Maryland BHIPP

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

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Disclosures

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

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Outline

- Scope of the problem
- Impacts of cannabis
- Clinical approaches and treatment
- "Medical" cannabis?

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Scope of the problem

Cannabis use in youth

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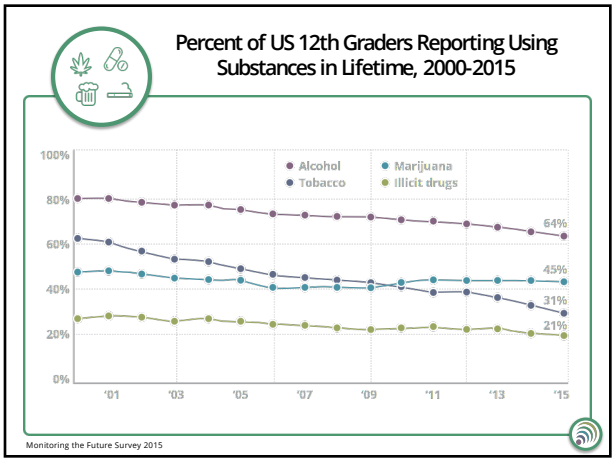

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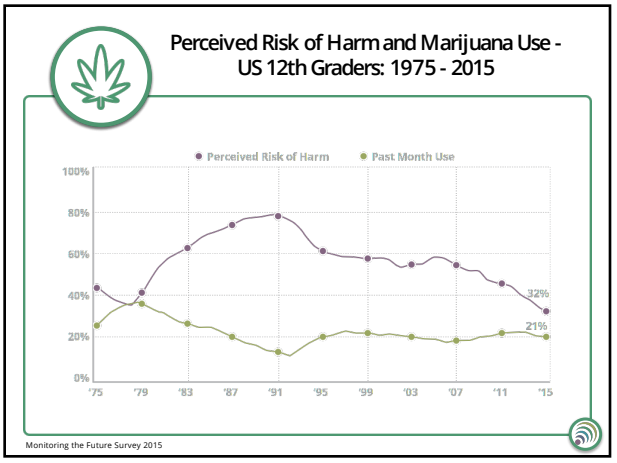

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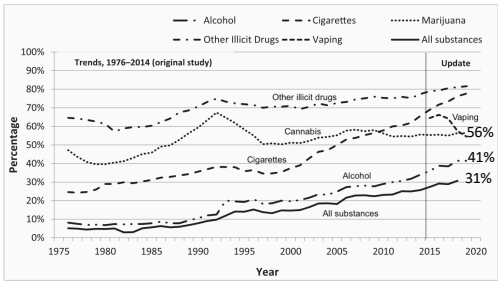
Non-Use Trends
12 graders, lifetime



Abstinence all substances (including vaping):

Lifetime	25.3%
Past 30d	50.9%

Levy S et al. Trends in Substance Nonuse by High School Seniors: 1975–2018. Pediatrics. 2020;146(6). Source: MTF survey

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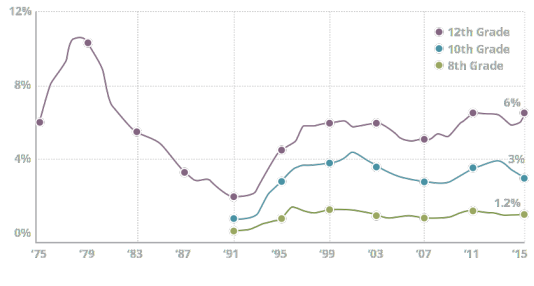
% WHO USE DAILY



Monitoring the Future Survey 2015

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Impacts of cannabis

What's all the fuss?

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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

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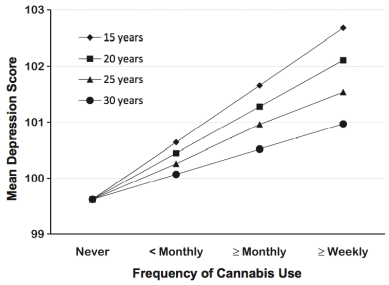
MJ use associated with depressive symptoms



Pooled data, 4 longitudinal studies, n=6900

Horwood et al. Drug and Alcohol Dependence *126 (2012) 369–378*

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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 (AHFR 3.2
  - Non-fatal self harm (AHR 3.3)
  - Suicide sig only in unadjusted model

Fontanella. *JAMA Peds*. 2021

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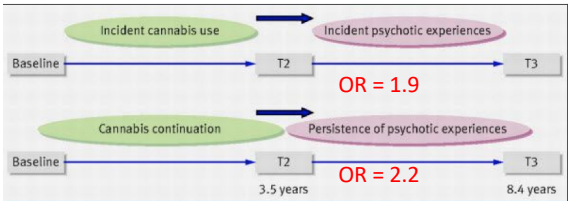
Cannabis and psychosis
Prospective exposure cohort study

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



Kuepper et al British Med J. 2011

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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

	None	Some use	1 wave	2 waves	3+ waves
Regular use	+1	-1	-3	-2	-5
Dependence	+1	-1	-2	-3	-6

- No difference with controls for education, recent use, other substances, schizophrenia
- Adolescent onset worse, -8 points for 3+waves

Meier et al. PNAS. 2011

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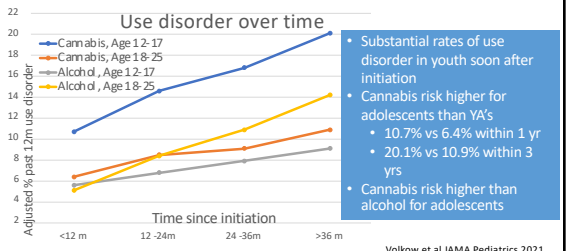
Early initiation confers high risk



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

Volkow et al JAMA Pediatrics 2021.

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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.
Silens et al. Lancet Psychiatry, 1,: 286 – 293, 2014S

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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

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Clinical approaches

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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?

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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 that important that you can't accept this advice, what does that tell you?

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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

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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

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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

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

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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

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Practical Treatment Approaches

- 95% is just showing up

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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

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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.

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Urine Drug Testing

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

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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)

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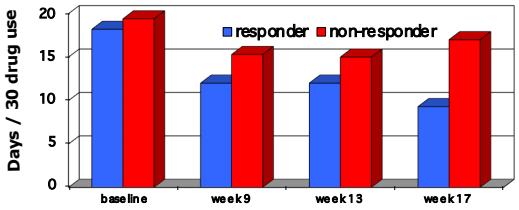
Reductions in substance use associated with reductions in depression



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

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"Medical" cannabis?

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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 pharmacalogical extracts or synthetics (not so much plant cannabis)

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"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

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Medical cannabis dispensaries

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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

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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

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Conclusions

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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)

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Ineffective interventions

Can we establish credibility despite historic exaggeration?

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Access:

I scream, you scream, we all scream for…

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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!

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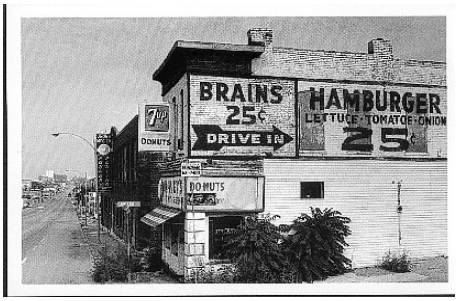
Hypothetical Miracle Cures



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