# HEALTH SERVICES FOR HAZARDOUS USE OF ALCOHOL AND ALCOHOL USE DISORDERS: What is the Latest Evidence?

## Alcohol treatment services and systems of care



Health service interventions for alcohol problems typically involve screening, brief interventions, diagnostic evaluation, referral advice, withdrawal management, treatment interventions, and continuing care.

Therapeutic approaches demonstrating some evidence of effectiveness include motivational interviewing, couples and family therapy, cognitive behavioral therapy (CBT), relapse prevention training, contingency management, pharmacotherapy for withdrawal management (benzodiazepines) and relapse prevention (with acamprosate, disulfiram or naltrexone), and interventions based on the Twelve Steps and mutual help groups (such as Alcoholics Anonymous [AA]).

These modalities are delivered in a variety of settings such as: community and outreach programs, primary health care, residential facilities, psychiatric and general hospital settings, outpatient programs, and more recently through digital technologies via the Internet.

### Health services for the management of alcohol use disorders

In some jurisdictions, services for people with alcohol and/or drug use disorders are administered separately; in others, they share the same programs and facilities.

In some countries, these services are part of the system of medical care, including psychiatric services. In others, they are integrated with social work or community-based mental health services.

The organization of services has implications for the efficiency and effectiveness of treatment for alcohol use disorders (AUDs) as part of a system of health and social services.

#### Screening and brief interventions

- Screening and brief interventions are designed for people with hazardous (whose drinking places them at risk of adverse health events) and harmful alcohol use (people who have already experienced physical or psychological harm).
- Following an initial screening to identify risk levels, the intervention is characterized by its low intensity and short duration (frequently only one to three sessions of several minutes in length).
- The aim is to motivate persons at high-risk level of drinking to reduce their alcohol consumption or to lower the risk of drinking-related harm.

- A related aim is to refer more serious cases for appropriate treatment.
- Evidence from systematic reviews and meta-analyses shows that clinically significant reductions in drinking and alcohol-related problems can follow from brief interventions, which were also found to be cost-effective.
- Nurses and other health care providers are as effective as doctors in producing behavioral changes.
- Positive effects have been observed with adolescents, adults, older adults, college students, and pregnant women.

#### **Other kinds of treatment/interventions**

- Specialized inpatient and outpatient treatment are used in many countries for persons with severe alcohol use disorders who do not respond to more limited efforts at rehabilitation.
- Inpatient treatment is effective in reducing alcohol and other substance use and improving mental health, and it may have a positive effect on reducing crime and adverse social outcomes.
- Alcohol-sensitizing drugs, such as disulfiram (Antabuse) cause an unpleasant physical reaction when alcohol is consumed. These drugs may help motivated patients but are generally ineffective for most patients.
- Naltrexone (an opioid antagonist), and Acamprosate (an amino acid derivative) have been found in some studies to delay the time to relapse and reduce the rate of relapse to heavy drinking.
- The additive effects of pharmacotherapies have been marginal beyond the benefits produced by medical management, standard counseling, and behavior therapies.
- Mutual help groups, such as Alcoholics Anonymous (AA), are a widely utilized source of help for people with alcohol problems. Studies show that AA can have an incremental effect when combined with formal treatment.

### **Key messages**

- **SBI for alcohol problems and treatment for AUDs work.** Effectiveness studies indicate that treatment services for persons with harmful drinking patterns contribute to short-term abstinence or reduction in drinking.
- **2. SBI and treatment for alcohol use disorders are cost-effective.** Studies of behavioral, pharmacological, and combined interventions show that the costs for interventions are less than the amounts that would have been spent on other health care and social services that would be needed if patients continued drinking.
- **3.** The public health impact of SBI for hazardous and harmful drinkers depends on large-scale screening and widespread implementation of brief interventions, which rarely exist in communities and nations.
- **SBI and treatment services are not stand-alone strategies.** SBI and treatment services do not forestall the need for universal strategies that affect the availability, affordability, and marketing of alcohol.

#### **Bibliography:**

- 1. Acuff SF, Voss AT, Dennhardt AA, Borsari B, Martens MP, Murphy JG. Brief motivational interventions are associated with reductions in alcohol-induced blackouts among heavy drinking college students. Alcohol Clin Exp Res. 2019 May;43(5):988-996. Available from: https://doi.org/10.1111/acer.14019.
- 2. Andréasson S, McCambridge J. Alcohol researchers should not accept funding from the alcohol industry: perspectives from brief interventions research. J Stud Alcohol Drugs. 2016 Jul;77(4):537-40. Available from: https://doi.org/10.15288/jsad.2016.77.537.
- 3. Angus C, Scafato E, Ghirini S, Torbica A, Ferre F, Struzzo P, et al. Cost-effectiveness of a programme of screening and brief interventions for alcohol in primary care in Italy. BMC Fam Pract. 2014 Feb 6;15:26. Available from: https://doi.org/10.1186/1471-2296-15-26.
- 4. Anton RF, O'Malley SS, Ciraulo DA, Cisler RA, Couper D, Donovan DM, et al. Combined pharmacotherapies and behavioral interventions for alcohol dependence: the COMBINE study: a randomized controlled trial. JAMA. 2006 May 3;295(17):2003-17. Available from: https://doi.org/10.1001/jama.295.17.2003.
- 5. Babor T, Casswell S, Graham K, Huckle T, Livingston M, Österberg E, et al. Alcohol: no ordinary commodity: research and public policy, 3rd edition. Oxford: Oxford University Press; 2022.
- 6. Donoghue K, Patton R, Phillips T, Deluca P, Drummond C. The effectiveness of electronic screening and brief intervention for reducing levels of alcohol consumption: a systematic review and meta-analysis. J Med Internet Res. 2014 Jun 2;16(6):e142. Available from: https://doi.org/10.2196/jmir.3193.
- 7. Ghosh A, Singh P, Das N, Pandit PM, Das S, Sarkar S. Efficacy of brief intervention for harmful and hazardous alcohol use: a systematic review and meta-analysis of studies from low middle-income countries. Addiction. 2022 Mar;117(3):545-558. Available from: https://doi.org/10.1111/add.15613.
- Heather N. Can screening and brief intervention lead to population-level reductions in alcohol-related harm? Addict Sci Clin Pract. 2012 Aug 28;7(1):15. Available from: https://doi.org/10.1186/1940-0640-7-15.
- 9. Jonas DE, Amick HR, Feltner C, Bobashev G, Thomas K, Wines R, et al. Pharmacotherapy for adults with alcohol use disorders in outpatient settings: a systematic review and meta-analysis. JAMA. 2014 May 14;311(18):1889-900. Available from: https://doi.org/10.1001/jama.2014.3628.
- 10. Kaner EF, Beyer FR, Muirhead C, Campbell F, Pienaar ED, Bertholet N, et al. Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev. 2018 Feb 24;2(2):CD004148. Available from: https://doi.org/10.1002/14651858.CD004148.pub4.
- 11. Riper H, Hoogendoorn A, Cuijpers P, Karyotaki E, Boumparis N, Mira A, et al. Effectiveness and treatment moderators of internet interventions for adult problem drinking: an individual patient data meta-analysis of 19 randomised controlled trials. PLoS Med. 2018 Dec 18;15(12):e1002714. Available from: https://doi.org/10.1371/journal.pmed.1002714.

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Screening and brief interventions, and digital technologies

Screening and brief interventions (SBIs) delivered via computer and telephone are effective in both educational and health care settings.

Systematic reviews have found internet-based treatments and SBIs to be as effective in reducing alcohol consumption as outpatient face-to-face treatments.

Population coverage can be increased and the cost of delivery reduced by means of mobile and digital technologies.