

DIAGNOSING CANNABIS USE DISORDERS & BEYOND

MARK DUNCAN MD UNIVERSITY OF WASHINGTON







GENERAL DISCLOSURES

The University of Washington School of Medicine also gratefully acknowledges receipt of educational grant support for this activity from the Washington State Legislature through the Safety-Net Hospital Assessment, working to expand access to psychiatric services throughout Washington State.



SPEAKER DISCLOSURES

✓ Any conflicts of interest-none



OBJECTIVES

- 1. Acknowledge that cannabis can be addictive
- 2. Describe risks of cannabis use
- 3. Review current treatment options
- 4. Review current implications of cannabis and psychiatric disorders (this is the **Beyond** part)



WHAT LEADS YOU TO ASK A PATIENT ABOUT THEIR CANNABIS USE?



PROBLEMS ASSOCIATED WITH CANNABIS (THAT SHOULD PROMPT SCREENING)

- Depression and anxiety
- Psychosis
- Respiratory tract infections
- Chronic cough
- Sleep disturbances
- Poor school or work performance
- Relationship difficulties
- Nausea and vomiting



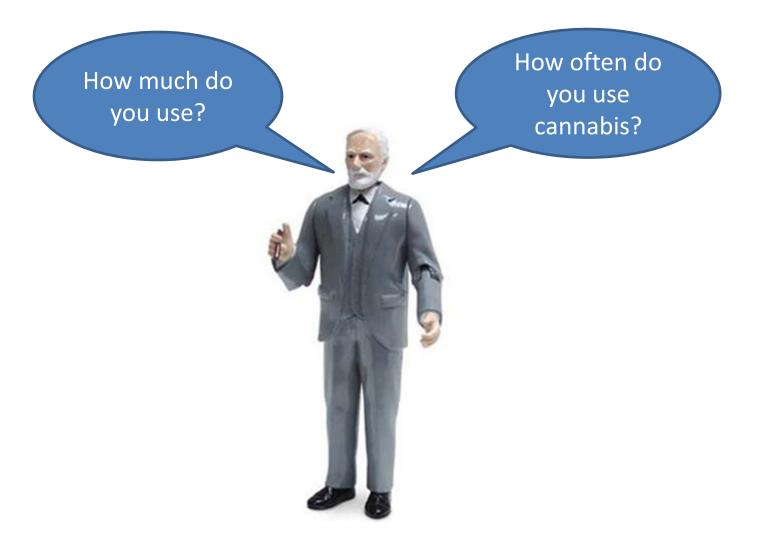
HOW DO YOU SCREEN FOR CANNABIS USE?



SCREENING

- "In the past year, how often have you used cannabis?"
 - Cutoff-2→Sens: 0.96; Spec: 0.86 for CUD
 - <21 yo in the ED</p>
- Drug Testing
 - More sensitive (near 100%) especially in groups with negative consequences
 - Identifies only recent use





HOW MUCH IS TOO MUCH?



HOW MUCH IS TOO MUCH?

Daily or near daily use

- Daily use leads to:
 - Increase risk of other illicit drug use, RR > 50%
 - More likely to drive and be involved in MVAs
 - Increase risk of developing a cannabis use disorder
 - Daily: 75% had a CUD
 - 2/wk or less: 13% had a CUD
 - Increase in cognitive problems
 - Increase in mental and physical health problems



SCREENING FOR A CANNABIS USE DISORDER

- CUDIT-R: Cannabis Use Disorder Identification Test-Revised
 - Use over past 6 months
 - 8 items
 - Stratefies: low risk→high risk→use disorder
 - PPV for CUD: 0.960
 - Sens: 0.913
 - Spec: 0.900
 - Free to use, works with DSM5
 - Not widely validated



The Cannabis Use Disorder Identification Test - Revised (CUDIT-R)

Have you used any cannabis over the past six months? YES / NO

If YES, please answer the following questions about your cannabis use. Circle the response that is most correct for you in relation to your cannabis use over the past six months

1.	How often do you use cannabis?				
	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
	0	1	2 monun	3 week	a week
	v	•	-		
2.	How many hours were you "stoned" on a typical day when you had been using cannabis?				
	Less than 1	1 or 2	3 or 4	5 or 6	7 or more
	0	1	2	3	4
3.	How often during the past 6 months did you find that you were not able to stop using cannabis once you had started?				
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	0	1	2	3	4
4.	How often during the past 6 months did you fail to do what was normally expected from you because of using cannabis?				
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	0	1	2	3	4
				_	
5.	How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?				
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	0	1	2	3	4
6.	How often in the past	6 months have you had a prob	lam with your mamo	ry or concentration after	using cannabis?
o.			•	-	Daily or
	Never	Less than monthly	Monthly	Weekly	almost daily
	0	1	2	3	4
7.	How often do you use cannabis in situations that could be physically hazardous, such as driving, operating machinery, or caring for children:				
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	0	1	2	3	4
8.	Have you ever thought	t about cutting down, or stopp	ing, your use of cann	abis?	

Scores

Yes, during the past 6 months

- 8+: hazardous use
- 12+: CUD?

 http://improvinghealthcolorado.org/wpcontent/uploads/2016/03/CUDIT-R-revised-with-scoring.pdf

Yes, but not in the past 6

months



A problematic pattern of cannabis use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

- 1. Cannabis 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 spent obtaining cannabis, use cannabis, or recover from it.
- 4. Craving, or a strong desire or urge to use cannabis.
- 5. Recurrent cannabis with a failure to fulfill major role obligations at work, school, or home.
- 6. Continued use despite having persistent or recurrent social or interpersonal problems
- 7. Important social, occupational, or recreational activities are given up or reduced
- 8. Recurrent cannabis use in situations in which it is physically hazardous.
- 9. Cannabis 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 cannabis.
- 10. Tolerance, as defined by either of the following:
 - -a. A need for markedly increased amounts of cannabis to achieve intoxication or desired effect.
 - -b. Markedly diminished effect with continued use of the same amount of cannabis.
- 11. Withdrawal, as manifested by either of the following:
 - -a. The characteristic withdrawal syndrome for cannabis link
 - -b. Cannabis (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.



TREATMENT OPTIONS

- Typically outpatient
- Psychosocial interventions first line
 - CBT
 - -MI
 - Contingency management
 - Mutual help groups
 - Family therapy



TREATMENT OPTIONS

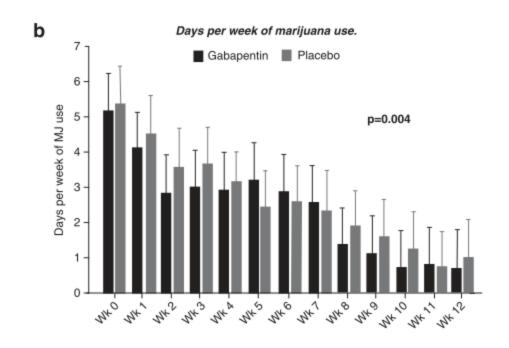
- Pharmacotherapy (evidence is underwhelming)
 - Acetylcysteine (OTC)
 - 1 trial in 15-21yo, N=116
 - 1200mg BID vs placebo BID + contingency management
 + Brief (<10min) weekly cessation couseling x 8 weeks
 - Acetylcysteine 41% neg urine tests vs Placebo 27%



PHARMACOTHERAPY (EVIDENCE IS UNDERWHELMING)

Gabapentin

- 1 trial in 18-65yo,N=50 otpts
- 1200mg/day vs
 Placebo + weekly
 manualized,
 abstinence-oriented
 individual counseling
- Decreased withdrawal and more neg urine test





CANNABINOID AGONISTS

- To help with reducing withdrawal
 - Evidence-case reports, small pilots

Currently being studied



"CANNABIS IS NOT A PROBLEM FOR ME"

Dr. Duncan: Good, lets try to keep it that way



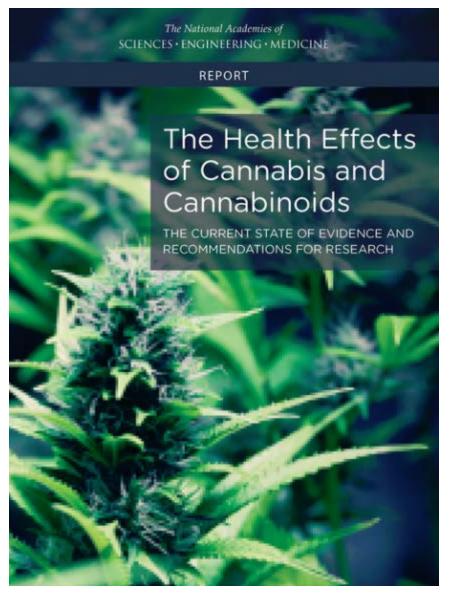
Adverse Effects of Short-Term Use and Long-Term or Heavy Use of Marijuana.

- Effects of short-term use
 - Impaired short-term memory, making it difficult to retain information
 - Impaired motor coordination, interfering with driving skills and increasing the risk of injuries
 - Altered judgement, increasing the risk of sexual behaviors that facilitate the transmission of STDs
 - In high doses, paranoia, psychosis
- Effects of long-term or heavy use

Addiction

- Altered brain development (esp in adolescents)
- Poor educational outcome, with increased likelihood of dropping out of school
- Cognitive impairment, with lower IQ among those who were frequent users during adolescence
- Diminished life satisfaction and achievement
- Symptoms of chronic bronchitis
- Increased risk of psychotic disorders in persons with a predisposition to such disorders

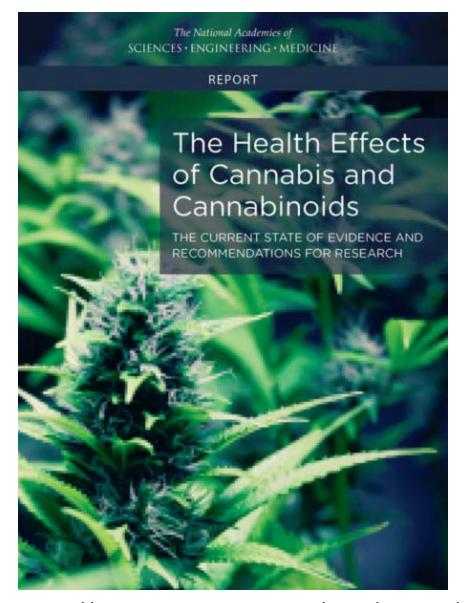




Free download!!!

©2016 University of Washington

http://nationalacademies.org/hmd/reports/2017/health-effects-of-cannabis-and-cannabinoids.aspx



Conclusions on

- Therapeutic effects
- Cancer
- Cardiometabolic risks
- Respiratory disease
- Immunity
- Injury and death
- Prenatal, neonatal exposure

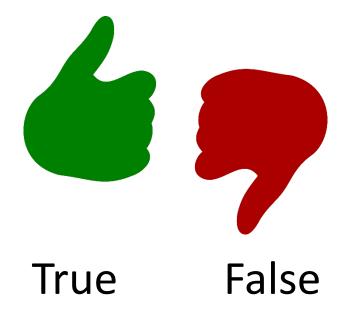
©2016 University of Washington

- Psychosocial
- Mental Health
- Problem Use

http://nationalacademies.org/hmd/reports/2017/health-effects-of-cannabis-and-cannabinoids.aspx

TRUE OR FALSE? PSYCHOSIS AND CANNABIS

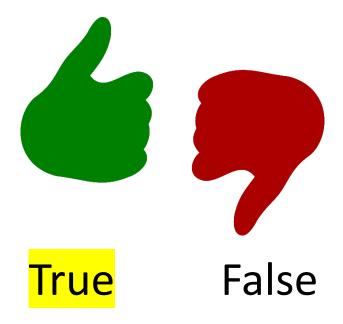
 There is SUBSTANTIAL evidence of a statistical association between cannabis and the development of schizophrenia or other psychoses.





TRUE OR FALSE? PSYCHOSIS AND CANNABIS

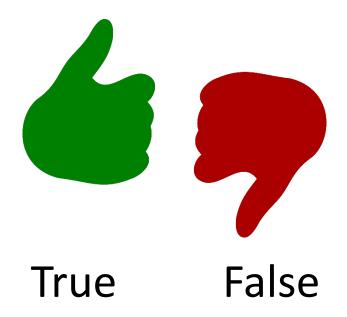
 There is SUBSTANTIAL evidence of a statistical association between cannabis and the development of schizophrenia or other psychoses.





TRUE OR FALSE? DEPRESSION AND CANNABIS

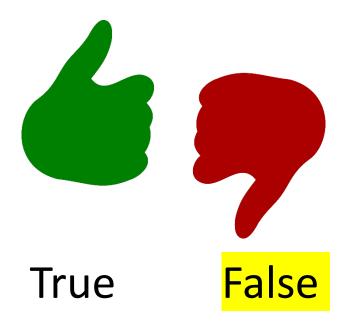
 There is NO evidence of a statistical association between cannabis and a small increased risk for development of depressive disorders.





TRUE OR FALSE? DEPRESSION AND CANNABIS

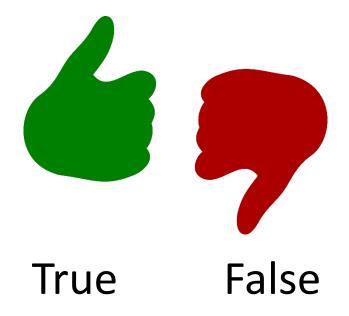
 There is NO evidence of a statistical association between cannabis and a small increased risk for development of depressive disorders.





TRUE OR FALSE? BIPOLAR AND CANNABIS

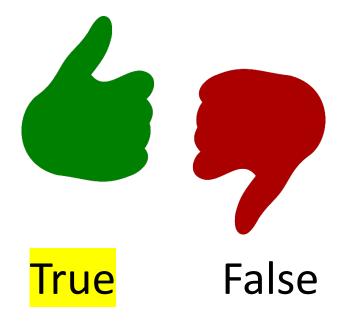
 There is MODERATE evidence of a statistical association between regular cannabis use and increased symptoms of mania and hypomania in bipolar disorder.





TRUE OR FALSE? BIPOLAR AND CANNABIS

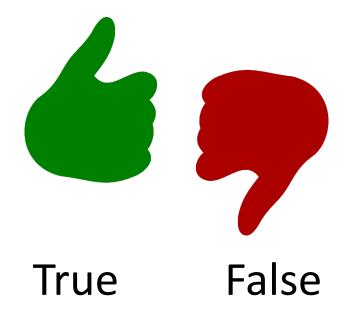
 There is MODERATE evidence of a statistical association between regular cannabis use and increased symptoms of mania and hypomania in bipolar disorder.





TRUE OR FALSE? ANXIETY AND CANNABIS

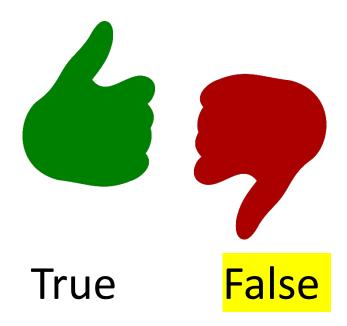
 There is MODERATE evidence of a statistical association between regular cannabis use and improved symptoms of anxiety.





TRUE OR FALSE? ANXIETY AND CANNABIS

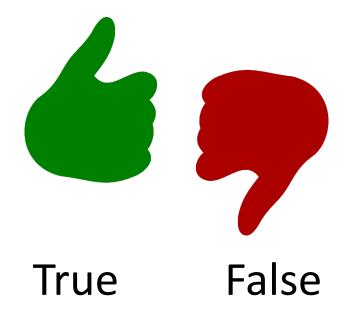
 There is MODERATE evidence of a statistical association between regular cannabis use and improved symptoms of anxiety.





TRUE OR FALSE? PTSD AND CANNABIS

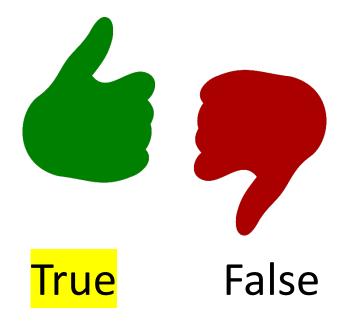
 There is LIMITED evidence of a statistical association between cannabis use and increased severity of PTSD symptoms.





TRUE OR FALSE? PTSD AND CANNABIS

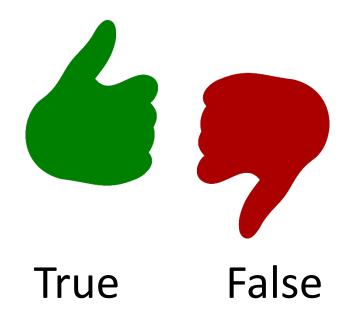
 There is LIMITED evidence of a statistical association between cannabis use and increased severity of PTSD symptoms.





TRUE OR FALSE? ADHD AND CANNABIS

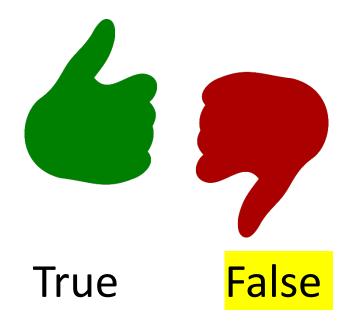
 There is SIGNIFICANT evidence of a statistical association between cannabis use and improved ADHD symptoms.





TRUE OR FALSE? ADHD AND CANNABIS

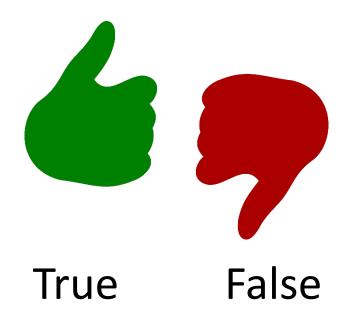
 There is SIGNIFICANT evidence of a statistical association between cannabis use and improved ADHD symptoms.





TRUE OR FALSE? CANNABIS AS SUBSTITUTION TREATMENT

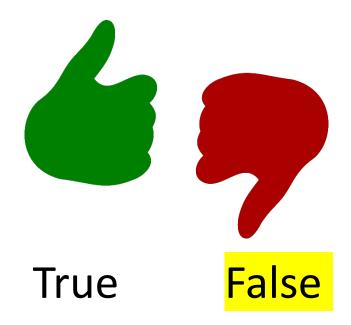
 There is MODERATE evidence to support the use of cannabinoids for achieving abstinence in other substances





TRUE OR FALSE? CANNABIS AS SUBSTITUTION TREATMENT

 There is MODERATE evidence to support the use of cannabinoids for achieving abstinence in other substances





GO EASY ON YOUR LUNGS

It only takes a few seconds for your lungs to absorb cannabis. Deep inhalation and breath-holding may lead to pain and breathing troubles. It also increases the amount of toxic by-products brought into the lungs without significantly increasing the desired effect. If smoking, take shallow inhales and exhale right away. Vaporizing causes less lung irritation than smoking.

ACKNOWLEDGE YOUR AGE

Young brains are still developing during adolescence and early adulthood. Regular and heavy use of cannabis at an early age may affect brain development with lasting consequences. Carefully weigh the potential benefits of using cannabis with the potential harm to the developing brain. If you are thinking about using cannabis, consider delaying use until late adolescence or early adulthood.

STAY SAFE IF IMPAIRED

Cannabis may impair coordination, reaction time and other cognitive abilities. This may be pronounced in occasional and novice users or those using higher dosages or stronger strains. If impaired by cannabis, avoid driving or engaging in other potentially dangerous activities as it may increase the risk of injury or death. To be safe, wait at least 3 hours after inhaling or 6 hours after inqesting.



USE SMALL AMOUNTS

It's ideal to use as little cannabis as is necessary to reach the desired effect. Many people find a small amount to be enough. Instead of smoking a whole joint or taking puffs each time a joint comes around, take one or two small puffs and wait to see how you react. If eating cannabis, start with a small bite and wait to feel the effects.

WAIT TO FEEL FULL EFFECTS

Dosage can make a big difference between getting the desired effects and feeling uncomfortable or anxious. Wait at least 10 minutes to feel the full effects of inhaled cannabis and at least an hour to feel the full effects of eaten cannabis. Consider the effects and then decide whether you want to use more.

NOTE EFFECT OF STRAIN

Different strains of cannabis have different effects on the body and the mind – some are more stimulating and some are more relaxing. If using an unfamiliar strain, sample a small amount to see how you react in order to avoid undesired effects.

AVOID TOXIC EFFECTS

Eating too much cannabis, using strong extracts, or mixing it with alcohol can cause extreme anxiety, nausea, vomiting and fainting. It's easier to control your dose when you inhale, rather than eat cannabis. Avoid consuming cannabis with alcohol. Using cannabis on a full stomach can help moderate the intensity of negative effects. If you feel too high, don't panic, stay hydrated, eat something, and find a safe place where you feel comfortable. The effects will wear off within 2 to 8 hours.

MIND YOUR MENTAL HEALTH

Cannabis may relieve some symptoms caused by depression and anxiety or it may make them worse, possibly leading to temporary psychosis including paranoia and hallucinations. It may also trigger the onset of schizophrenia in those already vulnerable. Such effects may be related to strain, dosage, or individual biochemistry. Cannabis is not a good fit for everyone. If you have a mental health condition, or a personal or family history of schizophrenia, it is extremely important to consider the potential risks of using cannabis.

CARE ABOUT QUALITY

Because cannabis is illegal, it is unlikely that the products you get will be tested for biological or chemical contaminants. Some contaminants, like mold and mildew, may be visible to the eye. Try to find organically grown cannabis and carefully assess the quality of what you consume.

SHARE CAREFULLY

Contact of shared joints or other implements with the lips increases the risk of spreading saliva-borne infections such as meningitis, the flu and other germs. If sharing, hold joints or implements in a way that you can inhale the smoke or vapour without touching them to your lips.





People all over the world have used cannabis for thousands of years for social, medical and spiritual reasons. People use cannabis to enhance their quality of life when they feel its effects are beneficial.

Whether eating, vaporizing, smoking, using a tincture or a topical preparation, cannabis affects everyone differently. This information outlines potential risks and gives suggestions for how to take care of yourself if you choose to use cannabis.



to learn more, please visit www.carbc.ca www.vch.ca











THE END

