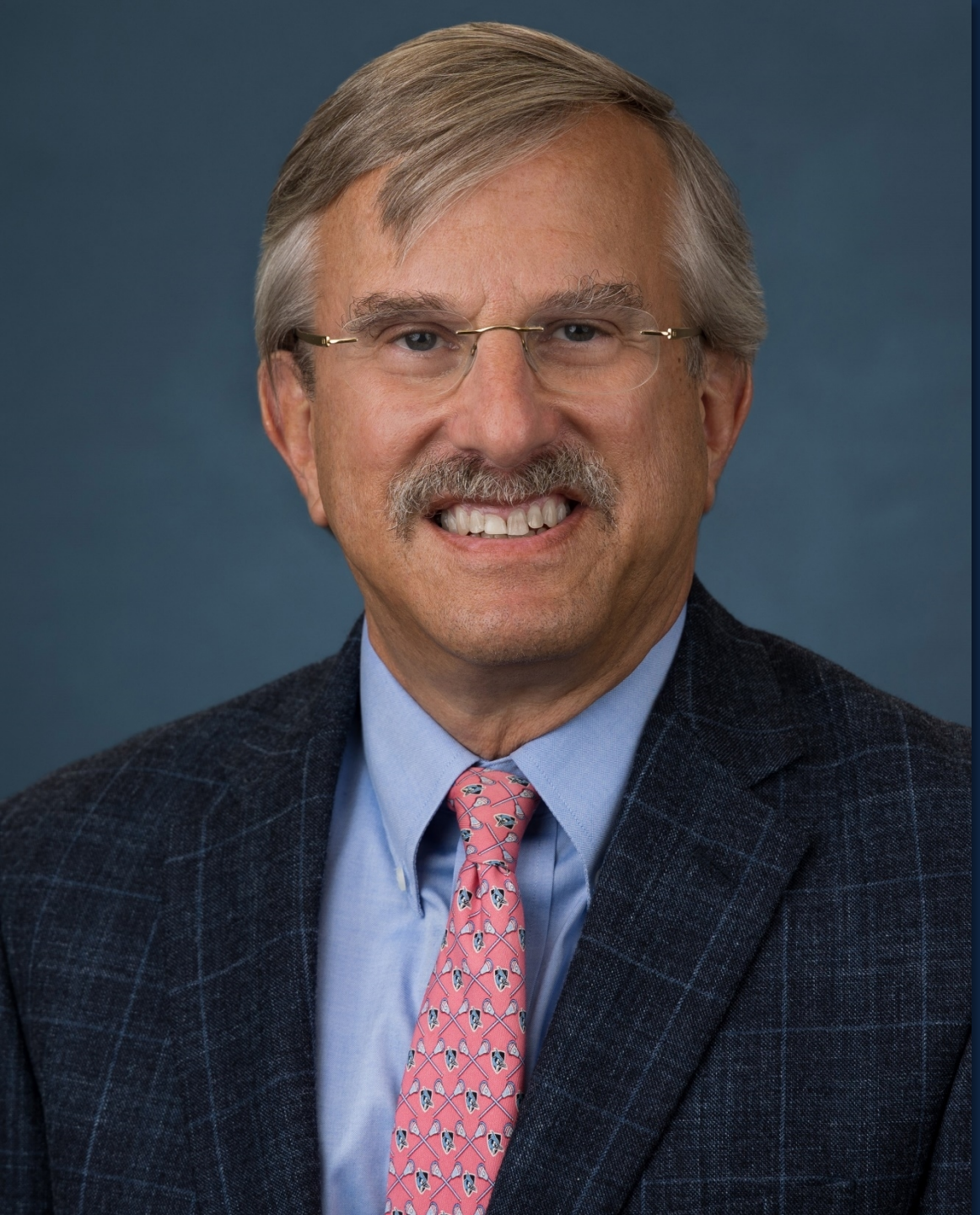
ASAM REVIEW COURSE 2025

Treatment for Different Stages of Life: Adolescents, Young Adults, and the Elderly

Michael Fingerhood, MD, FACP, AAHIVS, DFASAM
Professor and Medical Director
Johns Hopkins University
Baltimore, MD



Financial Disclosure

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- No relevant disclosures

LEARNING OBJECTIVE

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

Outline

1

Adolescents (10-19) and Young Adults (20-24 per World Health Organization)

2

Older adults (someone much older than yourself)

Adolescence

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

Substances

- Cannabis
- Alcohol
- Nicotine/vaping
- Opioids
- Cocaine
- Lots of experimenting- inhalants (nitrous and others), MDMA, synthetic cannabinoids, PCP, canthinones, stimulants, kratom, salvia

Adolescents Are Vulnerable

- Early substance use = high 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 with substance use disorder
- Mood disorder
- Learning disorder/poor school performance
- Low self-esteem
- Early sexual activity
- Substance using peers
- Availability of substances in community
- Poor family dynamics; family conflict

Recent Trends

- Overall, from 2020 to 2021, teen substance use 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.

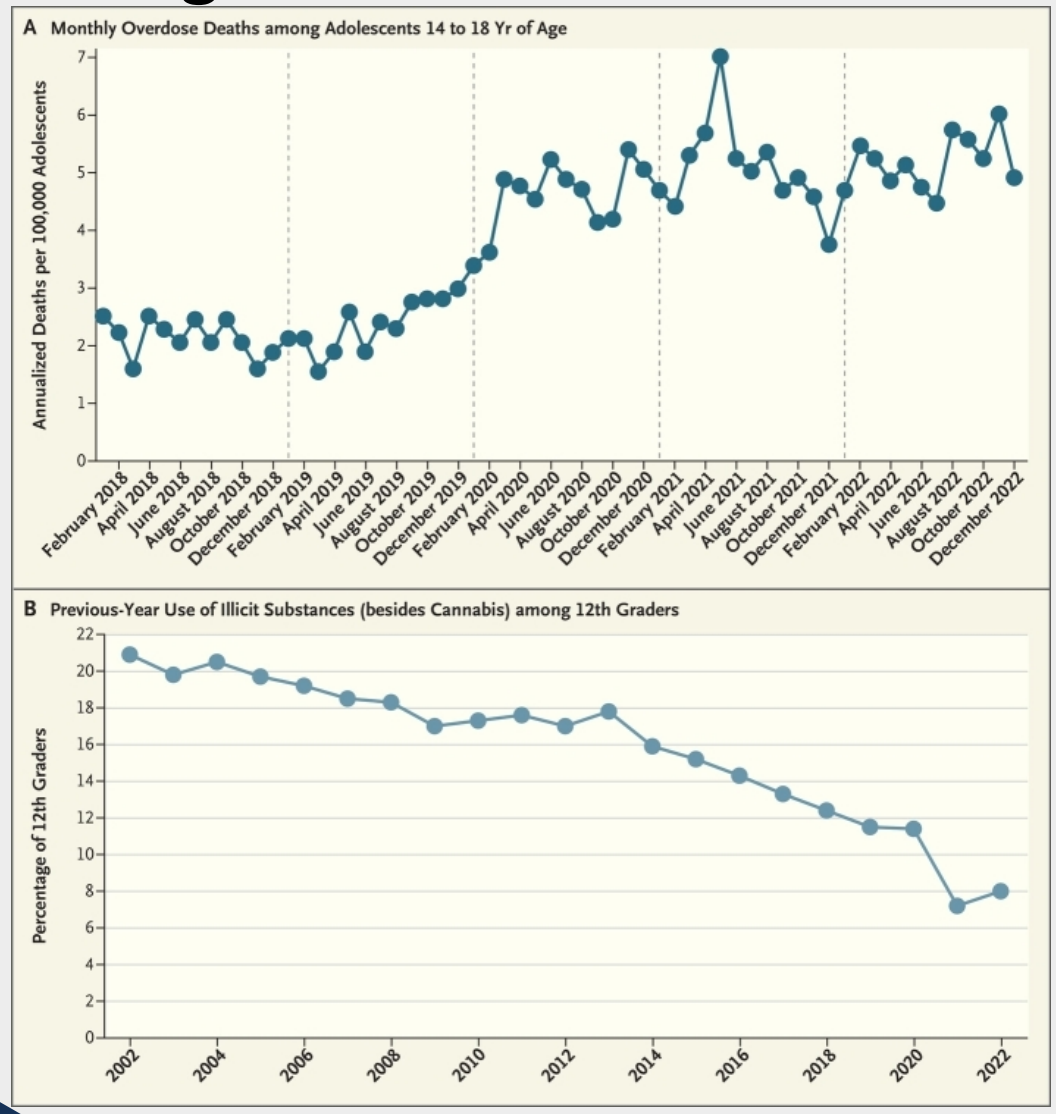
- Overdose deaths increased 94% 2019 to 2020, largely due to fentanyl.

  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

- In a 2023 survey of 12 graders, 11.4% had used delta8-THC and 30.4% had used marijuana.

  Harlow AF, Miech RA, Leventhal AM. Adolescent Δ8-THC and Marijuana Use in the US. JAMA. 2025 Mar 12;331(10):861-865. doi: 10.1001/jama.2025.0865. PMID: 38470384; PMCID: PMC10933714.

Drug-Overdose Mortality and Previous-Year Illicit-Drug Use among High-School–Aged Adolescents in the United States.



Goldstick JE, Cunningham RM, Carter PM. Current causes of death in children and adolescents in the United States. N Engl J Med 2022;386:1955-1956.

Recent Trends for High School Students

From 2019 to 2021, prevalence of current substance use:

- Decreased for alcohol (from 29.2% to 22.7%), marijuana (from 21.7% to 15.8%), and binge drinking (from 13.7% to 10.5%).
- No change was observed in prevalence of current prescription opioid misuse.
- Lifetime alcohol use, marijuana use, cocaine use, and prescription opioid misuse decreased from 2019 to 2021; lifetime inhalant use increased from 6.4% to 8.1%.

Hoots BE, Li J, Hertz MF, Esser MB, Rico A, Zavala EY, Jones CM. Alcohol and Other Substance Use Before and During the COVID-19 Pandemic Among High School Students - Youth Risk Behavior Survey, United States, 2021. MMWR Suppl. 2023 Apr 28;72(1):84-92. doi: 10.15585/mmwr.su7201a10. PMID: 37104552; PMCID: PMC10156154.

Prevalence of current and lifetime use of specific substances among high school students, by sexual identity — Youth Risk Behavior Survey, United States, 2021*

Behavior/Substance	Heterosexual %	Lesbian, gay, or bisexual %	Questioning or other %
Current use†			
Alcohol	21.6	29.3§	20.9¶
Marijuana	14.0	25.6§	16.5§,¶
Binge drinking	10.3	13.6§	7.6§,¶
Prescription opioid misuse	4.3	11.7§	10.3§
Lifetime use			
Alcohol	45.8	58.0§	46.2¶
Marijuana	25.8	41.2§	27.5¶
Inhalants	6.0	15.1§	13.4§
Ecstasy	2.1	6.0§	3.9§,¶
Cocaine	1.8	4.4§	3.1§
Methamphetamine	1.1	3.4§	3.0§
Heroin	0.8	1.9§	2.4§
Injection drug use	1.0	1.9§	2.7§
Synthetic marijuana	5.9	9.7§	6.1¶
Prescription opioid misuse	9.4	21.5§	18.6§

Hoots BE, Li J, Hertz MF, Esser MB, Rico A, Zavala EY, Jones CM. Alcohol and Other Substance Use Before and During the COVID-19 Pandemic Among High School Students - Youth Risk Behavior Survey, United States, 2021. MMWR Suppl. 2023 Apr 28;72(1):84-92. doi: 10.15585/mmwr.su7201a10. PMID: 37104552; PMCID: PMC10156154.

Random Tidbits

- Stimulant involved drug overdoses rising among youth; greatest rise in 11-14 year olds
- Inhalant use associated with violence, criminal activity, other substance use disorder, school dropout
- College students
  - depressive symptoms associated with non-medical prescription drug use
  - past year non-medical use of prescription medication prevalence 20%; higher among males and members of fraternities and sororities

CRAFFT: A Brief Screening Test for Adolescent Substance Use*

- 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

- Conditional risk of use disorder in adolescents as high as 40%
- Daily use of cannabis <age 17 associated with substantially increased risk of:
  - Later cannabis use disorder (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

Messaging – Overcoming Societal Attitudes

- Cannabis is addictive (but not everyone gets addicted)
- Cannabis can be harmful (but not everyone gets harmed)
- 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

- Adolescents rely on the support of adults, but also strive 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
- Weave a safety net of supports: families (or surrogates), but expect some disdain

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
- 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 pro's and con's 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…

Vignette

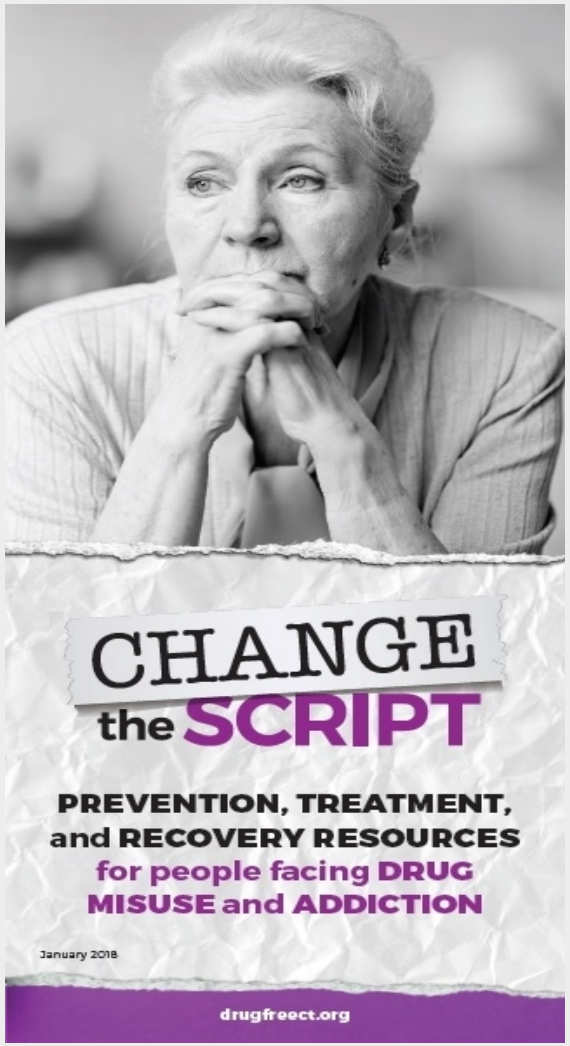
- 17M began prescription opioids at 15, progressing to daily use with withdrawal within 8 months; nasal heroin age 16, injection heroin 6 months later
- 3 episodes residential tx, 2 AMA, 1 completed
- Presents in crisis seeking detox (“Can I be out of here by Friday?”)
- How should you care for him?

Adolescents and Treatment of OUD

- Medications feasible and effective (buprenorphine better than no buprenorphine)
- Availability of programs offering MOUD limited*
- 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 should be considered

**Oldfield B, Chen K, Joudrey PJ et al. Availability of Specific Programs and Medications for Addiction Treatment to Vulnerable Populations: Results from the Addiction Treatment Locator, Assessment, and Standards (ATLAS) Survey. J Adddict Med 2023 Mar 17. doi: 10.1097/ADM.0000000000001158.*

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

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

Detecting Problematic Substance use

Lehmann & Fingerhood. NEJM 2018;379:2351-60

Table 2. Signs of Possible Problematic Substance Use in Older Adults.

Psychiatric symptoms: sleep disturbances, frequent mood swings, persistent irritability, anxiety, depression
Physical symptoms: nausea, vomiting, poor coordination, tremors
Physical signs: unexplained injuries, falls, or bruises; malnutrition; evidence of self-neglect, such as poor hygiene
Cognitive changes: confusion and disorientation, memory impairment, daytime drowsiness, impaired reaction time
Social and behavioral changes: withdrawal from usual social activities, family discord, premature requests for refills of prescription medications

Patient Vignette

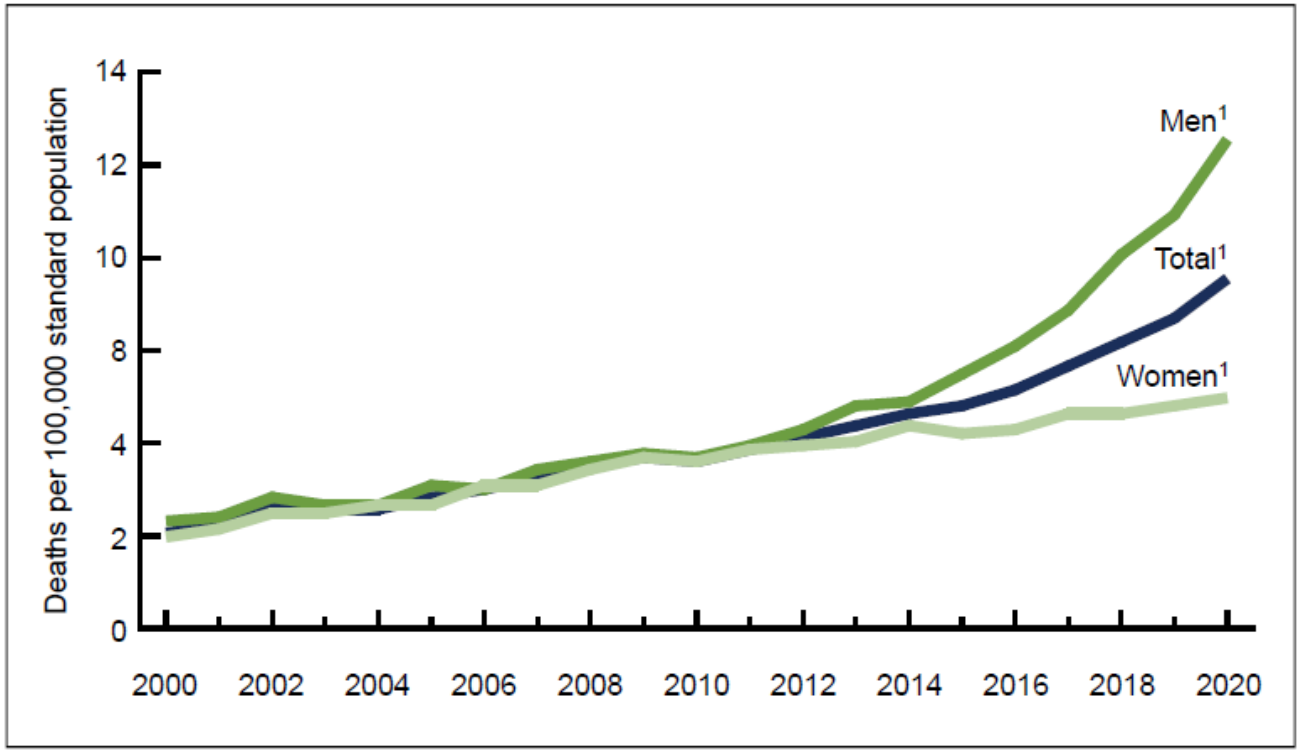
- EB is a 72 F seen for initial visit. She has a history of chronic pain in hips and knees. Her previous provider will no longer prescribe oxycodone as for the past 2 months her 30-day script ran out after 2 weeks. Tearful and fearful that providers won't help her. Cannot take NSAIDs. She admits that she often takes oxycodone when she is upset.
- She lives alone in senior housing apartment; 2 daughters- both with difficulties (medical and social). Non-smoker; no alcohol.
- How should you care for her?

Themes in Older Adults with Opioid (substance) Use Disorder

- Living alone
- Sense of isolation (despite family)
- Opioid as a “friend”
- Shame
- Fear of how to live without opioid (substance)

Older adult overdose death rate based on gender

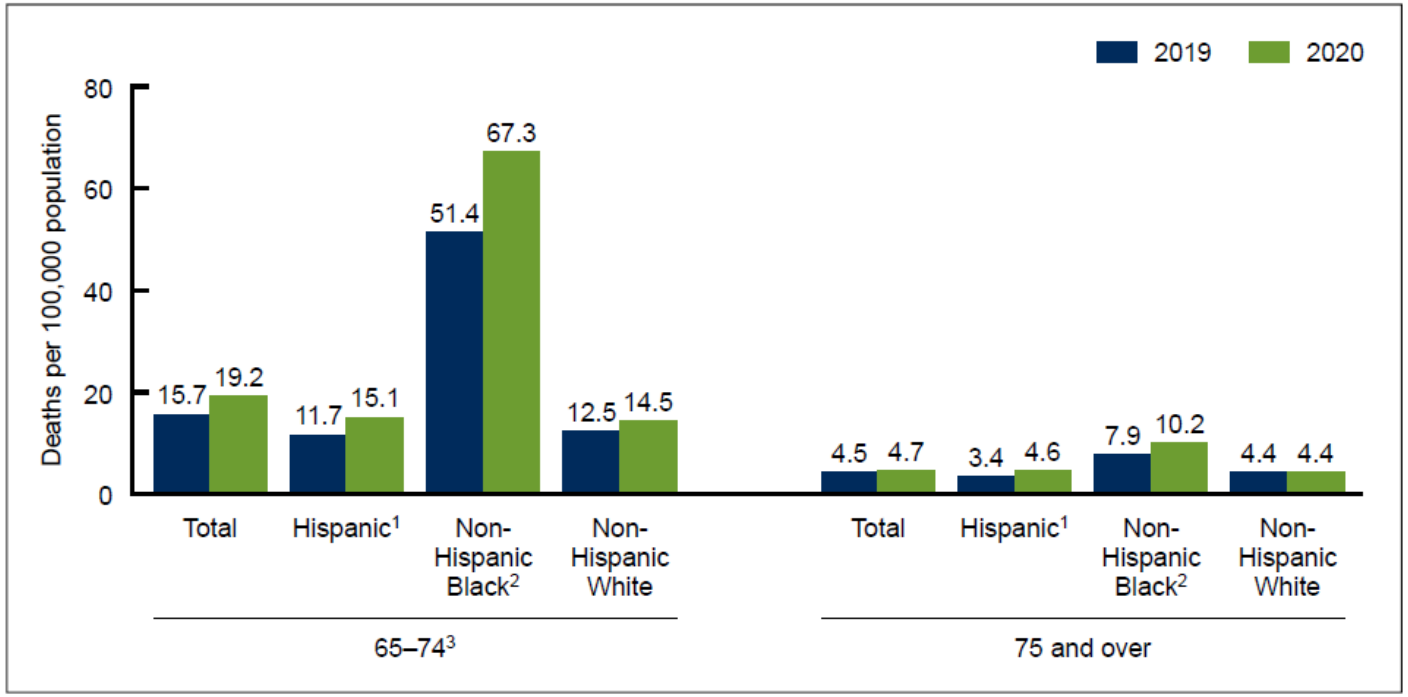
Figure 1. Age-adjusted drug overdose death rate for adults aged 65 and over, by sex: United States, 2000–2020



[1]Significant increasing trend from 2000 through 2020 with different rates of change over time; $p < 0.05$.
NOTES: Drug overdose deaths are identified using the *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db455-tables.pdf#1.
SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

Older adult overdose death rate by race

Figure 2. Drug overdose death rate for men aged 65 and over, by age group, race and Hispanic origin, and year: United States, 2019–2020



[1]Rates were significantly lower than rates for non-Hispanic Black men in 2019 and 2020; $p < 0.05$.
[2]Rates were significantly higher than rates for non-Hispanic White men in 2019 and 2020; $p < 0.05$.
[3]Rates for 2020 were significantly higher than 2019 for all groups; $p < 0.05$.
NOTES: Total includes races and origins not shown separately. Data for categories other than non-Hispanic White and non-Hispanic Black should be interpreted with caution because of inconsistencies in reporting race and ethnicity on death certificates, censuses, and surveys. Drug overdose deaths are identified using the *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db455-tables.pdf#2.
SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

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

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.

Patient Vignette

- BR is a 82F brought to the ER by neighbor with “syncope”, but 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?

Short Michigan Alcoholism Screening Test-Geriatric Version (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.

Alcohol: the Most Commonly Used Substance

- Alcohol Use Disorder in Older Adults
  - Early Onset: 2/3 of older adults; Men>Women
  - Late Onset: more likely to be triggered by stressful life event (loss of spouse, retirement, medical disability, pain, sleep problem) ; Women≥Men

Findings from NSDUH

- Prevalence of heavy drinking (5 or more drinks on one day on each of 5 or more days in past 30 days):
  - 5.6% of aged 50-54 year olds, 3.9% of aged 55-59
  - 4.7% of aged 60-64, 2.1% of 65+

- **Prevalence of binge drinking (5 or more drinks on same occasion on at least 1 day in past 30 days**):
  - 23.0% of aged 50-54, 15.9% of aged 55-59,
  - **14.1% of aged 60-64, 9.1% of aged 65+**

www.niaaa.nih.gov/alcohols-effects-health/special-populations-co-occurring-disorders/older-adults

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
  - Bariatric surgery

Patient Vignette

- CR is 82M with HTN and GERD and with recurrent depression which is being treated with 2 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 and emergency visits among older adults in California

- Cannabis related ED visit rate for adults ≥ age 65, increased from 20.7/100,000 visits in 2005 to 395.0 per 100,000 ED visits in 2019, a 1804% increase.

Han BH, Brennan JJ, Orozoco, et al. Trends in emergency department visits associated with cannabis use among older adults in California, 2005-2019. J Am Geriatr Soc 2023Jan 9. doi: 10.1111/jgs.18180

Impact of Cannabis on Physical and Mental Health

- Older adults often see cannabis 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
  - Increased anxiety
  - Paranoia and psychosis have dose-response effect

Patient vignette

- LK is an 80F with long history of episodic anxiety and low mood and insomnia- prescribed temazepam for 30 years. She has 6 month history of low mood, panicky feelings, crying spells, anxiety, poor appetite; can’t multitask or concentrate. Medications are- temazepam 30mg qhs, trazodone 50mg qhs, eszopiclone 3mg qhs, tramadol 50mg prn pain, gabapentin 2400mg daily

Benzodiazepine prescribing in older adults

- **What are the reasons?**
  - Anxiety symptoms, anxiety disorders, depression with anxiety, sleeplessness

- **What are the problems**?
  - Often prescribed for years, without good indication of continuing need
  - Often prescribed for symptoms, without recognition of the true underlying cause: e.g. depression, normal worry, cognitive impairment
  - Increased frequency of adverse effects with aging, polypharmacy and use of meds with long half-lives

Deprescribing

- Emphasize that you will not withdraw appropriate care: “I understand that I need to treat your symptoms but we need to do so without causing you other problems.”

- Reassure that you will monitor closely for symptoms recurrence: “We’ll reduce the medicine very slowly and will stay in close contact to watch for returning symptoms.”

Benzodiazepine tapering

Initial Considerations

- Use scheduled rather than prn dosing
- Consider switching to a longer-acting benzodiazepine
- Schedule follow-ups every 2-4 weeks- can be telemedicine or phone call

Tapering Considerations

- Reduce total daily dose (TDD) by 10-25% to start
- Continue reducing TDD by 10-25% every 2-4 weeks
- For patients on supra-therapeutic doses consider initial reduction of 25-30%

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

Some 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!

References

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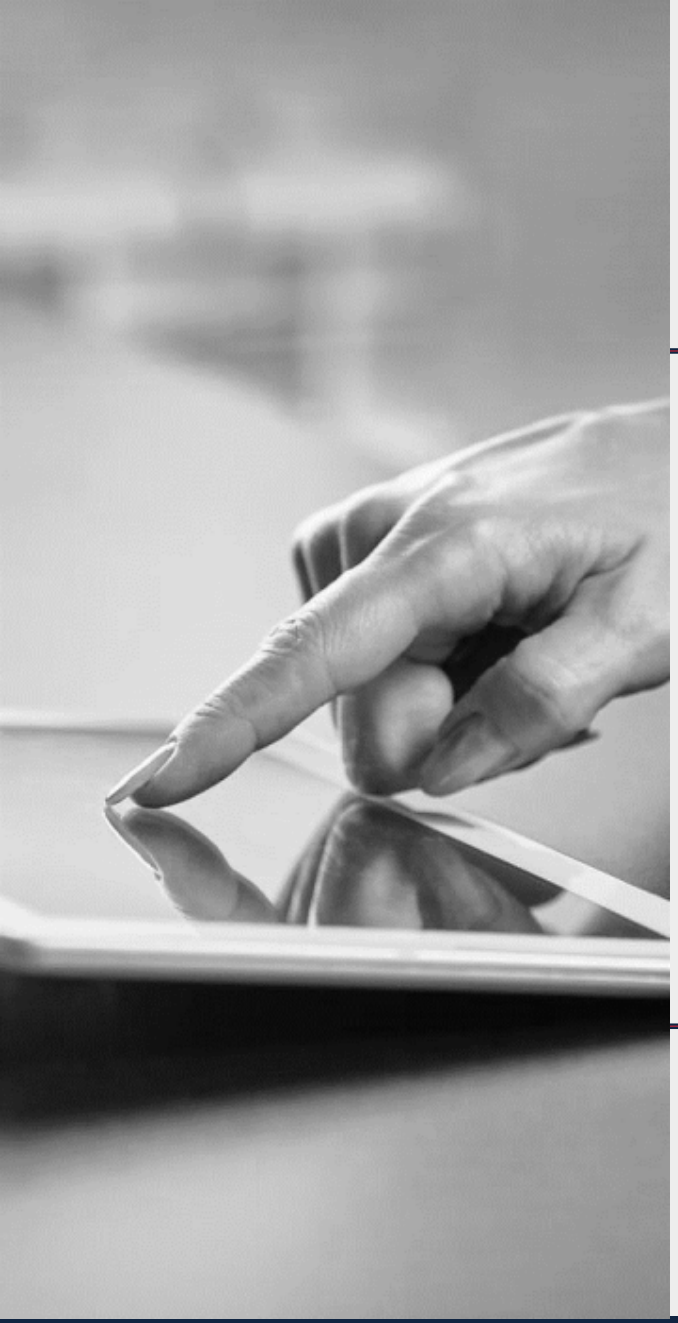

Get in Touch

301.656.3920

education@asam.org

www.asam.org