Substance Use Disorders in Older Adults

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Disclosures

- None
Objectives

• Increase ability to effectively diagnose substance use disorder in the older adult

• Be able to recommend effective treatment options for the older adult with substance use disorder
A “hidden problem”

- Lack of screening in primary care
- Lack of age-appropriate screening tools
- Lack of guidelines for assessing older adults
- Signs and symptoms of harmful use overlap with other conditions
- Ageist bias
Detecting problematic substance use
Lehmann & Fingerhood. NEJM 2018;379:2351-60

<table>
<thead>
<tr>
<th>Table 2. Signs of Possible Problematic Substance Use in Older Adults.</th>
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<tbody>
<tr>
<td>Psychiatric symptoms: sleep disturbances, frequent mood swings, persistent irritability, anxiety, depression</td>
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<td>Physical symptoms: nausea, vomiting, poor coordination, tremors</td>
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<td>Physical signs: unexplained injuries, falls, or bruises; malnutrition; evidence of self-neglect, such as poor hygiene</td>
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<td>Cognitive changes: confusion and disorientation, memory impairment, daytime drowsiness, impaired reaction time</td>
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<td>Social and behavioral changes: withdrawal from usual social activities, family discord, premature requests for refills of prescription medications</td>
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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
Psychosocial Contributors in Older Adults

- Stigma – “addict or alcoholic”
- Bereavement and grief issues
- Social isolation and loneliness
- Reduced self-regard or self esteem
- Family conflict and estrangement
- Problems in managing time/boredom
- Physical pain
Patient vignette 1

• KL is a 67F retired nurse who had right total knee replacement complicated by joint infection requiring prolonged course of antibiotics, hardware removal with spacer and finally replacement of hardware. She has been on oxycodone 15 mg four times daily for 4 months.
• She sees orthopedics in f/u and is told she should not be on any further opioids as she is now 2 weeks out since the last surgery. She is told to take ibuprofen
• Is this appropriate medical care?
Opioid “detoxification”?

• Assess for past withdrawal
• Are opioids being stopped or tapered?
• Is medication treatment for opioid use disorder being planned?
Patient vignette 2

- 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 substance use disorder

- Living alone
- Sense of isolation (despite family)
- Substance as a “friend”
- Shame
- Fear of how to live without substance
Opioids and aging

• 2010 analysis of Medicare claims data - 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 not lower

• Euphoria from opioids diminishes with age
American Geriatrics Society
Beers Criteria

- Avoid NSAIDs, muscle relaxants and tramadol (added 2019)
- Avoid opioids if history of falls or fracture
- Avoid tricyclics- amitriptyline
Patient vignette 3

• 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?
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?
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?
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.
Alcohol and Aging

- Dysphoria predominates
- Increased risk of cerebellar toxicity
- Nutritional problems more common
- Alcohol withdrawal symptoms more likely confusion/agitation rather than tremor and tachycardia.
MACS

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
RT is a 79M successful 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?
Prevalence of past-month binge alcohol use and alcohol use disorder among adults ages 50+ increased significantly from 2005/2006 to 2013/2014.

In 2014, 65% of adults aged 60-64 and 56% of adults aged 65+ reported drinking (NSDUH, 2015).

- **Early Onset:** 2/3 of older adults
- **Late Onset:** more likely to be triggered by stressful life event (loss of spouse, retirement, medical disability, pain, sleep problem)

Alcohol: the most commonly used substance.
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

Are older adults adhering to these guidelines?
Findings from 2013 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+
Alcohol detoxification?

“What happens if you go a few days without drinking?”

• Withdrawal may not occur until days after cessation.
• Confusion rather than tremor is often the predominant clinical sign; may need to interview family members.
•Severity of withdrawal increases with age.
•If no history of severe withdrawal and no co-morbid medical conditions, withdrawal can be managed with supportive care at home.
•If a history of severe withdrawal- monitor in the inpatient setting and treat with symptom driven use of benzodiazepines.
Pharmacologic treatment for alcohol use disorder?

- Disulfiram
- Acamprosate
- Naltrexone
Patient vignette 5

• SL is 78M with Alzheimer's dementia 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?
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?
Marijuana use is increasing among older adults
(Choi et al. J Subst Abuse Treat, 2017; Choi et al, 2016)

• 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%

• Older 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)
Adverse Health Effects of Marijuana Use
Volkow et al., NEJM 2014

Table 1. Adverse Effects of Short-Term Use and Long-Term or Heavy Use of Marijuana.

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<th>Effects of short-term use</th>
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<td>Impaired short-term memory, making it difficult to learn and to retain information</td>
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<td>Impaired motor coordination, interfering with driving skills and increasing the risk of injuries</td>
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<tr>
<td>Altered judgment, increasing the risk of sexual behaviors that facilitate the transmission of sexually transmitted diseases</td>
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<td>In high doses, paranoia and psychosis</td>
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<th>Effects of long-term or heavy use</th>
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<td>Addiction (in about 9% of users overall, 17% of those who begin use in adolescence, and 25 to 50% of those who are daily users)*</td>
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<td>Altered brain development*</td>
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<td>Poor educational outcome, with increased likelihood of dropping out of school*</td>
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<td>Cognitive impairment, with lower IQ among those who were frequent users during adolescence*</td>
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<td>Diminished life satisfaction and achievement (determined on the basis of subjective and objective measures as compared with such ratings in the general population)*</td>
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<td>Symptoms of chronic bronchitis</td>
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<td>Increased risk of chronic psychosis disorders (including schizophrenia) in persons with a predisposition to such disorders</td>
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* The effect is strongly associated with initial marijuana use early in adolescence.
Deleterious impact of marijuana on physical and mental health

• Complex substance
• Older adults often see it as “safer” alternative to alcohol, illicits, or pharmaceutical medications

• In all ages, short term use is associated with
  – Impaired short-term memory, impaired judgment/motor coordination, driving skills
  – Decreased motivation, increased anxiety
  – Paranoia and psychosis as dose-response effect
Reminder: Only 3 products have FDA approval

- Epidiolex
  - To treat severe epilepsy, in patients with Lennox-Gastaut and Dravet Syndrome
- Dronabinol
  - To treat anorexia with weight loss in patients with AIDS
- Cesamet
  - Synthetically derived, similar to THC
  - For nausea/vomiting due to chemotherapy

- FDA considers any product designed to impact the body to be a drug
- FDA does not consider THC and CBD products as dietary supplements
- Some companies are marketing products in ways that violate federal food and drug act
Patient vignette 7

- KT is a 70M seen for initial visit. He has a history of Type 2 diabetes mellitus and hypertension. He lives with his wife and has 3 grown daughters and 8 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 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
Intervention

- Brief interventions and EDUCATION are effective early on
- Interventions should emphasize health and relationship benefits
- Use family/friends in a positive way
- “Undo” shame
- Give hope that life can improve
- Work together to define the benefits of change
Summary - What should we do?

- Partner with patients to remove shame (and blame), and require acceptance of responsibility for making a change
- Offer concern and hope to patients’ that their lives can improve
- Help patients work toward trying to make each day better than the day before
References


QUESTIONS?

TYPE QUESTIONS INTO THE CHAT OR RAISE HAND

Additional questions:
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