# What's the Beef with the Reef? Cannabis Use in Youth

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#### **Disclosure Information**

Minnesota Psychiatric Society 2021 Virtual Spring Meeting 27 March 2021 Lucien Gonzalez MD MS, FAAP

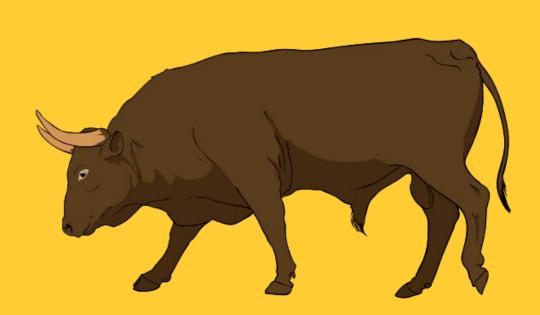
> Disclosure of relevant financial relationships: I have no financial relationships to disclose

I will not be discussing off-label use of medications or other treatments



# **Objectives**

- Recognize known risks from cannabis use in youth
- Become familiar with guidelines for substance use screening
- Understand importance of exploring substance use in clinical and cultural context
- Name skills in approaching cannabis youth discussion with parents versus youth



#### 1

#### More Questions than Answers

- Cognition
- Relationship to psychiatric conditions
- Precursor to other substance use

# Kids really are not simply tiny adults



and they're not rats either

#### **Teens Are Not Mini Adults**

16-17 year-old

VS

24-28 year-old

- subjective, memory, physiological and psychotomimetic effects
- Satiety
- inhibitory processes

Mokrysz C, Freeman TP, Korkki S, Griffiths K, and Curran HV (2016). *Are adolescents more vulnerable to the harmful effects of cannabis than adults? A placebo-controlled study in human males.* Transl Psychiatry 6(11): e961.



Cannabinoid exposure in rat adolescence reprograms the initial behavioral, molecular, and epigenetic response to cocaine

Maria Scherma, Johanna S. Qvist, Arun Asok, Shao-shan C. Huang, Paolo Masia, Matteo Deidda, Ya B. Wei, Rajesh K. Soni, Walter Fratta, Paola Fadda, Eric R. Kandel, Denise B. Kandel, Philippe A. Melas

Proceedings of the National Academy of Sciences May 2020, 117 (18) 9991-10002; DOI: 10.1073/pnas.1920866117



Neuropharmacology



# Just Says In Rats

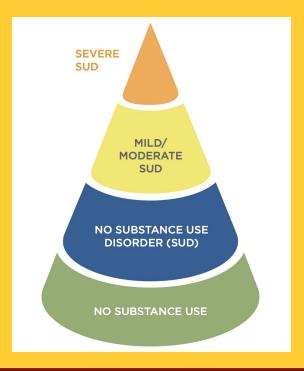
Adolescent cannabis exposure increases heroin reinforcement in rats genetically vulnerable to addiction

Daniele Lecca <sup>a</sup>, Andrea Scifo <sup>a</sup>, Augusta Pisanu <sup>b</sup>, Valentina Valentini <sup>a</sup>, Giovanna Piras <sup>a</sup>, Annesha Sil <sup>a</sup>, Cristina Cadoni <sup>b</sup> A B, Gaetano Di Chiara <sup>a</sup>, <sup>b</sup>

### More Questions than Answers

- Cognition
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# Screening, Brief Intervention and Referral to...





### Always Consider Culture and Identity Context

Age/Generation

Disability Status (developmental)

Disability Status (acquired)

Religion and Spiritual Orientation

**E**thnicity

Socioeconomic Status

**S**exual Orientation

Indigenous Heritage

**N**ational Origin

Gender

**Source:** Hays P. Addressing cultural complexities in practice: Assessment, diagnosis, and therapy, third edition. Washington, DC: American Psychological Association; 2016.

# **Talking Points with Caregivers**

- Educate caregivers first
- Connect caregivers to care if needed
- Facilitate determination of rules and expectations
- Modeling non-substance means of self-regulation and stress relief
- Role of parental self-disclosure

# Summary

- Engage with parents before substance use can start
- Respect youth as experts on their own experience
- Know what the youth is reading
- Don't jump to diagnose
- Consider use in cultural, identity, and social context

#### Resources

Sagar KA, Gruber SA (2018). *Marijuana matters: reviewing the impact of marijuana on cognition, brain structure and function, & exploring policy implications and barriers to research*. Int Rev Psychiatry 30(3): 251-267.

Gülck T, Møller BL (2020). *Phytocannabinoids: Origins and Biosynthesis*. <u>Trends in Plant Science 25 (10):</u> 985-1004.

Lu HC, Mackie, K (online August 2020). *Review of the endocannabinoid system*. <u>Biol Psychiatry: Cog Neurosci and Neuroimag.</u>

Massachusetts Dept of Public Health (2015). <u>Adolescent SBIRT Toolkit for Providers.</u> http://files.hria.org/files/SA3541.pdf

"Divides along race, class create different worlds for marijuana users." <a href="https://www.northjersey.com/story/opinion/2020/10/13/different-worlds-nj-legal-wed-divides-along-race-class-opinion/5936141002/">https://www.northjersey.com/story/opinion/2020/10/13/different-worlds-nj-legal-wed-divides-along-race-class-opinion/5936141002/</a>





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