

Prevention of Alcohol Consumption in Alcohol Use Disorder

Kenedi Cheatham, PA-S

Background & Purpose

Alcohol use disorder (AUD) is the most prevalent substance use disorder in the U.S., causing physical, mental, and social impairment. There are greater than 85,000 alcohol-related deaths annually in the U.S.¹ There are 3 million alcohol-related deaths worldwide.²

Purpose:

To compare first-line pharmacotherapy for the treatment of AUD with cognitive behavioral therapy (CBT) in terms of alcohol consumption rates. Additionally, to explore each treatment option's unique method of reducing alcohol consumption.

PICOT

In adults aged 18-65 with alcohol use disorder, is the use of pharmacological therapy associated with higher alcohol cessation compared to cognitive behavioral therapy?

Design & Methods

• **Keywords:** alcohol use, abstinence, heavy drinking, multimodality therapy, naltrexone, acamprosate, disulfiram, cognitive behavioral therapy

• **Inclusion:** 18-65 years old with AUD, English language texts from 2018 to present, pharmacological/CBT treatment for AUD

• **Exclusion:** populations < 18 years old, non-English language texts older than 2018

Summary of Evidence Search:

Utilized PubMed, Cochrane Library, and APA PsychInfo. Search terms: "alcohol use disorder," "cognitive behavioral therapy," and "pharmacologic therapy."

Summary of Evidence Synthesis

Database	Yielded	Reviewed	Included in Analysis
PubMed	422	23	4
Cochrane Library	106	16	1
APA PsychInfo	809	12	1
Total:	1337	51	6

Types of Studies

6 meta-analyses

Results:

- Comparisons between the efficacy of CBT and first-line pharmacotherapy is inconclusive.
- CBT and naltrexone together had a greater reduction of alcohol consumption and relapse compared to pharmacotherapy only.³
- Naltrexone increases abstinence rates and reduces heavy drinking.⁴
- Acamprosate increases abstinence rates but does not affect heavy drinking.⁵
- Disulfiram reduces heavy drinking but does not affect abstinence rates.⁵
- CBT reduces alcohol consumption but does not affect abstinence.⁶

Summary of Results

Treatment	Reduce Heavy Drinking	Increase Abstinence
CBT + Naltrexone	+	+
CBT	+	-
Naltrexone	+	+
Acamprosate	-	+
Disulfiram	+	-

Best Practice

Discussion:

Implementation of multimodality therapy with both CBT and pharmacotherapy results in a greater reduction of alcohol consumption. Of the first-line options of pharmacotherapy, naltrexone is the most effective option due to both reducing binge drinking and increasing abstinence rates.

Limitations/Further study:

Variable populations, effect sizes, and outcomes may make results too broad to be applicable to the general population. There was little focus on lifetime effects of treatment. Long-term effects of pharmacological intervention should be studied.

Conclusion:

Direct comparison between CBT and pharmacotherapy remain inconclusive. However, a synergistic relationship between CBT and first-line pharmacotherapy has been found to exist, that of which could prove to be highly beneficial toward the treatment of individuals with AUD.

References:

1. Nehring SM, Chen RJ, Freeman AM. Alcohol Use Disorder. In: StatPearls. StatPearls Publishing; 2024. Accessed February 3, 2024. <http://www.ncbi.nlm.nih.gov/books/NBK436003/>
2. Glantz MD, Bharat C, Degenhardt L, et al. The epidemiology of alcohol use disorders cross-nationally: Findings from the World Mental Health Surveys. *Addict Behav.* 2020;102:106128. doi:10.1016/j.addbeh.2019.106128
3. van Amsterdam J, Blanken P, Spijkerman R, van den Brink W, Hendriks V. The Added Value of Pharmacotherapy to Cognitive Behavior Therapy And Vice Versa in the Treatment of Alcohol Use Disorders: A Systematic Review. *Alcohol Alcohol Oxf Oxf.* 2022;57(6):768-775. doi:10.1093/alcalc/agac043
4. Kranzler HR, Soyka M. Diagnosis and Pharmacotherapy of Alcohol Use Disorder: A Review. *JAMA.* 2018;320(8):815-824. doi:10.1001/jama.2018.11406
5. Bahji A, Bach P, Danilewitz M, et al. PHARMACOTHERAPIES FOR ADULTS WITH ALCOHOL USE DISORDERS: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS. *J Addict Med.* 2022;16(6):630-638. doi:10.1097/ADM.0000000000000992
6. Magill M, Ray L, Kiluk B, et al. A meta-analysis of cognitive-behavioral therapy for alcohol or other drug use disorders: Treatment efficacy by contrast condition. *J Consult Clin Psychol.* 2019;87(12):1093-1105. doi:10.1037/ccp0000447

