CLINICAL QUICKNOTES ON SUBSTANCE USE DISORDERS

What's Happened with Alcohol Use Disorder?

Author: Mark Hurst, MD, LFAPA

Editors: SUD-COE Medical Advisory Group

July 2024

Quick Takes

- Alcohol use disorder (AUD) is the most prevalent substance use disorder in the United
 States, affecting 12-15% of the population and contributing to 178,000 deaths annually.
- AUD screening is uncommon in clinical practice.
- Psychosocial and pharmacological treatments for AUD exist but are tremendously
 underutilized.
- All patients should be screened for problematic alcohol use and if identified should receive appropriate evidence-based interventions.

Case Study:

A 35-year-old man presents to his primary care physician (PCP) for a routine examination. He denies physical complaints in the last year but does report that he and his wife of 12 years recently separated. He reports frequent loneliness in the evening, drinking a 6-pack of beer while watching television on most nights. He feels mildly depressed and does not feel that he is coping well with the separation. He uses no other drugs and is on no medications. The patient has no significant physical findings, does not meet criteria for a major depressive disorder, and denies suicidal ideation.

The United States is amid a public health crisis related to opioid use, opioid use disorder, and opioid overdose deaths. The opioid crisis has received justified public focus, while a less recognized alcohol crisis has continued, with more use of alcohol, more individuals drinking heavily, more individuals with alcohol use disorder (AUD), and more alcohol-related deaths than ever before. This increase occurred gradually over the last thirty years and accelerated during the COVID pandemic. Alcohol-related deaths now outpace opioid-related deaths by tens of thousands annually Clearly, alcohol-related issues continue to be a significant contributor to individual health problems and a major public health concern.

In 2022, 136 million adults over the age of 18 in the United States (53%) consumed alcohol, with 60.4 million binge drinking (>5 standard drinks/2 hours in men: >4 standard drinks/2 hours in women), and 14 million classified as "heavy users" of alcohol (\geq 5 binge episodes in a month). An estimated 28.2 million (11.2%) adults had a diagnosable AUD, with many having either another SUD, a co-occurring psychiatric disorder, or both. Regrettably, only about 8 % of those with an AUD received any kind of professional assistance in 2022, leaving a substantial treatment gap. 1







AUD is a biomedical disease, with genetic and environmental components contributing to its development and manifestations. Studies have found that about half of the risk for an AUD is genetic, with the remainder due to environmental factors such as adverse childhood experiences (ACES) and early age of first alcohol use. 8,9,10 Despite the science, moral views of AUD persist and represent major barriers to individuals with AUD seeking and receiving treatment. 11

Case Continued:

Upon noting that the patient's alcohol use exceeds National Institute on Alcohol Abuse and Alcoholism (NIAAA) low-risk drinking levels (Table 1), the PCP completes the Alcohol Use Disorders Identification Test (AUDIT) to further assess alcohol use and life impact. The patient scores 15 on the AUDIT, which is in the upper-moderate range, placing his drinking in the "hazardous" range, with possible AUD.

Table 1. Low-Risk Drinking Guidelines ¹²	
Group	Amount
Healthy men over age 21	≤14 standard drinks*/week; ≤4 drinks on a single day
Healthy women over age 21	≤7 standard drinks*/week; ≤ 3 drinks on a single day
Older adults	Should consider moderating or eliminating alcohol use
	and discuss their individual situation with a health care
	provider**
Pregnant women	
All those under age 21	
People on medication which adversely react with	
alcohol	
People with medical issues exacerbated by	No alcohol use
alcohol	
People with current/past AUD	
People planning to drive or operate machinery	
*"Standard drink" is 12 oz. beer with 5% alcohol concentration, a 5 oz. glass of wine with 12% alcohol	

*"Standard drink" is 12 oz. beer with 5% alcohol concentration, a 5 oz. glass of wine with 12% alcohol concentration, or 1.5 oz of distilled spirits with a 40% (80 proof) content. Number of drinks requires recalculation if the person consumes larger amounts or beverages with higher alcohol content.

Patients experiencing an AUD are more likely to present to their PCP with complaints such as anxiety, insomnia, or depression instead of alcohol use itself, speaking to the importance of screening patients for AUD routinely. ¹³ Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a process that was developed to identify and address alcohol use in a primary care setting. ¹⁴ In SBIRT, an initial screening is recommended, utilizing a brief tool with high sensitivity such as the NIAAA Single Alcohol Screening Question (SASQ; "How many times in the past year have you had [4 for women, or 5 for men] or more drinks in a day?") or the Alcohol Use Disorder Identification Tool-Concise (AUDIT-C), with follow-up of patients with positive screens using a comprehensive tool such as the AUDIT to provide a more complete clinical view and aid in treatment planning. The AUDIT was developed specifically for primary care and can be completed in 2-3 minutes. ¹⁵ Despite the ease and effectiveness of the AUDIT and other validated screening tools, they are utilized in less than 3% of all primary care visits. ¹⁶ A formal diagnosis of AUD utilizes the criteria for AUD from the Diagnostic and Statistical Manual, version 5-TR (DSM-5-TR) of the American Psychiatric Association. ¹⁷

^{**}Previous guidelines suggested that those aged \geq 65 y.o. limit alcohol use to \leq 7 standard drinks/week; \leq 3 drinks on a single day

Case Continued:

The PCP reviews the AUDIT results with the patient and expresses concern that his use exceeds the "low risk drinking" guidelines established by national experts. The patient responds, "you sound like my wife—and she drinks as much as I do." The PCP advises him to reduce his use of alcohol to low-risk levels and consider quitting altogether. When the PCP suggests possible next steps, including counseling to address the marital separation/use of alcohol, a formal alcohol treatment program, or both, the patient declines, indicating that "I can cut down on my own." He states he will attempt to reduce drinking and follow-up with the physician within the month.

Many patients initially reject alcohol abstinence but will accept a plan to work with their PCP to reduce alcohol use. In this situation, it can be helpful to utilize a brief intervention (BI) that discusses alcohol-related risks and applies motivational techniques to encourage the patient to improve their health by addressing alcohol use. 15 Readers are strongly encouraged to seek additional training to implement SBIRT in clinical practice. 14 Additionally, all treatment providers should be prepared to address potential alcohol withdrawal when advising patients to stop or reduce drinking due to the risks of significant morbidity and even mortality in severe cases.

Case Continued:

The patient returns to the PCP after one month and shares that he had reduced his alcohol use to 3 beers nightly. The PCP congratulates him for progress, while sharing continued concerns about alcohol use that still exceeds low risk drinking guidelines. They have a more indepth discussion about treatment options, including counseling, 12-step meetings, and medication. The patient indicates willingness to try medication and "maybe see what AA is like." The PCP prescribes oral naltrexone 50mg daily and the patient agrees to follow-up in a month.

Multiple psychosocial and pharmacological treatments for AUD have been rigorously evaluated and are considered evidence-based practices (EBPs), with studies indicating that the combination of evidence-based pharmacotherapy and psychosocial treatment is more effective than either modality alone. ¹⁸

Evidence-based psychosocial treatments for AUD include cognitive-behavioral therapy (CBT), motivational enhancement therapy (MET), contingency management (CM), couples and family counseling, acceptance and mindfulness-based interventions, and twelve-step facilitation (TSF).¹⁹ Alcoholics Anonymous (AA), though technically not a treatment, helps many people and is the assistance most utilized by individuals with AUD. It is not structured to support efficacy studies and is not itself an EBP, but strong evidence supports the efficacy of TSF in combination with AA as being at least as helpful as other psychosocial EBPs.^{19,20}

Evidence-based medication treatments include disulfiram, naltrexone (oral and long-acting injection), and acamprosate. None have addiction potential, all are FDA approved for AUD treatment and all are recommended as first-line treatment by one or more national expert groups. 8,19,21 Despite demonstrated efficacy and recommendations of national expert groups, only 2% of individuals with AUD received any of the approved medications, highlighting another significant treatment gap. 1 The anticonvulsants topiramate and gabapentin are *not* FDA approved for AUD treatment, but have sufficient literature support to be considered as reasonable therapeutic choices. 8,19,21 Other medications have been evaluated for treatment of AUD, some with promising results, but evidence is insufficient to recommend their routine use in treating AUD at this time.

"Alcohol and drug addiction take an enormous toll on individuals, families, and communities. Most Americans know someone who has been touched by an alcohol or drug use disorder. Yet 90 percent of people with a substance use disorder are not getting treatment. That has to change."

-Surgeon General Vivek Murthy, MD (2016)²²

Case Continued:

The patient returns for his next follow-up appointment and shares that he now has 1-2 beers a few times a week. He feels that he is now "better at stopping drinking" and is considering quitting entirely. He and his wife talked, and she shared that she had pursued alcohol treatment herself and attends AA. She invited him to accompany her to AA, and he accepted. He requests a referral for treatment and the PCP links him with a therapist who provides 12-step facilitation therapy. The patient and PCP agree that he will continue medication and monthly primary care appointments to monitor progress and support his life changes.

Alcohol use disorder is a treatable, chronic, and potentially lethal medical disease with both genetic and environmental components. AUD treatments are effective though few people with AUD receive any treatment, let alone evidence-based ones. Routinely screening for problematic drinking and assuring receipt of evidence-based interventions can greatly improve patients' physical, social, and emotional health and should be a treatment skill of all clinicians.

For Additional Information on This Topic

- The Healthcare Professional's Core Resource on Alcoholism: Knowledge. Impact. Strategies.
 National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism (2022)
- Screening, Brief Intervention and Referral to Treatment (SBIRT) for Substance Use Disorders in Primary Care Settings. Providers Clinical Support System (2023)
- Planning and implementing screening and brief intervention for risky alcohol use: a step-by-step planning guide for primary care practices. Centers for Disease Control and Prevention (2014)
- SBIRT Resources. Ohio Department of Mental Health and Addiction Services (2021)
- Medication and Behavioral Treatments for Substance Use Disorders. Providers Clinical Support System (2021)
- Pharmacotherapy for Alcohol Use Disorder. Providers Clinical Support System (2023)

Upcoming Trainings on Substance Use Disorders

- Ohio Alcohol and Substance Use (AUD/SUD) ECHO. Northeastern Ohio Medical University. First and third Fridays of every month.
- Substance Use Deflection Initiative ECHO. Northeastern Ohio Medical University. Second Wednesday of every month
- Ohio Substance Use Disorders Center of Excellence. Multiple trainings and learning communities on various topics, with in-person and virtual trainings available.

At the SUD COE, we are committed to bringing you resources and trainings that meet your needs in providing care to patients with substance use disorders. Please let us know what suggestions you have for improving Clinical QuickNotes, or topics that you would like addressed by clicking QUICKNOTES_feedback.

References

- 1. Substance Abuse and Mental Health Services Administration. (2023). *Key substance use and mental health indicators in the United States: Results from the 2022 National Survey on Drug Use and Health* (HHS Publication No. PEP23-07-01-006, NSDUH Series H-58). https://www.samhsa.gov/data/report/2022-nsduh-annual-national-report
- Esser, M. B., Sherk, A., Liu, Y., & Naimi, T. S. (2024). Deaths from excessive alcohol use—United States, 2016-2021. Morbidity and Mortality Weekly Report, 73(8), 154-161. http://dx.doi.org/10.15585/mmwr.mm7308a1
- 3. Slater, M. E., & Alpert, H. R. (2024). *Apparent per capita alcohol consumption: National, state and regional trends, 1977-2022* (Surveillance Report #121). National Institute on Alcohol Abuse and Alcoholism. https://www.niaaa.nih.gov/publications/surveillance-reports/surveillance121
- Barbosa, C., Dowd, W. N., Barnosky, A., & Kariker-Jaffe, K. J. (2023). Alcohol consumption during the first year of the COVID-19 pandemic in the United States: Results from a nationally representative longitudinal survey. *Journal of Addiction Medicine*, 17(1), e11e17. https://doi.org/10.1097/adm.0000000000001018
- Karaye, I. M., Maleki, N., Hassan, N., & Yunusa, I. (2023). Trends in alcohol-related deaths by sex in the US, 1999-2020. JAMA Network Open, 6(7), e2326346. https://doi.org/10.1001/jamanetworkopen.2023.26346
- 6. White, A. M., Castle, I.-J. P., Powell, P.A., Hingson, R. W., & Koob, G. F. (2022). Alcohol-related deaths during the COVID-19 pandemic. *JAMA*, 327(17), 1704-1706. https://doi.org/10.1001/jama.2022.4308
- 7. National Institute on Alcohol Abuse and Alcoholism. (2024). *Alcohol-related emergencies and deaths in the United States*. Retrieved July 10, 2024, from https://www.niaaa.nih.gov/alcohols-effects-health/alcohol-topics/alcohol-facts-and-statistics/alcohol-related-emergencies-and-deaths-united-states
- 8. Kranzler, H. R. (2023). Overview of alcohol use disorder. *American Journal of Psychiatry, 180*(8), 565-572. https://doi.org/10.1176/appi.ajp.20230488
- 9. Volkow, N. D., & Blanco, C. (2023). Substance use disorders: A comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention. *World Psychiatry*, 22(2), 203-229. https://doi.org/10.1002/wps.21073
- Hingson, R. W., & Zha, W. (2009). Age of drinking onset, frequent heavy drinking, and unintentionally injuring oneself and others after drinking. *Pediatrics*, 123(6),1477-1484. https://doi.org/10.1542/peds.2008-2176
- Kilian, C., Manthey, J., Carr, S., Hanschmidt, F., Rehm, J., Speerforck, S., & Schomerus, G. (2021). Stigmatization of people with alcohol use disorders: An updated systematic review of population studies. *Alcohol Clinical Experimentation Research*, 45(5), 899-911. https://doi.org/10.1111/acer.14598
- 12. National Institute on Alcohol Abuse and Alcoholism. (2024). *Rethinking Drinking: Alcohol and Your Health*. Retrieved July 10, 2024, from https://rethinkingdrinking.niaaa.nih.gov
- 13. Wood, E., Pan, J., Cui, Z., Bach, P., Dennis, B., Nolan, S., & Socias, M. E. (2024). Does this patient have alcohol use disorder? The rational clinical examination systematic review. *JAMA*, 331(14), 1215-1224. https://doi.org/10.1001/jama.2024.3101

- 14. US Preventive Services Task Force. (2018). Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: US Preventive Services Task Force recommendation statement. *JAMA*, 320(18), 1899-1909. https://doi.org/10.1001/jama.2018.16789
- 15. National Center on Birth Defects and Developmental Disabilities. (2014). Planning and implementing screening and brief intervention for risky alcohol use: A step-by-step guide for primary care practices. Centers for Disease Control and Prevention. https://stacks.cdc.gov/view/cdc/26542
- Chatterton, B., Agnoli, A., Schwartz, E. B., & Fenton, J. J. (2022). Alcohol screening during US primary care visits, 2014-2016. *Journal of General Internal Medicine*, 37(15), 3848-3852. https://doi.org/10.1007/s11606-021-07369-1
- 17. American Psychiatric Association. (2023). *Alcohol use disorder*. Retrieved July 10, 2024, from https://www.psychiatry.org/patients-families/alcohol-use-disorder
- 18. Ray, L. A., Meredith, R. A., Kiluk, B. D., Walthers, J., Carroll, K. M., & Magill, M. (2020). Combined pharmacotherapy and cognitive behavioral therapy for adults with alcohol or substance use disorders: A systematic review and meta-analysis. *JAMA Network Open, 3*(6), e208279. https://doi.org/10.1001/jamanetworkopen.2020.8279
- 19. Koob, G. F. (2024). Alcohol use disorder treatment: Problems and solutions. *Annual Review of Pharmacology and Toxicology, 64*, 255-275. https://doi.org/10.1146/annurev-pharmtox-031323-115847
- 20. Kelly, J. F., Humphreys, K., & Ferri, M. (2020). Alcoholics Anonymous and other 12-step programs for alcohol use disorder. *Cochrane Database of Systematic Reviews*. https://doi.org/10.1002/14651858.cd012880.pub2
- 21. Burnette, E. M., Nieto, S. J., Grodin, E. N., Meredith, L. R., Hurley, B., Miotto, K., Gillis, A. J., & Ray, L. A. (2022). Novel agents for the pharmacological treatment of alcohol use disorder. *Drugs*, 82, 251-274. https://doi.org/10.1007/s40265-021-01670-3
- 22. National Institute on Alcohol Abuse and Alcoholism. (2016, November 17). Surgeon general issues landmark report on alcohol, drugs and health [Announcement]. https://www.niaaa.nih.gov/news-events/announcement/surgeon-general-issues-landmark-report-alcohol-drugs-and-health

This QuickNote is an overview only and is not intended to be the sole resource for treatment of AUD. The reader is encouraged to seek training from one of the sources listed in "Additional Training" prior to treating AUD.

Much gratitude to the SUD-COE Medical Advisory Group for their expert input and editing of this QuickNote: Susan Painter, DNP, C-CNS, PMHCNS-BC; Justin Trevino, MD; Krisanna Deppen, MD; Roberto Soria, MD; Craig King DNP, APRN, PMHNP-BC; Morgan Wiggins, DNP, APRN, PMHNP-BC; Phylicia Bediako, PHD, MSW; and Sarah Fulton, MA





