

Treatment for Different Stages of Life

Maria Rahmandar, MD

Lurie Children's Hospital of Chicago

Northwestern University Feinberg School of Medicine

The ASAM Review Course of Addiction Medicine

July 2022

Financial Disclosures

Maria Rahmandar, MD

No Disclosures



Learning Objectives

Describe how the different life stage of a patient can impact the development, diagnosis, and treatment of addiction.

Presentation Outline

Adolescents (10-19) and Young
(10-24 per World Health
Organization)

Elderly (someone much older
than yourself)

Adolescence

- ✦ Biologic growth and development
- ✦ Increased social pressures
- ✦ Increased decision making
- ✦ Search for self

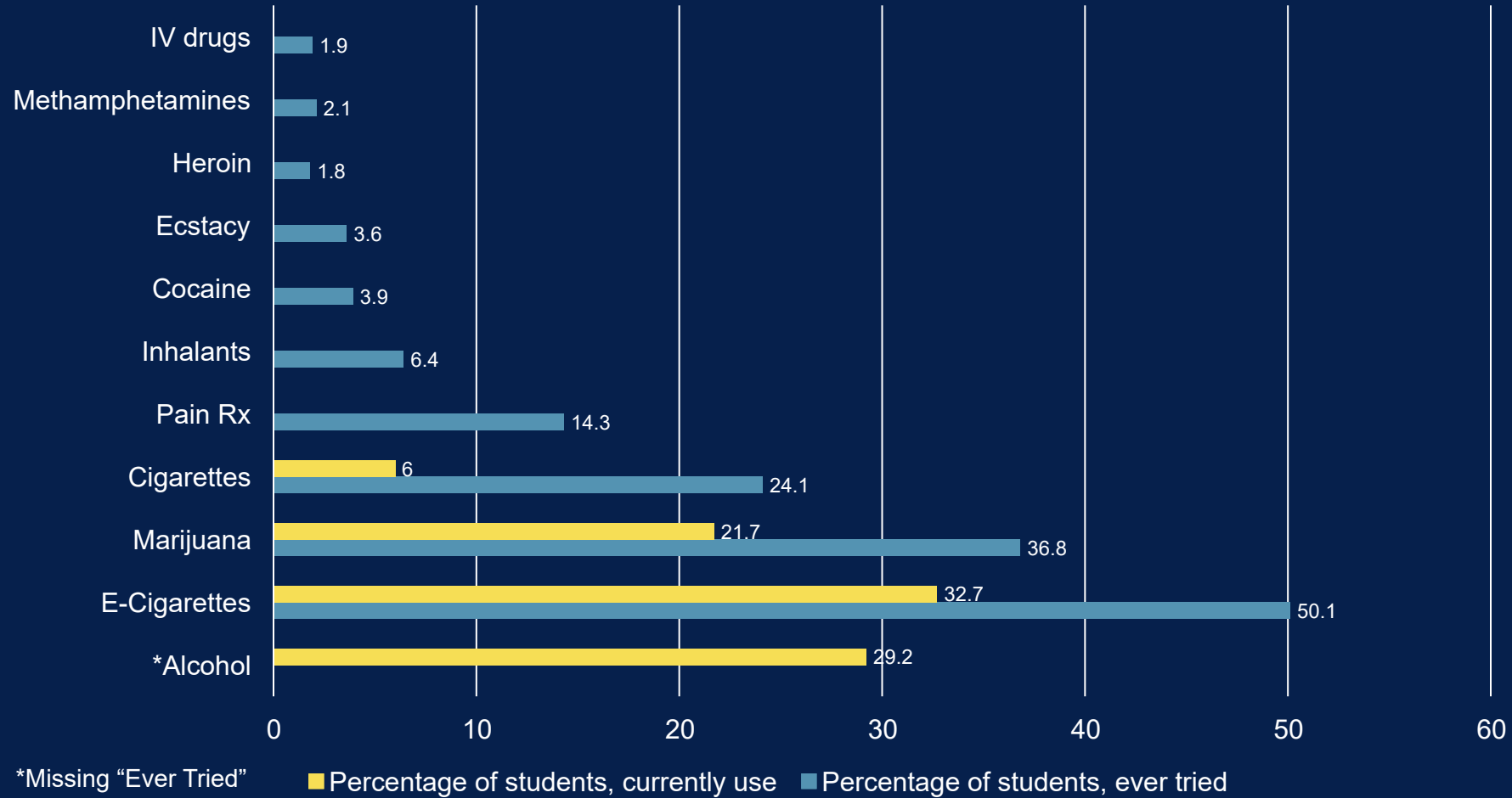
Adolescents Are Vulnerable

- ✦ Earlier substance use = higher risk of addiction
- ✦ Adolescent immaturity during critical development period = vulnerability
 - ✦ Impulsiveness and excitement seeking
 - ✦ Difficulty delaying gratification
 - ✦ Poor executive function and inhibitory control

Associated Factors

- ✿ Having a parent/sibling with substance use disorder
- ✿ Mood disorder
- ✿ Learning disorder/poor school performance
- ✿ Low self-esteem
- ✿ Substance use among peers
- ✿ Availability of substances in community
- ✿ Poor family relationship, family conflict

Substances Used by US High School Students



Recent Trends

- ✦ **Overall, from 2020 to 2021, teen substance use reportedly declined**
 - ✦ Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2022). Monitoring the Future national survey results on drug use 1975-2021: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, University of Michigan.
- ✦ **Overdose deaths increased 94% 2019 to 2020, largely due to fentanyl**
 - ✦ Friedman J, Godvin M, Shover CL, Gone JP, Hansen H, Schriger DL. Trends in Drug Overdose Deaths Among US Adolescents, January 2010 to June 2021. *JAMA*. 2022;327(14):1398–1400. doi:10.1001/jama.2022.2847

CRAFFT 2.1 + N

- ✦ During the past 12 months, on how many days did you:
 - ✦ Alcohol
 - ✦ Marijuana or synthetic marijuana
 - ✦ Anything else to get high
 - ✦ Vaping device containing nicotine and/or flavors, or any tobacco products

- ✦ www.crafft.org

CRAFFT 2.1 + N

- ☀ C - Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?
- ☀ R - Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?
- ☀ A - Do you ever use alcohol/drugs while you are by yourself, ALONE?
- ☀ F - Do your family or FRIENDS ever tell you that you should cut down on your drinking or drug use?
- ☀ F - Do you ever FORGET things you did while using alcohol or drugs?
- ☀ T - Have you gotten into TROUBLE while you were using alcohol or drugs?

**2 or more yes answers suggests a significant problem.*

CRAFFT 2.1 + N

Ask about use of vaping device containing nicotine and/or flavors, or any tobacco products.

1. Ever tried to QUIT
2. Use NOW because hard to quit
3. Felt ADDICTED
4. CRAVINGS
5. Felt like NEEDED to vape/use tobacco
6. Hard to keep from using in PLACES where you shouldn't
7. When you HAVEN'T used
 - a. Hard to CONCENTRATE
 - b. IRRITABLE
 - c. NEED/urge
 - d. NERVOUS, restless, anxious

Do We Care About Cannabis?

- ☀️ Vulnerable populations: youth, psychiatric illness, other substance use disorders
- ☀️ Consequences of intoxication, e.g., MVCs
- ☀️ Impact on learning
- ☀️ Psychiatric consequences of use
- ☀️ Progression to cannabis use disorders and other substance use disorders

Vulnerability in Youth

- ✱ Daily use of cannabis <age 17 associated with substantially increased risk of:
 - ✱ Later cannabis dependence
 - ✱ High school non-completion
 - ✱ Use of other drugs
 - ✱ Suicide attempts

Silins E, Horwood LJ, Patton GC, Fergusson DM, Olsson CA, Hutchinson DM, Spry E, Toumbourou JW, Degenhardt L, Swift W, Coffey C, Tait RJ, Letcher P, Copeland J, Mattick RP; Cannabis Cohorts Research Consortium. Young adult sequelae of adolescent cannabis use: an integrative analysis. *Lancet Psychiatry*. 2014 Sep;1(4):286-93

Can We Establish Credibility Despite Historic Exaggeration & Racist Cannabis Regulations?

Messaging - Overcoming Societal Attitudes

- ☀ Cannabis is addictive (but not everyone gets addicted)
- ☀ Cannabis can be harmful (but not everyone gets harmed)
- ☀ This is not your grandmother's cannabis
- ☀ Broader use leads to broader problem use through access and decreased perceived harm
- ☀ This is a huge problem for youth and other vulnerable populations

Features of Adolescent Treatment

- ✦ Developmental barriers to treatment engagement
 - ✦ Invincibility
 - ✦ Immaturity
 - ✦ Motivation and treatment appeal
 - ✦ Salience of burdens of treatment
- ✦ Variable effectiveness of family leverage (or not)
- ✦ Pushback against sense of parental dependence and restriction
- ✦ Prominence of co-morbidity

Developmentally Informed Treatment -1

- ☀ Remember that adolescents rely on the support of adults, but also acknowledge that they are striving for autonomy
- ☀ Emphasize rewards and praise
- ☀ Emphasize adolescent learning styles, using energetic and fun activities while preserving therapeutic content
- ☀ Emphasize social alternatives to drug use
- ☀ Acknowledge normative attraction of thrill-seeking, risk, deviance
- ☀ Management of disruptive behavior is expected and essential, balancing limits
- ☀ Weave a safety net of supports: families (or surrogates), but expect some resistance

Developmentally Informed Treatment - 2

- ◆ Encourage adolescents to formulate their own solutions
- ◆ Natural consequences: Give some rope (but not too much) and don't enable
- ◆ Emotion regulation training
- ◆ Address sleep deprivation
- ◆ Skills rehearsal
- ◆ Treatment = habilitation, not rehabilitation
- ◆ Not effective- “Just grow up!”, “Just say no.”

Motivational Approaches

- ☀ Do you know other kids who have been in trouble?
- ☀ What are the pros and cons for you?
- ☀ How much do you think is too much?
- ☀ What do you know about health risks?
- ☀ If it did become a problem in the future, how would you know?
- ☀ Do you know why I or your parents might think it's a problem?
- ☀ If you can 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...

Families

- ☀ Monitoring and supervision
- ☀ Modeling of prosocial behaviors
- ☀ Support for treatment
- ☀ Communication and negotiation
- ☀ Difficult balance of zero tolerance and accommodation of normative experimentation
- ☀ We need to work hard to engage families

Vignette

- ☀ 17-year-old male began prescription opioids at 15, progressing to daily use with withdrawal within 8 months; nasal heroin age 16, injection heroin 6 months later
- ☀ 3 episodes residential tx, 2 AMA, 1 completed
- ☀ Presents in crisis seeking detox (“Can I be out of here by Friday?”)
- ☀ How should you care for him?

Adolescents and Opioids

- ☀ Medications feasible and effective (buprenorphine better than heroin)
- ☀ Adolescents with non-fatal opioid overdose should be strongly considered for buprenorphine treatment
- ☀ Naltrexone requires acceptance with concern over retention
- ☀ Longer duration buprenorphine better
- ☀ XR buprenorphine can be considered

Older Adults

Older Adults-“Hidden Problem”

- ☀ Lack of screening in primary care
- ☀ Lack of guidelines for assessing older adults
- ☀ Signs and symptoms of harmful use overlap with other conditions
- ☀ Ageist bias

Detecting Problematic Substance Use

- ☀️ Psychiatric symptoms: sleep changes, mood changes
- ☀️ Physical symptoms: nausea/vomiting, poor coordination, tremors
- ☀️ Physical signs: injuries, falls, bruises, malnutrition, self-neglect (ie poor hygiene)
- ☀️ Cognitive changes: confusion/disorientation, memory impairment, daytime drowsiness, impaired reaction time
- ☀️ Social/behavioral changes: withdrawn, family discord, early refills

Challenges in Detecting Problematic use

- ☀ Relying on older patient's report of frequency and quantity of substance use can lead to underestimation of the problem
- ☀ Older adults and family members may not appreciate deleterious consequences of long-time patterns of drinking or drug use
- ☀ Harm can come from lower amounts of substances

Patient Vignette

- ☀ EB is a 72-year-old female seen for her initial visit. She has a history of chronic pain in her hips and knees. Her previous provider will no longer prescribe oxycodone because, for the past two months, her 30-day script ran out after two weeks. She is fearful that providers won't help her. She cannot take NSAIDs and admits that she often takes oxycodone when she is upset.
- ☀ She lives alone in a senior housing apartment; she has two daughters-both with difficulties (medical and social). Non-smoker; no alcohol.
- ☀ How should you care for her?

Opioids and Aging

- ☀ Older adults who were prescribed opioids (vs NSAIDs), had significantly higher rates of:
 - ☀ Cardiovascular events
 - ☀ Fractures
 - ☀ Hospitalizations
 - ☀ Death
 - ☀ (risk for gastrointestinal bleeding was similar)

American Geriatrics Society Beers Criteria

- ✱ Avoid chronic NSAIDs, muscle relaxants and use tramadol with caution (added 2019)
- ✱ Avoid opioids if history of falls or fracture
- ✱ Avoid tricyclics- amitriptyline

Patient Vignette

- ☀ BR is an 82-year-old female brought to the ER by neighbor with “syncope.” It is noted that she has alcohol on her breath and her BAL is 228 mg/dl. When confronted, she becomes tearful. Her son goes to her home and finds hidden miniatures throughout her apartment.
- ☀ How do you approach caring for her?

Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)

In the past year:

1. When talking with others, do you ever underestimate how much you actually drink?
2. After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?
3. Does having a few drinks help decrease your shakiness or tremors?
4. Does alcohol sometimes make it hard for you to remember parts of the day or night?
5. Do you usually take a drink to relax or calm your nerves?

SMAST-G

6. Do you drink to take your mind off your problems?
7. Have you ever increased your drinking after experiencing a loss in your life?
8. Has a doctor or nurse ever said they were worried or concerned about your drinking?
9. Have you ever made rules to manage your drinking?
10. When you feel lonely, does having a drink help?

**2 or more “yes” responses indicative of alcohol problem.*

Patient Vignette

- ☀ RT is a successful 79-year-old businessman with HTN and recurrent depression with poor sleep and worries about his memory. At initial evaluation, he performs well on cognitive testing, but you learn that he has two “stiff drinks” every evening, and often has a third after a stressful day. He is defensive about his drinking because this has been a longstanding pattern that he enjoys.
- ☀ How concerned are you about his drinking?

Alcohol: the Most Commonly Used Substance

- ☀ Alcohol Use Disorder in Older Adults
 - ☀ Early Onset: more common; Men>Women
 - ☀ Late Onset: more likely to be triggered by stressful life event (loss of spouse, retirement, medical disability, pain, sleep problem) ;
Women_≥Men

National Institute on Alcohol Abuse and Alcoholism

Drinking Guidelines for Older Adults (65 & older)

- ✦ Should not have more than:
 - ✦ 3 drinks on a given day
 - ✦ 7 drinks in a week

Alcohol Use Trends

- ☀ Increased in past 2 decades for adults 60+, particularly women
- ☀ Binge drinking prevalence:
 - ☀ 20% of 60-64yo
 - ☀ 11% of 65+

Increased Risks of Alcohol Even at “Low Consumption”

- ✦ Increased vulnerability to physiological effects
 - ✦ Decreased lean muscle mass
 - ✦ Decreased total body water
 - ✦ Less efficient liver enzymes that metabolize alcohol
 - ✦ Increased effective concentration of alcohol, higher and longer lasting blood alcohol levels
- ✦ Additional risks
 - ✦ Alcohol-medication interactions
 - ✦ Co-morbid chronic illnesses
 - ✦ Women experience alcohol-related harms at lower levels than men

Patient Vignette

- ☀ SL is a 78-year-old male with Alzheimer's dementia being cared for at home by his daughter and son-in-law. He has had increasing episodes of agitation and his daughter inquires about the use of cannabis to help with agitation.
- ☀ What do you advise?

Patient Vignette

- ☀ CR is an 82-year-old male with HTN, GERD, and recurrent depression which is being treated with two different antidepressants. His depression is much improved, but he continues to experience anxiety and stress, primarily related to worries about his wife's cancer and her poor health. He reports that he has decided to go to a marijuana dispensary and try cannabis to see if it can help his mood and his anxiety.
- ☀ How do you respond?

Cannabis Use is Increasing Among Older Adults

- ✦ Prevalence of cannabis use increased from 2002/2003 to 2012/2013
 - ✦ 45-64 age group.....increased from 1.6% to 5.9%
 - ✦ 65+ age group.....increased from 0.0% to 1.3%
- ✦ Adults age 50+ with cannabis use
 - ✦ Frequently began use in teen years
 - ✦ Often have other co-morbid substance use and mental disorders
- ✦ Majority of older people who use cannabis perceive no risk or slight risk from frequent use (e.g., 3 times/week)

Impact of Cannabis on Physical and Mental Health

- ✦ Older adults often see marijuana as “safer” alternative to alcohol, opioids, or pharmaceutical medications
- ✦ Short term use is associated with
 - ✦ Impaired short-term memory, impaired judgment/motor coordination, driving skills
 - ✦ Injury, paranoia, and psychosis

Patient Vignette

- ☀️ KT is a 70-year-old male seen for initial visit. He has a history of Type 2 diabetes mellitus and hypertension. He lives with his wife and has three daughters and eight grandchildren that he sees regularly. He enjoys watching sports and getting together with friends every Friday night to play pinochle and most times there is crack cocaine use- “we just unwind and have a good time.”
- ☀️ How should you address cocaine use? What if he instead drank 3-4 beers to unwind?

Treatment Approach for Older Adults

- ☀ Don't minimize
- ☀ Confront with compassion
- ☀ Remove shame
- ☀ Build self-esteem
- ☀ Give encouragement/hope
- ☀ Undo isolation
- ☀ Work on coping skills
- ☀ Facilitate finding new ways to stay busy with use of peers

Conclusions: Treatment for Youth and the Elderly is Effective, but...

- ☀ We need to learn to improve it
- ☀ There isn't enough of it
- ☀ Access and engagement is a problem
- ☀ **Treatment works!**
- ☀ **We are at a crossroads -- we have an obligation to do better!**

References

1. American Geriatrics Society 2019 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults. *J Am Geriatr Soc.* 2019 Apr;67(4):674-694. doi: 10.1111/jgs.15767. Epub 2019 Jan 29. PMID: 30693946
2. Cavacuiti CA. *Principles of Addiction Medicine: The Essentials* (2011). LWW: Philadelphia, PA
3. Centers for Disease Control and Prevention. *Youth Risk Behavior Survey Data.* 2019
4. Choi NG, DiNitto DM, Marti CN. Older adults who use or have used marijuana: Help-seeking for marijuana and other substance use problems. *J Subst Abuse Treat.* 2017 Jun;77:185-192. doi: 10.1016/j.jsat.2017.02.005. Epub 2017 Feb 16. PMID: 28216197
5. Friedman J, Godvin M, Shover CL, Gone JP, Hansen H, Schriger DL. Trends in Drug Overdose Deaths Among US Adolescents, January 2010 to June 2021. *JAMA.* 2022;327(14):1398–1400. doi:10.1001/jama.2022.2847
6. Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2022). *Monitoring the Future national survey results on drug use 1975-2021: Overview, key findings on adolescent drug use.* Ann Arbor: Institute for Social Research, University of Michigan
7. Lehman S, Fingerhood M. Substance use disorders in later life. *New England Journal of Medicine* 2018; 378:2351-60
8. Silins E, Horwood LJ, Patton GC, Fergusson DM, Olsson CA, Hutchinson DM, Spry E, Toumbourou JW, Degenhardt L, Swift W, Coffey C, Tait RJ, Letcher P, Copeland J, Mattick RP; Cannabis Cohorts Research Consortium. Young adult sequelae of adolescent cannabis use: an integrative analysis. *Lancet Psychiatry.* 2014 Sep;1(4):286-93. doi: 10.1016/S2215-0366(14)70307-4. Epub 2014 Sep 10. PMID: 26360862
9. Solomon DH, Rassen JA, Glynn RJ, Lee J, Levin R, Schneeweiss S. The Comparative Safety of Analgesics in Older Adults With Arthritis. *Arch Intern Med.* 2010;170(22):1968–1978. doi:10.1001/archinternmed.2010.391
10. www.crafft.org
11. www.niaaa.nih.gov/alcohols-effects-health/special-populations-co-occurring-disorders/older-adults

Submit Your Feedback on this Session!



- ✓ Scan QR code or visit bit.ly/SESSIONEVAL
- ✓ Choose the session you are reviewing
- ✓ Provide your feedback

Up Next: *Genetics and Gender* – Leslie A. Hayes, MD