

# Adolescents, Young and the Elderly

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## ASAM Board Exam Study Course- Adolescents, Young Adults and the Elderly

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### Financial Disclosures

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### Learning Objectives

**Conduct** a biopsychosocial and developmental ambulatory assessment of an adult with a suspected SUD to match the patient to an appropriate level of care.

**List** the indications, contraindications, and duration of treatment of evidence based pharmacotherapy for alcohol, tobacco, and opioid use disorders and refer patient to specialty care where appropriate.

**Reflect** on the role of behavioral interventions for patients and families including formal intensive ambulatory and inpatient treatment and informal programs such as mutual aid groups in the recovery process for patients in their practice/communities.


**Implement** motivational interviewing strategies with patients ambivalent about changing their substance use behavior.



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### Presentation Outline

- Adolescents (10-19) and Young (10-24 per World Health Organization)
- Elderly (someone much older than yourself)



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### Adolescence

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







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### Substances

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



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## 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



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## 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
- Dysfunctional family/parenting



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## Epidemiology- 2019 Monitoring the Future

- Alcohol- 1/3 of 12<sup>th</sup> graders with past month use; less binge drinking
- Synthetic cannabinoids- past year use for 12<sup>th</sup> graders fell from 5.8% to 3.3 %
- Vaping – 25.0% of 10<sup>th</sup> graders and 30.9% of 12<sup>th</sup> graders are current users of a vaping product
- Heroin - use in past year 0.4% 12<sup>th</sup> graders
- IDU increased in many urban areas; increase in co-morbid alcohol and opioid use



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## 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



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## CRAFFT: A Brief Screening Test for Adolescent Substance Abuse\*

- 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



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## Do We Care About MJ?

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



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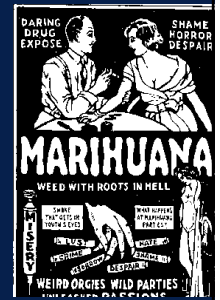
## Vulnerability in Youth

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

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## Can We Establish Credibility Despite Historic Exaggeration?



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## Messaging - Overcoming Societal Attitudes

- MJ is addictive (but not everyone gets addicted)
- MJ 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

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## 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

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## Developmentally Informed Treatment -1

- Remember that adolescents rely on the support of adults, but also acknowledge 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 disdain

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## 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"

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## 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...

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## 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

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## Which is not a risk factor for substance use disorder in an adolescent?

- A. Mood disorder
- B. Having a parent with substance use disorder
- C. Early age of puberty
- D. Poor school performance

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## 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?

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## Adolescents and Opioids

- Medications feasible and effective (buprenorphine better than no buprenorphine)
- Adolescents with non-fatal opioid overdose should be strongly considered for buprenorphine treatment
- Naltrexone requires acceptance with concern over retention
- Longer duration buprenorphine better
- Residential (with and without meds) effective as one *component* of continuum
- XR buprenorphine should be considered

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## Older Adults



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## 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

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## 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

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## 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

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## Patient Vignette

- EB is a 72-year-old female seen for 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; two daughters- both with difficulties (medical and social). Non-smoker; no alcohol.
- How should you care for her?

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## 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

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## Opioids and Aging

- 2010 analysis of Medicare claims data of older adults who were prescribed opioids (in comparison to those prescribed NSAIDs), had significantly higher rates of cardiovascular events, fractures, hospitalizations and death; risk for gastrointestinal bleeding was higher
- Euphoria from opioids diminishes with age

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## American Geriatrics Society Beers Criteria

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

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## 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?

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## MAST-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?

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## MAST-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?

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## MAST-G

- Greater than five "yes" answers indicates an alcohol problem with a sensitivity of 91-93% and a specificity of 65-84% when compared to DSM criteria

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## 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?

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## 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

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## National Institute on Alcohol Abuse and Alcoholism

- **Drinking Guidelines for Older Adults**  
Adults over age 65 who are healthy and do not take medications should not have more than:
  - 3 drinks on a given day
  - 7 drinks in a week

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## 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+

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## Which is a screening tool specifically assesses alcohol use disorder in older adults?

- A. CRAFFT
- B. TWEAK
- C. CAGE-G
- D. MAST-G

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## 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

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## NIAAA guidelines state that for someone over age 65, alcohol intake should be limited to:

- A. 4 drinks on a given day
- B. 7 drinks in a week
- C. 14 drinks in a week for men
- D. 2 drinks in a day

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## Patient Vignette

- SL is 78-year-old male with Alzheimers 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?

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## 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?

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## Marijuana Use is Increasing Among Older Adults

- Prevalence of marijuana 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 marijuana use
  - Frequently began use in teen years
  - Often have other co-morbid substance use and mental disorders
- Majority of older marijuana users perceive no risk or slight risk from frequent use (e.g., 3 times/week)

(Choi et al. J Subst Abuse Treat, 2017; Choi et al, 2016)

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## Impact of Marijuana 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
  - Increased anxiety
  - Paranoia and psychosis as dose-response effect

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## 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?

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## Treatment Approach for Older Adults

- Don't enable
- 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


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## 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!**
- **We are at a crossroads --**  
**we have an obligation to do better!**



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