use more likely than non-medical use only group to
  - Have high cannabis dependence risk (12% vs 5%)
  - Use other drugs (60% vs 41%)
  - Use tobacco (47% vs 26%)
  - Be prescribed sedatives / tranquilizers (10% vs 3%)

Wardell et al. Prevalence and correlates of medicinal cannabis use among adolescents. JAH. 2021

Approaches to “medical” cannabis
“My other doctor says it’s ok”

- Lots of patients appear with alleged remedies that we disagree with
- We approach each one based on their individual condition
  - Rationale for our position
  - Evidence in their own lives
  - Communication with other doctors
  - When you say you “need” it, you mean you want it
  - Line in the sand as a last resort

Messaging - Overcoming societal attitudes

- We have too easily been cast in the role of puritanical prohibitionists, but we are concerned with problem use
- MJ can be harmful and addictive (but not everyone gets harmed or addicted)
- Broader use leads to broader problem use through access and decreased perception of harm
- This is a huge problem for youth
- How to respond to MJ as “medicine” or consumer good:
  - Medicalization (analogy: US prescription opioid epidemic)
  - Recreational commercialization (analogy: alcohol)

Ineffective interventions
Can we establish credibility despite historic exaggeration?

Access:
I scream, you scream, we all scream for...
The bottom line

- Harms of cannabis for a substantial group of youth are considerable
- Society, families and patients are increasingly in pre-contemplation – expect trouble
- Treatment for cannabis works, but the barriers to treatment-seeking and engagement are growing: motivational enhancement is the key tool
- Less is better in general, none is best for our patients
- Recovery happens!