Beyond Screening: Empowering Generalists to Assess and Manage Alcohol Use Disorder

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Conflicts of Interest

• No financial disclosures or conflicts of interest related to this presentation.

• This presentation may include the discussion of non-FDA approved, off-label, or investigative uses of drugs, treatments, and medications.
Land Acknowledgement

I acknowledge the original inhabitants and traditional village sites of the land we live and work on, the unceded territory of the Multnomah, Kathlamet, Clackamas, Tumwater, Watlala bands of the Chinook, Tualatin Kalapuya, Molalla, Wasco & many Indigenous nations of the Willamette Valley & Columbia River Plateau.

I thank the original caretakers of this land - past, present, & future

Learning Objectives

1. Define alcohol use and alcohol use disorder spectrum
2. Identify risk & protective factors for alcohol use and alcohol use disorder
3. Recognize how to risk stratify alcohol withdrawal management
4. Counsel patients on evidence-based pharmacotherapy for alcohol use disorder
The words we use when talking to each other & to patients about addiction & substance use matter\(^1\)

### Outline

1. Learning objectives
2. Background & Epidemiology
   a. COVID-19 and Alcohol Use
3. Definitions & Terms
4. Alcohol risk & Special populations
5. Screening
6. Assessment of alcohol use & alcohol use disorder
7. Evidence-based treatment
   a. Behavioral treatments
   b. Medications

1. Ashford et al D & AD 2018
Background & Epidemiology

NSDUH – Past Month Use (2019)$^2$

![Chart showing past month use by substance in 2019. Alcohols and tobacco account for the highest number of users.](image)
NSDUH – Alcohol Severity (2019 → 2020)

Low Rates of Alcohol Use Treatment

• < 1 in 10 patients needing pharmacotherapy receive it\(^4,5\)
• Significant disparities, esp for Black patients; non-commercial insurance\(^6,7\)

COVID-19 Pandemic & Alcohol Use

America is drinking its way through the coronavirus crisis – and that’s no party
A surge in alcohol use disorders likely lies ahead

Soaring Pandemic Alcohol Sales Cause Concern For Doctors

‘More Zoom Parties, More Alcohol Consumption’: Hard Seltzer, Tequila Sales Boom During COVID-19 Lockdown

Alcohol & COVID-19 (Feb → Nov 2020)\(^8,9\)

- Of ~54% of those drinking more
  - Avg drinks 15 → 33 per month
- Greater ↑ for women; Black, non-Hispanic people
- ↑ those with children <5 years old

8. Barbosa, et al. JAM, 2021
Definitions & Terms

What is a Standard Drink?

- 12 fl oz of regular beer = 8-9 fl oz of malt liquor (shown in a 12 oz glass) = 5 fl oz of table wine = 1.5 fl oz shot of distilled spirits (gin, rum, tequila, vodka, whiskey, etc.)

Each beverage portrayed above represents one standard drink (or one alcohol drink equivalent), defined in the United States as any beverage containing 0.6 fl oz or 14 grams of pure alcohol. The percentage of pure alcohol, expressed here as alcohol by volume (a/v), varies within and across beverage types. Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes.
NIAAA – Alcohol Drink Calculator

<table>
<thead>
<tr>
<th>What's the alcohol content of the beverage? (convert proof to alc/vol)</th>
<th>U.S. standard drink (or drink-equivalent) size (containing 14 g pure alcohol)</th>
<th>What's the container size? (convert to fl. oz.) if needed</th>
<th>Number of U.S. standard drinks (or drink-equivalents) per container</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.3 % alc/vol</td>
<td>8.2 fl. oz.</td>
<td>12 fl. oz.</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Terminology

• **Abstinence**: No current alcohol use
• **Low-Risk Drinking**: Drinks within recommended limits
• **Moderate-Risk Drinking**: Drinks above recommended limits
• **High-Risk Drinking**: Binge drinking or drinks above recommended limits and has a co-occurring health condition or mental disorder
• **Binge Drinking**: Drinking pattern → BAC >0.08 g/dL
  • Impacted by gender, age, body composition, enzyme activity
  • Women > 4 drinks in 2 hours; Men > 5 drinks in 2 hours
• **Alcohol use disorder (AUD)**: Meets diagnostic criteria
Spectrum of Alcohol Use

Risk Factors

Genetics/Family history

Illness/Loss of function

$ Stressors/Retirement

Loss of spouse/Loved one

Loneliness/Isolation
Protective Factors

- Supportive family relationships
- Basic resources & housing
- Connection/Social Bonds
- Supportive spouse/partner

Alcohol Risk & Special Populations

Note: this is not a comprehensive presentation on all populations with increased risk for alcohol-related complications
What is “At-Risk” Alcohol Use

<table>
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<tr>
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<td>&gt; 7</td>
</tr>
<tr>
<td><strong>All Age &gt;65</strong></td>
<td>&gt; 3</td>
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</tr>
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</table>
Scope of Problem – Women

- Greater ↑ of binge drinking
  - Higher income\textsuperscript{12}
  - Higher education\textsuperscript{12}
  - Educational prestige\textsuperscript{13}
  - High occupational autonomy\textsuperscript{13}
- ↑ advertising, leisure spending, and alcohol messaging to women
- Women at ↑ risk for alcohol-related complications; developing AUD\textsuperscript{14}

12. McKetta & Keyes, DAD, 2020

Scope of Problem – Women\textsuperscript{15}

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Scope of Problem – Older Adults

- ↑ alcohol use past 2 decades
- Up to 15% meet criteria for “at-risk” drinking
- More vulnerable to negative effects
- Mistake symptoms for age-related changes or other condition
- ↓ likelihood of diagnosis and offered treatment
- ↑ mortality & comorbid conditions

- High risk drinking – drinking above recommendations + use of alcohol interactive (AI) medication or health condition

10. SAMHSA, TIP 26, 2020
### Alcohol Interactive (AI) Medications

- Anti-hypertensives
- Antiarrhythmics
- Diuretics
- Anti-epileptics
- Anxiolytics
- Muscle relaxers
- Opioids
- NSAIDs
- Medications for diabetes
- Antidepressants
- Antibiotics
- Antihistamines
- Anticoagulants

### Screening
SBIRT

- Screening
- Brief Intervention
- Referral to Treatment

Screening

Prescreen
"During the past 3 months, have you had anything to drink that has alcohol in it?"

NO

Y

Praise healthy behavior

Screen for alcohol misuse
(AUDIT or SMAST-G)

Negative

Positive

Prevention intervention
(offer educational materials)

Prevention intervention
(offer educational materials)

Brief intervention

Follow-up

Referral to treatment

- Alcohol Use Disorder Identification Test – C (AUDIT-C)
- Short Michigan Alcoholism Screening Test – Geriatric ver. (SMAST-G)
Alcohol Assessment & Brief Intervention

Screen positive – Assessment of Alcohol Use

• Going beyond Screening into Brief Intervention & Referral to Treatment

• Assess amount

• Evaluate for Alcohol Use Disorder (AUD)
  • Diagnostic & Statistical Manual for Mental Disorders - 5th Ed (DSM-5)

• Screen for other co-occurring mental health conditions
The 5 A’s

• **Ask** – Screen ?s & risk/severity; Intervention based off risk

• **Advise** – Re: substance use & behavior change recommendations

• **Assess** – Evaluate patient readiness for changing behavior

• **Assist** – Make patient-centered treatment plan; behavioral and/or medications; additional risk assessments

• **Arrange** – Schedule follow-up and consider specialty referrals

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**DSM-5 to Assess Alcohol Use Disorder**

**The Three C’s**

**Diagnosis:**
• ≥ 2 in prior 12 months

**Characterization:**
• 2-3 = mild
• 4-5 = moderate
• 6 or more = severe
Brief Intervention

• Evidence-based

• Designed to motivate individuals with at-risk substance use to change behavior by helping them understand how substance use affects their health

• Goal may be to reduce or give up substance use

• 5 minutes of brief advice to 15 minutes of brief counseling

• Associated with ↓ health care costs and ↓ alcohol use\(^{16}\)

Referral to Treatment - Behavioral
Behavioral Treatment & Social Support

• Referral to specialists
• Inpatient addiction-specific treatment
• Outpatient addiction-specific treatment
• Cognitive Behavioral Therapy (CBT)
• Social services
• Community-based mutual help & recovery support groups
  • Alcoholics Anonymous (AA)
  • SMART Recovery
  • Refuge Recovery or Recovery Dharma (Buddhist)

Population-specific Support
Referral to Treatment - Medications

Alcohol & The Brain

- Inhibition
  - GABA
  - Serotonin
  - Magnesium

- Excitation
  - Glutamate
  - Dopamine
  - Noradrenalin
Alcohol & The Brain – Alcohol Withdrawal¹⁸

Outpatient vs Inpatient Management

18. Maldonado, Critical Care Clinics, 2017

Outpatient withdrawal management

• High-risk for seizures or DTs?
• Other substance use disorders?
• Lives alone or lack of support?
• Delirium, hallucinations?
• Unstable comorbid medical and/or psychiatric conditions?
• CIWA-Ar >10? (mild w/d)*
• Benzodiazepine dependence?

Inpatient withdrawal management

• Symptom-triggered benzodiazepine
• Fixed benzodiazepine
• Phenobarbital
• Adjunctive meds:
  • Gabapentin
  • Carbamazepine
  • Clonidine
  • Valproic acid

Outpatient withdrawal management

• Daily check-in (in-person or telemed)
• Consider benzodiazepine taper (long-acting)
• Supportive medications
  • Gabapentin
  • Carbamazepine
• Consider inpatient if CIWA-Ar ↑

*CIWA 10-18 (moderate w/d) can consider outpatient in more experienced settings with more monitoring

Medications for AUD

4 FDA-Approved Medications for AUD

1. Acamprosate
2. Naltrexone PO
3. Naltrexone intramuscular injection
4. Disulfiram

Acamprosate

- Structural analog to GABA
- Thought to work by modifying GABA & glutamine
- ↓ cravings
- ↓ pleasurable effects of alcohol
- May lessen anxiety & insomnia
- Renally metabolized
- Typical dose is 666mg TID
- May consider dose reduction

NNT to prevent return to any drinking was 12

Naltrexone (PO or IM)\textsuperscript{20}

- Opioid receptor antagonist
- ↓ cravings for alcohol
- ↓ return to use heavy drinking
- Cannot be taking opioids
- Typical dose is 50mg PO daily
- Can go up to 150mg daily
- Monitor liver function
- More data on PO (IM newer)

For Oral Naltrexone
NNT to prevent return to any drinking was 20
NNT to prevent return to heavy drinking was 12

Disulfiram

- Inhibits acetaldehyde dehydrogenase
- Triggers acute reaction when consume alcohol
- Symptoms include – flushing, tachycardia, nausea, chest pain, dizziness, hypotension
- Symptoms thought to motivate to stop alcohol consumption

Moises Dominguez
Non-FDA-Approved Medications\textsuperscript{20,21}

**Gabapentin**
- Dosage 600-1800mg/day
- Taken in 3 divided doses
- ↑ rate of abstinence
- ↓ rate of binge drinking

**Topiramate**
- Dosage 75-300mg/day
- Taken in 2 divided doses
- ↑ rate of abstinence
- ↓ rate of binge drinking

\textsuperscript{20} Jonas, et al, JAMA, 2014
\textsuperscript{21} Kranzler & Soyka, JAMA, 2018

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Analogously, I have been drastically UNDER prescribing naltrexone for alcohol use disorder/dependence.

Starting a hospitalized patient on it today.

Joseph D’Orazio @dorazepam · Oct 7
IF PEOPLE ARE COMING TO THE ED FOR HELP WITH ADDICTION YOU HAVE WON THE BATTLE.

As an EM physician, this is the easiest patient all day. Dose of med if in withdrawal, linkage with a program, Rx for bupe. Done.

Hospitals need to support the resources and have an ED champion twitter.com/KaylaPMHNP/sta…

9:19 AM · Oct 7, 2021 · Twitter Web App
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Thank you!
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References


10. Substance Abuse and Mental Health Services Administration (SAMHSA). *Treating Substance Use Disorder in Older Adults*. Rockville, MD; 2020.

References - Continued


All photos from Unsplash.com
Screening – AUDIT-C

1. How often do you have a drink containing alcohol?
   - a. Never
   - b. Monthly or less
   - c. 2-4 times a month
   - d. 2-3 times a week
   - e. 4 or more times a week

2. How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?
   - a. 0 drinks
   - b. 1 or 2
   - c. 3 or 4
   - d. 5 or 6
   - e. 7 to 9
   - f. 10 or more

3. How often do you have six or more drinks on one occasion?
   - a. Never
   - b. Less than monthly
   - c. Monthly
   - d. Weekly
   - e. Daily or almost daily

Screening in Older Adults – SMAST-G

Yes (1) No (0)

1. When talking with others, do you ever underestimate how much you 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?

TOTAL SMAST-G-SCORE (0-10)

SCORING: 2 OR MORE “YES” RESPONSES IS INDICATIVE OF AN ALCOHOL PROBLEM.

Ask the extra question below but do not calculate it in the final score.
Extra question: Do you drink alcohol and take mood or mind-altering drugs, including prescription tranquilizers, prescription sleeping pills, prescription pain pills, or any illicit drugs?

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