

Translating Research into Practice on Alcohol and Polysubstance Use Disorders by Educating the Interprofessional Primary Care Team

#### **Psychiatric Comorbidities and AUD**

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June 4, 2025



## **Learning objectives**

#### By the end of this session, participants will be able to...

- 1. Review the most common psychiatric comorbidities seen in primary care practice
- 2. Evaluate pharmacotherapeutic approaches to psychiatric comorbidities and AUD
- 3. Understand the bi-directional relationship between insomnia, depression and anxiety and AUD
- 4. Differentiate between alcohol-related dementia and primary dementia





## **Alcohol and Sleep**

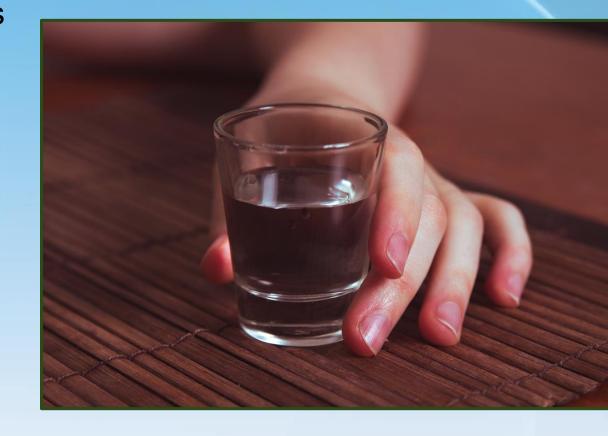
- Insomnia occurs in 36-72% of pts with an AUD
- Severity of insomnia correlates positively with increased drinking and AUD severity
- Disruptions of REM sleep (delayed onset and shortened duration) can occur with as little as two drinks.
- Sleep onset latency and deep sleep most affected by high dose alcohol use (5+ drinks)





## **Alcohol and Sleep**

- Alcohol (2-3 standard drinks/night) worsens snoring, apnea-hypoxia index (MD of 3.98 addn events/hour) and oxygen saturation (MD of -2.72% drop in 02 sat).
- Addition of a CNS depressant for insomnia in a person who drinks may provide initial sense of relief, but over time leads to diminishing returns and could compound disruptions in REM, sleep latency, snoring, AHI, O2%





## **Alcohol and Depression**

- MDD is the most common co-occurring psychiatric disorder among people with AUD. People with AUD are 2.3x more likely to have MDD in previous year than those with no AUD and 3.7x more likely to have concurrent MDD.
- Women with AUD are more likely to meet criteria for MDD than men with AUD.
- Women more likely to have pre-existing MDD before AUD and vice-versa for men.
- Similarly, assessment of baseline mood sx during extended periods of abstinence can help refine diagnosis and treatment.



## **Alcohol and Depression**

- Cessation of alcohol use can lead to significant improvement in depressive sx, even full remission, within 3-4 weeks.
- Treatment of depression with medication has mixed effects on drinking outcomes but on balance show greatest effect on abstinence and reduced number of drinks per drinking day and should be considered esp for persistent severe MDD and/or antecedent MDD.
- An abstinence trial for a person with MDD who drinks, esp who has AUD, is possibly the highest impact initial intervention you can do for MDD.



# **Alcohol and Anxiety**

- AUD is associated with a 2-fold increased risk of any Anxiety DO (4x for GAD; 2x for PTSD)
- Literature tracks with MDD in that AUD and AnxDO appear to be bi-directional, but stronger recommendation to treat AnxDO regardless of alcohol consumption.
- Telescoping gender pattern in women with AnxDO and develop AUD. Also women with trauma (including PTSD) are at significantly higher risk to develop AUD.
- Social phobia and panic disorder are strong predictors of early relapse and regression to AUD after a treatment episode.



## **Alcohol and Anxiety**

- There appears to be less of a correlation between reducing anxiety (either pharmacologically or behaviorally) and improving alcohol -related treatment outcomes compared to MDD.
- SSRIs, Buspirone, gabapentin, topiramate, pregabalin are all acceptable, but there
  is weak evidence that improvement of anxiety translates to improved AUD
  outcomes. Treat the anxiety while continuing to work on the AUD.
- There are no recommendations to use BZDs for treatment of AnxDO + AUD except in the treatment of withdrawal and for brief adjunctive trials (1-4 weeks).



#### **Alcohol and Dementia**

- Alcohol related dementia (ARD) is the primary exogenous/exposure-related cause
  of dementia in the general population. Mostly related to thiamine deficiency,
  oxidative stress, direct neuronal damage. Onset usually at a younger age than AD
  and motor/gait deficits.
- Chronic heavy alcohol use and AUDs increases risk for Alzheimer's and vascular dementia and leading modifiable risk factor for early onset dementia
- Brain regions affected frontal lobes, cerebellum, mammillary bodies. Extensive white matter loss. Combined executive, motor and memory retrieval deficits.
- Some structural damage/deficits can be reversible, esp with thiamine supplementation and cessation of use.
- Scant evidence that cognitive enhancers are effective in ARD.



## **Summary**

- There are strong bi-directional and cumulative effects of sleep quality and AUD on MDD
  - alcohol worsens insomnia and sleep quality, alcohol worsens depression, insomnia and poor sleep quality worsen depression
- A sustained period of alcohol abstinence can decisively impact sleep quality and depression.
- Pharmacotherapy of MDD can improve some alcohol related outcomes
- Anxiety and AUD should be tackled concurrently, and relief of anxiety may not translate to better AUD outcomes.
- Heavy drinking is the greatest threat and predictably worsens Sleep Quality, MDD, Anxiety Disorders, and Cognition.
  - Do whatever you can to substantially reduce the quantity of alcohol use over time
- Complete cessation of alcohol use is indicated for alcohol related cognitive impairment and all types
  of dementia.



# **Questions?**

Feel free to unmute or put your questions in the chat!





### References

- Examining Sleep Over Time in a Randomized Control Trial Comparing Two Integrated PTSD and Alcohol Use Disorder Treatments PMC
- o The effect of alcohol on subsequent sleep in healthy adults: A systematic review and meta-analysis PubMed
- o Impact of Alcohol Consumption on Snoring and Sleep Apnea: A Systematic Review and Meta-analysis PubMed
- Alcohol Use Disorder and Depressive Disorders PMC
- <u>Evaluating depression in alcoholics ScienceDirect</u>
- Antidepressants for the treatment of people with co-occurring depression and alcohol dependence PMC
- o Co-Occurring Alcohol Use Disorder and Anxiety: Bridging Psychiatric, Psychological, and Neurobiological Perspectives PMC
- Treatment of Comorbid Alcohol Dependence and Anxiety Disorder: Review of the Scientific Evidence and Recommendations for Treatment PMC
- o Follow-up study of anxiety disorder and alcohol dependence in comorbid alcoholism treatment patients PubMed
- Alcohol use and dementia: a systematic scoping review | Alzheimer's Research & Therapy | Full Text
- o Alcohol-Related Dementia and Early-Onset Alzheimer's Disease

#### Papers that changed the way I think about SUD:

Actual causes of death in the United States, 2000 - PubMed

Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation – PubMed