Treatment of Alcohol use Disorders in Primary Care

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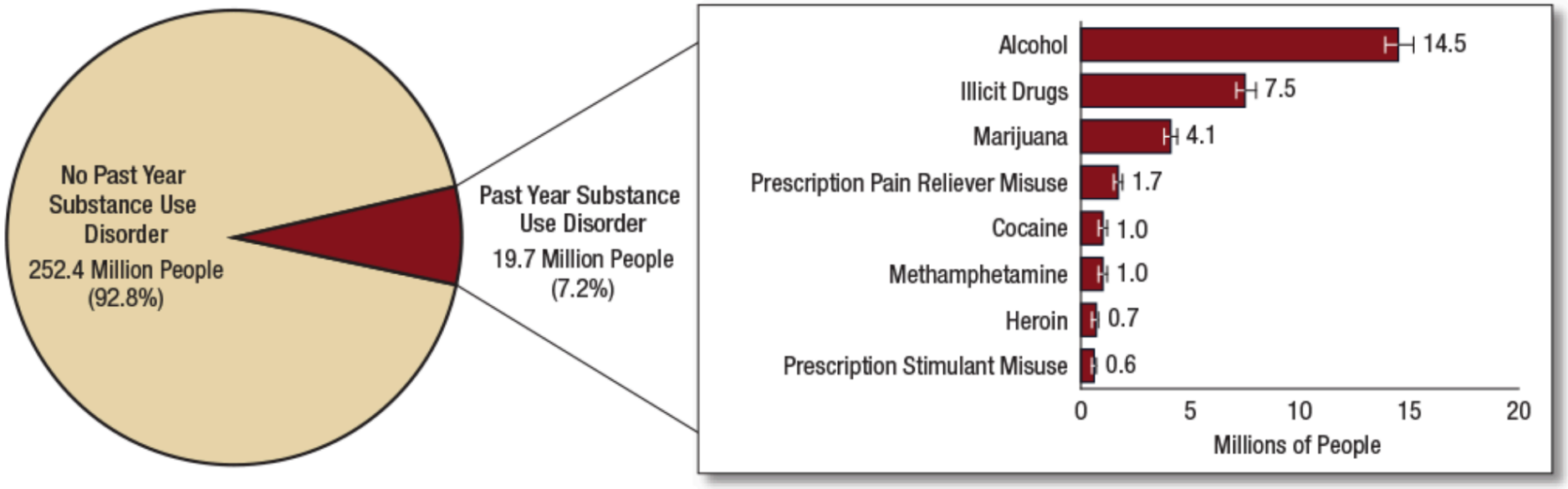
Objectives

* Recognize risky and binge drinking
* Screen for alcohol use disorder
* Identify inpatient vs. outpatient management criteria
* Discuss management of withdrawal
* Management of AUD with medications and behavioral therapies

NSDUH 2017

Figure 39. Numbers of People Aged 12 or Older with a Past Year Substance Use Disorder: 2017



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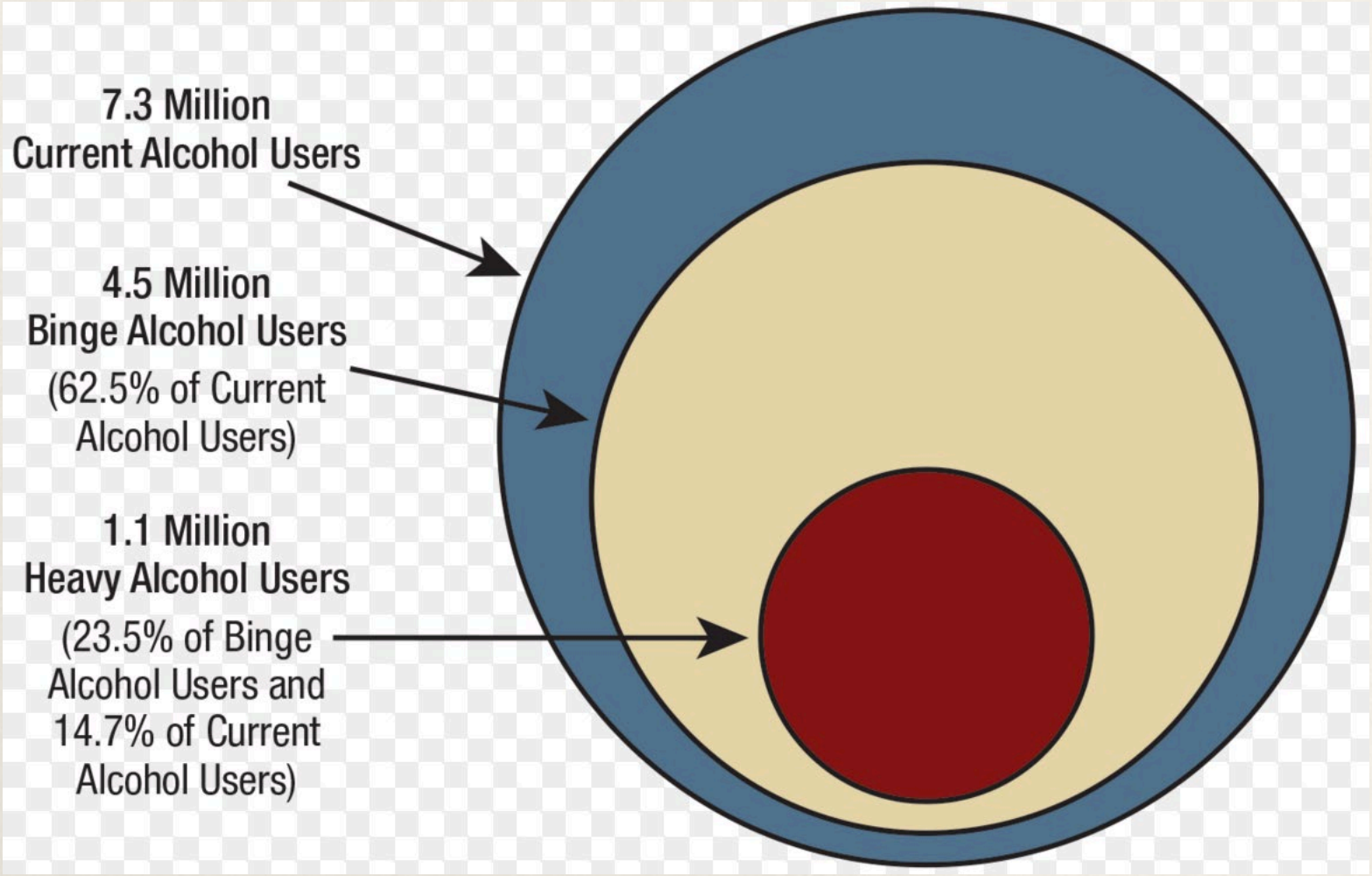
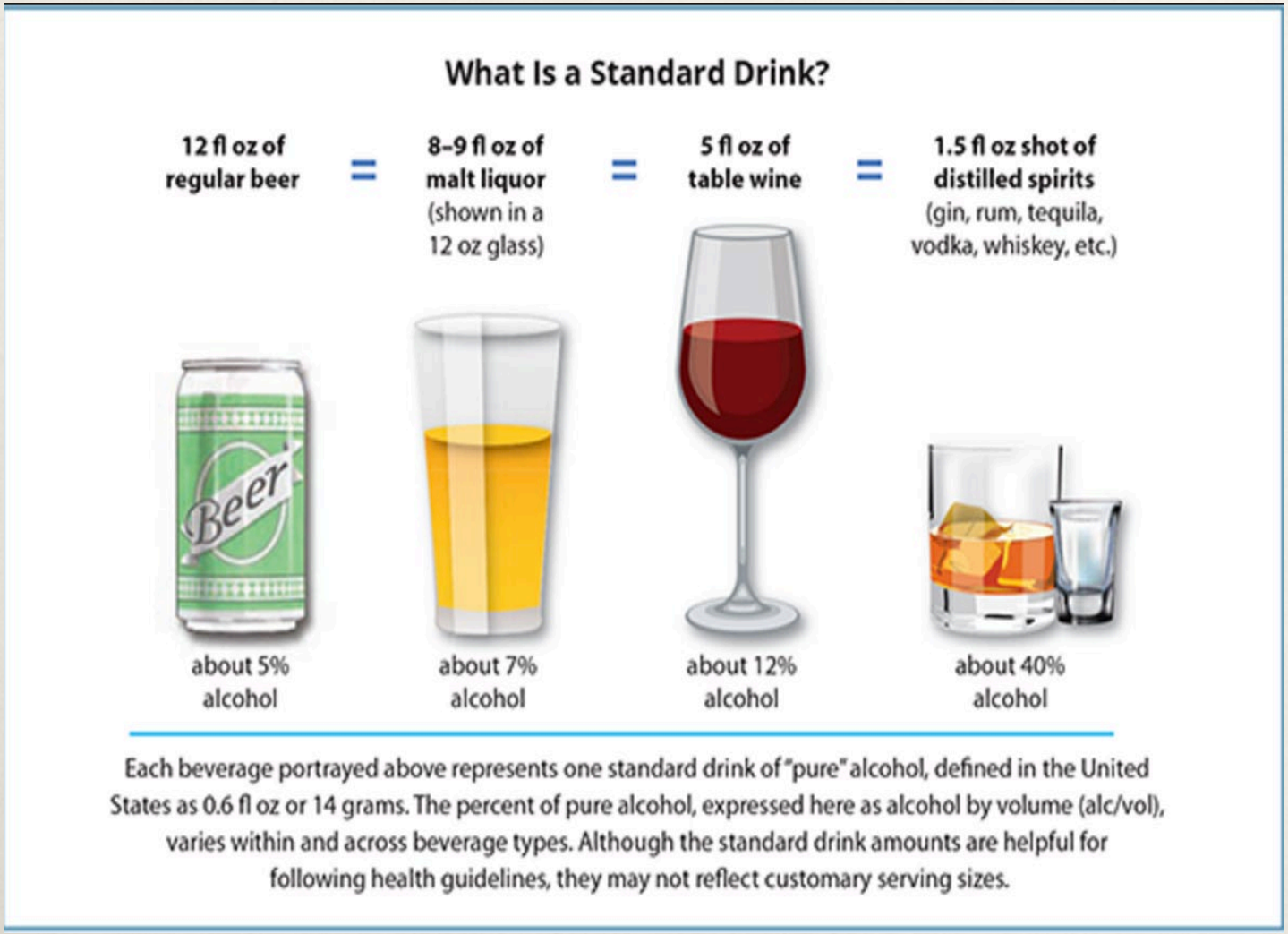
Note: Estimated numbers of people refer to people aged 12 or older in the civilian, noninstitutionalized population in the United States. The numbers do not sum to the total population of the United States because the population for NSDUH does not include people aged 11 years or younger, people with no fixed household address (e.g., homeless or transient people not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term care hospitals.
Note: The estimated numbers of people with substance use disorders are not mutually exclusive because people could have use disorders for more than one substance.



Alcohol use disorders

Behavioral Health Trends in the United States: Results from the 2016 National Survey on Drug Use and Health

Screening


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.)
Beer
about 5% alcohol
about 7% alcohol
about 12% alcohol
about 40% alcohol
Each beverage portrayed above represents one standard drink of "pure" alcohol, defined in the United States as 0.6 fl oz or 14 grams. The percent of pure alcohol, expressed here as alcohol by volume (alc/vol), varies within and across beverage types. Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes.

Risky drinking

Binge Drinking

AUDIT-C: tool to assess risky drinking

1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	

Scoring

The AUDIT-C is scored on a scale of 0-12.

Each AUDIT-C question has 5 answer choices. Points allotted are:

a = 0 points, b = 1 point, c = 2 points, d = 3 points, e = 4 points

- **In men**, a score of 4 or more is considered positive, optimal for identifying hazardous drinking or active alcohol use disorders.
- **In women**, a score of 3 or more is considered positive (same as above).
- However, when the points are all from Question #1 alone (#2 & #3 are zero), it can be assumed that the patient is drinking below recommended limits and it is suggested that the provider review the patient's alcohol intake over the past few months to confirm accuracy.[3]
- Generally, the higher the score, the more likely it is that the patient's drinking is affecting his or her safety.

Psychometric Properties

For identifying patients with heavy/hazardous drinking and/or Active-DSM alcohol abuse or dependence

	Men[1]	Women[2]
≥3	Sens: 0.95 / Spec. 0.60	Sens: 0.66 / Spec. 0.94
≥4	Sens: 0.86 / Spec. 0.72	Sens: 0.48 / Spec. 0.99

For identifying patients with active alcohol abuse or dependence

≥ 3	Sens: 0.90 / Spec. 0.45	Sens: 0.80 / Spec. 0.87
≥ 4	Sens: 0.79 / Spec. 0.56	Sens: 0.67 / Spec. 0.94

AUDIT

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential, so please be honest.

For each question in the chart below, place an X in one box that best describes your answer.

NOTE: In the U.S., a single drink serving contains about 14 grams of ethanol or "pure" alcohol. Although the drinks below are different sizes, each one contains the same amount of pure alcohol and counts as a single drink:

12 oz. of beer (about 5% alcohol) =

8-9 oz. of malt liquor (about 7% alcohol) =

5 oz. of wine (about 12% alcohol) =

1.5 oz. of hard liquor (about 40% alcohol)

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times a month	2 to 3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have 5 or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been	No		Yes, but not in the last year		Yes, during the last year	

DSM-5 diagnosis criteria for alcohol use disorder*

1. Alcohol is often taken in larger amounts or over a longer period than was intended
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects
4. Craving or strong desire, or urge to use alcohol
5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home
6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol
7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use
8. Recurrent alcohol use in situations in which it is physically hazardous
9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol
10. Tolerance, as defined by either of the following:

a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect

b. A markedly diminished effect with continued use of the same amount of alcohol

11. Withdrawal or taking alcohol to relieve withdrawal

**(At least of 2 symptoms in past 1 year; mild disorder:2-3; moderate:4-5; severe disorder≥6)*

Updated

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Inpatient vs Outpatient management of withdrawal

* PAWSS (Prediction of alcohol withdrawal severity scale)
* H/o complicated withdrawal
* CIWA >10
* Medical or psychiatric co-morbidities
* Dehydration/poor oral intake, electrolyte disturbance,
* Other substance use
* Age

Prediction of Alcohol Withdrawal Severity Scale (PAWSS)

Maldonado et al., 2014

Part A: Threshold Criteria:

(1 point either)

1. Have you consumed any amount of alcohol (i.e., been drinking) within the last 30 days?

   OR did the patient have a "+" BAL upon admission? _____

   IF the answer to either is YES, proceed with test:

Part B: Based on patient interview:

(1 point each)

2. Have you ever experienced previous episodes of alcohol withdrawal? _____
3. Have you ever experienced alcohol withdrawal seizures? _____
4. Have you ever experienced delirium tremens or DT's? _____
5. Have you ever undergone of alcohol rehabilitation treatment? _____

   (i.e., in-patient or out-patient treatment programs or AA attendance)
6. Have you ever experienced blackouts? _____
7. Have you combined alcohol with other "downers" like benzodiazepines or barbiturates during the last 90 days? _____
8. Have you combined alcohol with any other substance of abuse during the last 90 days? _____

Part C: Based on clinical evidence:

(1 point each)

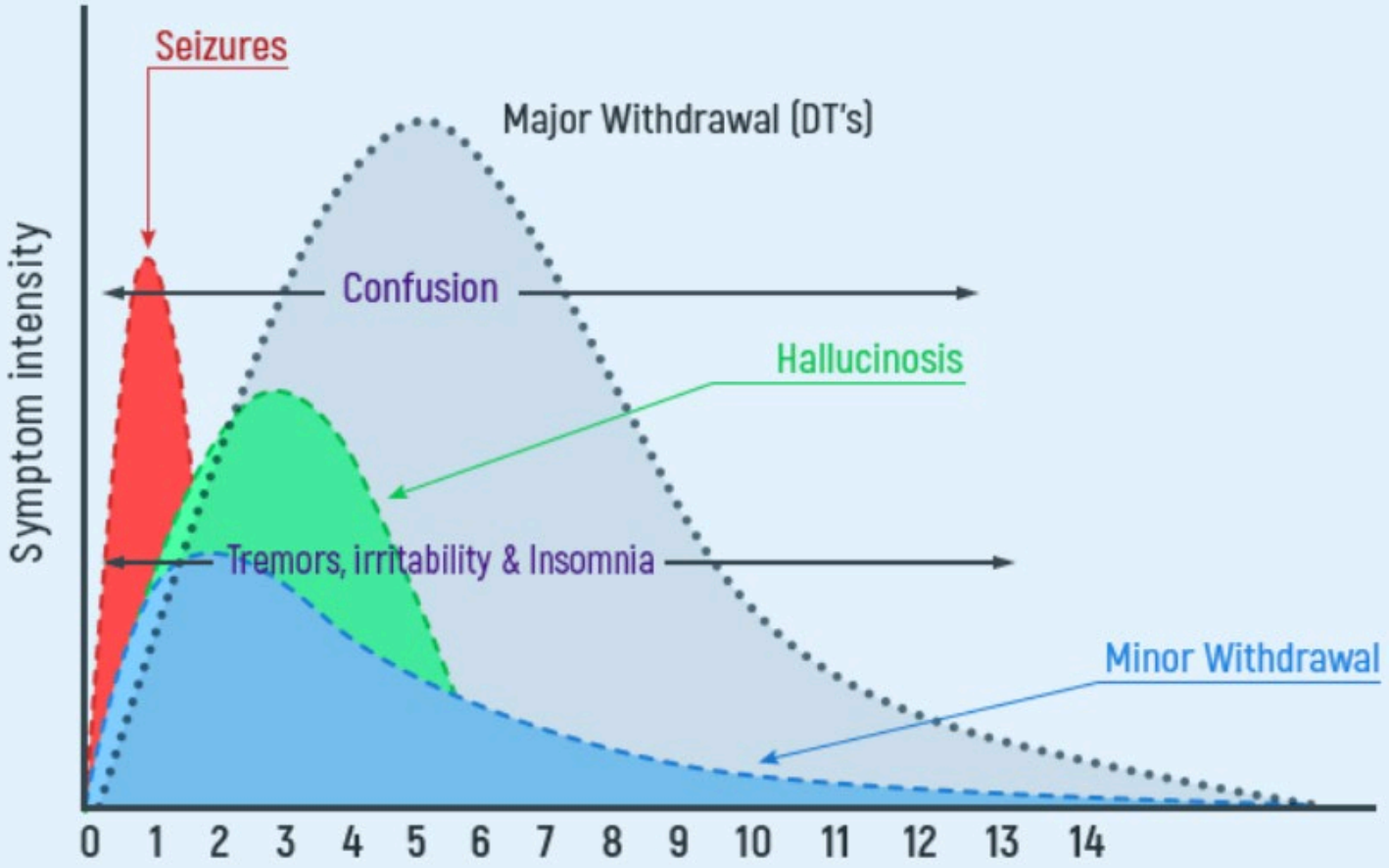
9. Was the patient's blood alcohol level (BAL) on presentation > 200? _____
10. Is there evidence of increased autonomic activity?

    (e.g., HR > 120 bpm, tremor, sweating, agitation, nausea) _____

Total Score: ____

Notes: Maximum score = 10. This instrument is intended as a SCREENING TOOL. The greater the number of positive findings, the higher the risk for the development of alcohol withdrawal syndromes. A score of ≥ 4 suggests HIGH RISK for moderate to severe AWS; prophylaxis and/or treatment may be indicated.

Alcohol Withdrawal Syndromes



Inpatient management

* Vital sign and CIWA monitoring
* Benzodiazepines (or phenobarbital)
* Thiamine: CAINE criteria for IV
* Electrolyte repletion (Na, K, Mag, Phos)
* Fluid resuscitation
* Adjuncts (folate, vitamins, comfort meds)

Outpatient Management

* No Benzodiazepines!
* Anti-convulsants reduce GABA activity/enhance glutamate
* Gabapentin, valproic acid and carbamazepine
* Gabapentin and CBZ shown to reduce post-withdrawal drinking relative to lorazepam (Malcolm 2002, Myrick 2009)

Gabapentin for outpatient management

* 400-600mg tid x 2 days
* 300mg tid x 2 days
* 200mg tid x 2 days
* 100mg tid x 2 days

* Can maintain gabapentin 300-400mg tid for 1-2 months

Other options for outpatient management

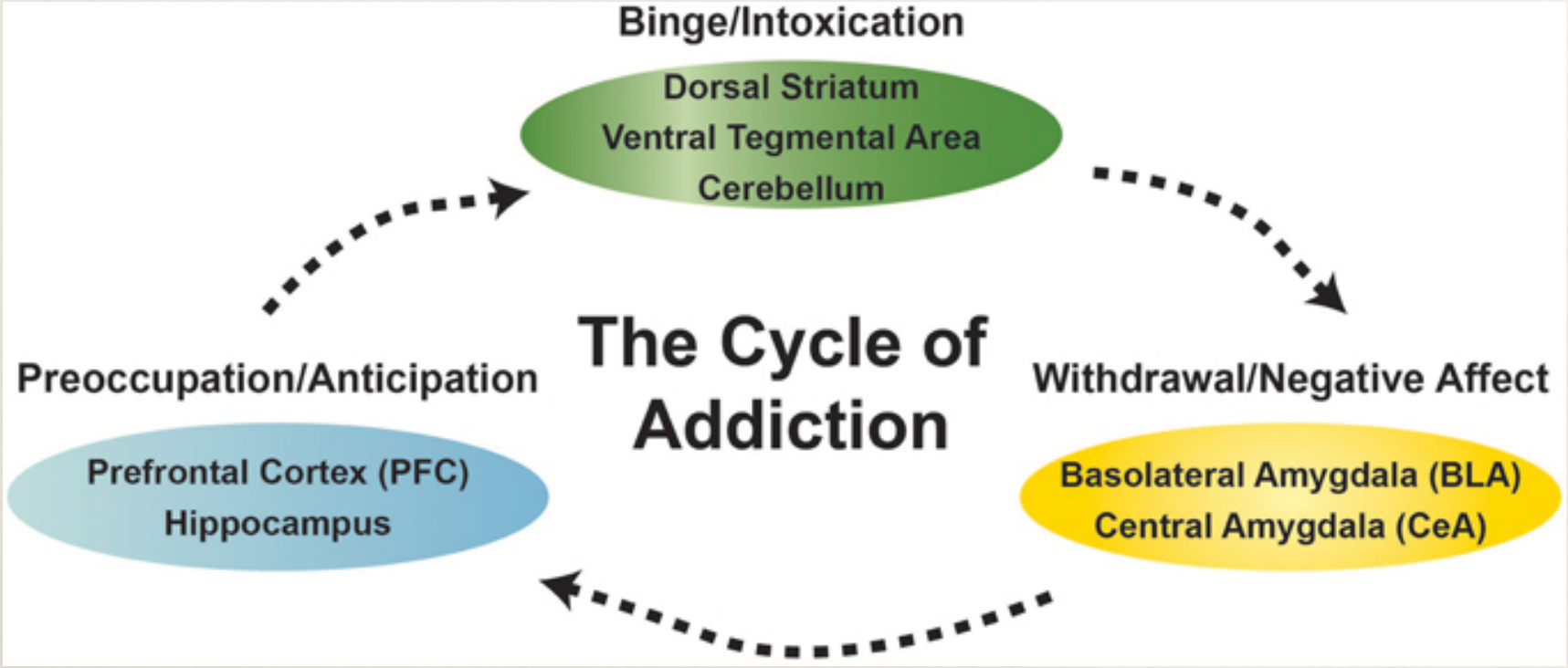
* Valproic acid: 500mg tid x 5 days->taper
* Carbamazepine: 200mg qid x 5 days->taper

Beyond “Detox”

* Alcohol is a messy drug
  * Serotonin
  * Dopamine
  * GABA
  * Glutamate
  * Opioid

* Post acute withdrawal syndrome
* Trigger-induced cravings
* Neuroplastic and epigenetic changes

Neurobiology=Opportunity



Pharmacotherapy for Alcohol use disorders

* FDA approved:
  * **Naltrexone (Vivitrol)**
  * **Acamprosate (Campral)**
  * **Disulfiram (Antabuse)**
* AHQR review of 135 studies show naltrexone and acamprosate to be helpful, insufficient evidence to support the use of disulfiram.
* The COMBINE study shows use of both naltrexone and acamprosate are better than one.
* There are several medications used off-label which are helpful

Naltrexone

* Opioid antagonist
* Blocks the endogenous opioid response and pleasurable effects of alcohol
* Helps with cravings
* Cochrane review of 7,793 patients show it decreases heavy drinking (**NNT=10**) and decreases daily drinking (**NNT=25**)
* Decreases amount of alcohol consumed

Naltrexone

* Oral: 50mg daily or 100mg M,W,S
* Injectable: 380mg IM every 4 weeks
* Start 3 days after last drink
* Adverse effects: site reactions, depression (rare), nausea, vomiting, headache, dizziness, fatigue, insomnia
* Contraindications: opioid use or withdrawal, acute hepatitis (LFT's 10x ULN) or liver failure

Acamprosate

* Maintains abstinence in non-drinking patients
* Interferes with glutamate at the NMDA receptor
* Review study of 7,519 patients show **NNT=12** for abstinence

Acamprosate

* Oral: 666mg (2 x 333mg tabs) tid
* Adverse effects: diarrhea, insomnia, anxiety, depression, asthenia, anorexia
* Safe in hepatically impaired patients, reduced dosing in renal patients with a CrCl 30-50 and contraindicated in <30

Disulfiram

* Inhibits aldehyde dehydrogenase - build up of acetaldehyde causes unpleasant effects
* Does not reduce cravings
* Insufficient evidence to support efficacy but studies show reduced drinking days
* May be more effective with observed consumption
* May be helpful for socially risky situations
* Black box warning

Anticonvulsants

* **Topirimate:** AHQR review shows this decreases number of drinking days, heavy drinking days and amount consumed. Helps with depression and anxiety. + AE
* Dosing: start with 25mg qhs and titrate up to 50-100mg bid
* **Gabapentin**: **NNT=8** for return to drinking as well as lower cravings, improved mood and sleep. Dose 1,200-1,800mg day, effects tend to be dose dependent

Antidepressants

* Helpful in patients with comorbid depression with CBT
* **Fluoxetine** (20-40mg) and sertraline have been studied
* **Sertraline** (200mg) and naltrexone in combination were more effective in sustaining abstinence than either alone

Other

* **Baclofen**: GABA-B receptor agonist; possibly promotes abstinence in more severe UD especially those w/ liver disease (cirrhotic patients?) Dose: 10mg bid
* **Doxazosin and clonidine**: can reduce drinking and craving by stabilizing CNS response to protracted withdrawal and activation. Good for PTSD comorbidity.

Psychosocial treatment

* Project MATCH:
  * Compared CBT, MET and 12 step facilitation for 12 weeks (follow up for 8 years) and all methods were equal and efficacious.
* Low psychiatric co-morbidity and 12 Step facilitation -> higher sobriety

Conclusion

* 30% of people in US have AUD in their lifetime
* 3rd preventable cause of death in the US
* Less than 10% patients with AUD get treatment
* Less than 10% of them receive evidence based treatment

It is up to you to to help your patients with this devastating disease, if not **you**- who else?

References

* NIAAA: drugabuse.gov
* ASAM 2019 Addiction Medicine Review Conference
* https://medicine.med.ubc.ca/files/2015/06/Alcohol-2015.pdf
* Principles of Addiction Medicine
* NSDUH 2017
* SAMHSA definition of binge drinking
* Hammond, C. J., Niciu, M. J., Drew, S., & Arias, A. J. (2015). Anticonvulsants for the treatment of alcohol withdrawal syndrome and alcohol use disorders. CNS drugs, 29(4), 293–311. https://doi.org/10.1007/s40263-015-0240-4