Alcohol use disorder: Psychosocial management

AUTHOR: Andrew J Saxon, MD
SECTION EDITOR: Murray B Stein, MD, MPH
DEPUTY EDITOR: Michael Friedman, MD

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INTRODUCTION

Alcohol use disorder is a highly prevalent and disabling condition. It is associated with high rates of medical and psychiatric comorbidity as well as early mortality. The psychiatric diagnoses, alcohol abuse and alcohol dependence, in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) were replaced by one diagnosis, alcohol use disorder, in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) [1].

Psychosocial treatments can reduce alcohol consumption and increase abstinence, either alone or in conjunction with pharmacologic treatment. Short-term goals of psychosocial treatment include:

- Encouraging and supporting abstinence, or reduction in alcohol use
- Encouraging engagement in alcohol use disorder treatment
- Supporting adherence to medication for alcohol use disorder
- Promoting participation in other psychosocial services
- Involving family, community, and employment resources

Long-term goals include restoration of self-esteem, resolution of alcohol-related social problems, improvement in physical health, and lasting abstinence from alcohol use.

This topic addresses psychosocial interventions for alcohol use disorder. Pharmacotherapy and withdrawal management for alcohol-related conditions are reviewed separately, as is nutritional

status in patients with alcohol use disorder. Specific psychosocial interventions for substance use disorders, including motivational interviewing, contingency management, psychotherapies, mutual help groups, and screening and brief intervention, are also reviewed separately.

- (See "Alcohol use disorder: Pharmacologic management".)
- (See "Management of moderate and severe alcohol withdrawal syndromes".)
- (See "Nutritional status in patients with sustained heavy alcohol use".)
- (See "Screening for unhealthy use of alcohol and other drugs in primary care".)
- (See "Brief intervention for unhealthy alcohol and other drug use: Efficacy, adverse effects, and administration".)
- (See "Substance use disorders: Motivational interviewing".)
- (See "Substance use disorders: Principles, components, and monitoring during treatment with contingency management".)
- (See "Substance use disorders: Training, implementation, and efficacy of treatment with contingency management".)
- (See "Substance use disorders: Psychosocial management".)

TERMINOLOGY

Alcohol is used by many without apparent substantial consequences. Therapeutic options for patients who drink excess alcohol depend upon the degree of use and associated risk, dysfunction, and/or consequences. Definitions of standard terms are provided below.

Alcohol use disorder — The psychiatric diagnoses in the DSM-IV-TR, alcohol abuse and alcohol dependence, were replaced by one diagnosis, alcohol use disorder, in the DSM-5 [1]. Most clinical trials of treatments for alcohol disorders were conducted in samples of patients with a DSM-IV diagnosis of alcohol dependence. These trial results can be most accurately applied to patients with a moderate to severe alcohol use disorder under DSM-5 criteria. DSM-IV alcohol abuse is comparable to the mild subtype of alcohol use disorder in DSM-5. (See "Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment", section on 'Alcohol use disorder'.)

At-risk drinking — The National Institute on Alcohol Abuse and Alcoholism defines "at-risk" drinking (which suggests that the person is at risk for adverse consequences) as [2]:

- Greater than 14 drinks per week or 4 drinks on an occasion for healthy men under age 65.
- Greater than 7 drinks per week or 3 drinks on an occasion for nonpregnant, healthy women under age 65 and healthy men over age 65.

A standard drink contains approximately 0.5 ounces of alcohol (12 to 14 grams) as defined by Department of Health and Human Services and the United States Department of Agriculture [3]. This corresponds to 12 fluid ounces of regular beer, 5 fluid ounces of wine, and 1.5 fluid ounces of 80-proof distilled spirit.

Criteria for at-risk drinking may be modified by comorbidities, especially in the older population. Increased mortality risk has been demonstrated for older patients who are at-risk drinkers, as defined by the Comorbidity-Alcohol Risk Evaluation Tool [4]. Any drinking can be considered "at-risk" for pregnant women, for those who take medications that interact with alcohol, or for those with a health condition that can be caused or exacerbated by alcohol (eg, hepatitis C).

"Binge" drinking — "Binge" or heavy episodic drinking is an important subset of at-risk drinking, particularly in teenagers and young adults. Binge drinking has been variably defined; we use the definition, "extended alcohol or other substance consumption (often operationalized as over at least two days) to the point of intoxication during which the person gives up their usual activities and obligations in order to use the substance" [5].

The National Institute of Alcohol Abuse and Alcoholism defines binge drinking as five or more standard drinks for men, and four for women, in one sitting in the past year [6]. Binge or high intensity drinking has been associated with injuries, psychosocial problems, and other negative consequences [7-9].

TREATMENT GOALS

The goal of treatment for alcohol use disorder can be broadly seen as restoration of medical and social well-being by control of drinking and its consequences.

Short-term goals of treatment include:

- Encouraging abstinence or reduction of alcohol use
- Promoting participation in counseling and mutual help groups
- Increasing pleasant, sober activities
- Involving family, community, and employment resources, including Employee Assistance Programs

Long-term goals include:

- Restoration of self-esteem
- Resolution of alcohol-related social problems
- Improvement in physical health

- Lasting abstinence from alcohol use or drinking of low amounts without consequences

Research studies suggest that a small but significant proportion of patients may be able to resume normal or controlled drinking [10,11]. This is an area of controversy [12]. Controlled drinking is probably more likely for people with a mild disorder (or at-risk drinking) and not for a more severe disorder. Advocates for a "harm reduction" approach as an alternative to abstinence may acknowledge that abstinence is the best outcome, but that not every individual achieves this end, and that controlled drinking for some individuals is an achievable aim which reduces risk to patients.

INTERVENTIONS

An algorithm describes our approach to choosing psychosocial treatment for alcohol use disorder (algorithm 1).

Motivational interviewing — Motivational interviewing is an evidence-based counseling technique for eliciting behavior change by helping the patient explore and resolve ambivalence about change. The theoretical foundation, indications, components, and efficacy of motivational interviewing are reviewed in detail separately. (See "Substance use disorders: Motivational interviewing".)

A meta-analysis examined 59 randomized trials with a total of 13,342 adult participants with alcohol use disorder (29 trials were specific to DSM-IV alcohol abuse and dependence) [13]. Motivational interviewing reduced substance use over the course of the trial (standardized mean difference 0.79, 95% CI 0.48-1.09) and at subsequent follow-up of up to 12 months (standardized mean difference 0.15, 95% CI 0.04-0.25) compared with a control condition. No differences in efficacy were seen for motivational interviewing by type of substance. No difference in substance use was seen when motivational interviewing was compared with treatment as usual for substance use disorders (SUDs), other active treatments, and receiving substance use disorder assessment and feedback.

Cognitive-behavioral therapy — Cognitive-behavioral therapy (CBT) is a structured goal-directed form of psychotherapy in which patients learn how their thought processes contribute to their behavior. Increased cognitive awareness is combined with techniques to help patients develop new and adaptive ways of behaving and alter their social environment, which in turn leads to change in thoughts and emotions. The theoretical foundation, indications, components, efficacy and administration of CBT and other psychotherapies for SUDs are reviewed separately. (See "Substance use disorders: Psychosocial management".)

A meta-analysis of 53 trials found CBT to have a modest positive effect on outcomes for alcohol and other drug dependence compared with control conditions and no treatment. Comparable results were seen across most categories of substances, including alcohol [14]. Studies have generally not found the combination of CBT and medications for alcohol dependence to improve outcomes more than either intervention individually [15,16]. (See "Substance use disorders: Psychosocial management", section on 'Cognitive-behavioral therapy'.)

A brief, CBT-based intervention has shown effectiveness in helping people with DSM-IV alcohol abuse or dependence to initiate treatment [17]. A randomized trial compared a single-session, telephone-based CBT intervention to a control condition in 196 participants who screened positive for a possible alcohol use disorder. Subjects receiving the intervention had improved attitudes towards addiction treatment and were three times more likely to attend an alcohol treatment program within three months than patients in the control group (31 versus 12 percent).

Residential treatment — Residential programs provide a 24-hour, substance-free environment. They vary widely in the intensity of clinical services provided and the treatment models employed. As examples, three models of residential treatment have been identified:

- A psychosocial model – Emphasizing individual and group counseling, social skills training, and mutual help groups.
- A supportive rehabilitative model – Adds work training and other specialized rehabilitative services to services provided by the psychosocial model.
- An intensive treatment model – Adds medical and psychiatric services, couples/family counseling, and nutritional counseling to services provided by the supportive rehabilitative model.

There are no well-designed clinical trials comparing the effectiveness of residential treatment for alcohol use disorder to treatment at lower levels of care. In our clinical experience, residential treatment can be beneficial for patients with a moderate to severe alcohol use disorder who have not succeeded in maintaining abstinence at a less intensive level of treatment (eg, an intensive outpatient program). Residential treatment can also be beneficial for patients at very high risk if they are not removed from their environment, such as patients who are homeless or pregnant, or who only have substance-using friends/family. The availability of residential treatment varies widely, and may not be covered by health insurance.

The intensity of care for SUDs across levels of care is reviewed separately. (See "Substance use disorders: Determining appropriate level of care for treatment".)

Mutual help groups — Mutual help groups, including 12-step programs and other models, are a common component of treatment for alcohol use disorder. Although there are differences among them, they commonly emphasize achieving abstinence through group sharing and support. Mutual help groups for SUDs and facilitating engagement in mutual help groups is discussed further separately. (See "Substance use disorders: Psychosocial management", section on 'Facilitating mutual help group engagement'.)

The best-known mutual help group for alcohol use disorder is Alcoholics Anonymous (AA), which is free and readily available without appointment. The program is based upon peer support, social fellowship, and a belief in a spiritual basis for recovery [18]. Other aspects include role modeling and mentoring (sponsorship), and abstinence is encouraged on a "one day at a time" basis. Members attend meetings (either open to all or restricted to participants with alcoholism) in which experiences related to drinking and recovery are shared, and the "Twelve Steps to Recovery" are discussed. Participants in AA acknowledge that alcohol has led to loss of control, and that recovery is a spiritual journey through belief in a higher power, and through personal exploration and acceptance. More information about AA can be found on their website.

Randomized trials provide limited, indirect evidence for modest efficacy of AA. In a systematic review, the primary findings included the following [18]:

- A meta-analysis of two trials (n = 1936 patients) compared manualized psychotherapy that facilitates AA involvement (12-step facilitation) with other interventions, such as CBT, motivational enhancement therapy, and case management. Continuous abstinence 12 months posttreatment occurred more often in patients who received 12-step facilitation, compared with those who did not, but the difference was small (relative risk 1.21, 95% CI 1.03-1.42).

- One trial randomly assigned patients (n = 91) to 12-step facilitation, motivational enhancement, or CBT. At the 12-month follow-up posttreatment, percentage days abstinent was 15 percent greater with 12-step facilitation.

These studies indicate psychotherapy that is administered by mental health clinicians and facilitates involvement with AA may be helpful. However, the studies do not directly address the efficacy of AA.

Clinicians can take an active role referring patients to a mutual help program. As an example:

- Making the first call with the patient present
- Helping to locate meeting sites

- Identifying times for the patient to attend
- Requesting that the patient provide feedback to the clinician after attending meetings
- Discussing common misconceptions about AA (eg, that medications are prohibited or that AA is a religious group)

For patients who prefer a mutual help group without AA's emphasis on the role of a higher power, alternative support programs are available. One such program is SMART Recovery (Self-Management and Recovery Training), which offers free treatment advice online as well as group meetings which stress self-reliance [19]. For those who prefer to attempt controlled drinking, other self-help groups are available with both group meetings and internet support [20].

Contingency management — Contingency management interventions for SUDs offer incentives to encourage abstinence or discourage substance use. Several small randomized clinical trials have found contingency management to reduce alcohol use in patients with DSM-IV alcohol dependence or heavy drinking [21-23]. As an example, a clinical trial randomly assigned 30 adults with heavy drinking to receive three weeks of either daily contingency management or daily noncontingent reinforcement [22]. Patients assigned to contingency management had a higher proportion of days with no drinking detected using a transdermal alcohol sensor (54.3 versus 31.2 percent). These trials used breath alcohol or ethyl glucuronide testing (short term), or transdermal alcohol testing (technology is available but in early stages and not widely so). (See "Substance use disorders: Principles, components, and monitoring during treatment with contingency management" and "Substance use disorders: Training, implementation, and efficacy of treatment with contingency management".)

Combined behavioral intervention — Combined behavioral intervention (CBI) is an intervention combining elements of CBT, 12-step facilitation, motivational interviewing, and support system involvement. In a randomized trial that compared CBI in combination with other interventions, the number of abstinent days was similar in those who received versus did not receive CBI [15]. In some subgroups (eg, patients receiving naltrexone), CBI appeared to have a benefit in drinking outcomes (eg, percent days abstinent).

Medical management — Medical management is a manual-based therapy that is designed to mimic the management of medical conditions and is effective in the treatment of alcohol use disorder. In counseling sessions, clinicians explain alcohol use disorder and medication treatment, identify patient treatment goals, discuss medication adherence, and suggest mutual help group participation. Follow-up sessions include a review of recent drinking and its consequences, medication adherence, side effects and their management, and further advice regarding cutting down or abstinence is given. Further information is available at

https://www.niaaa.nih.gov/sites/default/files/NIAAA-combined-behavioral-intervention-manual.pdf.

In a randomized trial including 1383 individuals with alcohol dependence (DSM-IV), the effects of combined treatments in reducing the risk of heavy drinking days was most evident in the group receiving naltrexone combined with medical management [15].

Brief intervention — Brief intervention has been shown to be efficacious for unhealthy mild alcohol use disorder. There are few studies and no proven efficacy of brief intervention for patients with moderate to severe alcohol use disorder [24]. Brief intervention for alcohol used disorder is discussed separately. (See "Brief intervention for unhealthy alcohol and other drug use: Goals and components".)

Internet- or videoconference-delivered therapy — Limited data support internet- or video-delivered psychotherapies for alcohol use disorder. In a review of the treatment of individuals with alcohol use disorder, videoconference therapy appeared to have similar effect on the number of any days of alcohol use or excessive alcohol use as in-person therapy (one randomized controlled trial; n = 71) [25]. Additionally, web-based CBT had similar effects on rate of overall abstinence, days of any alcohol use, and overall quality of life at eight-week follow-up as in-person therapy (two randomized controlled trials; n = 212). The strength of the evidence in each case was very low due to small number of studies with small sample sizes. In a recent trial not covered in that review, 301 individuals with alcohol use disorder were randomly assigned to internet-delivered CBT versus face-to-face CBT [26]. At six-month follow-up, the reduction in alcohol consumption in the internet group was noninferior to those in face-to-face treatment.

CONTINUING CARE

Recognition that addiction is often chronic or relapsing has led to a gradual evolution in clinical management toward continuing care [27,28]. Continuing care is a treatment model that emphasizes modifications in the intensiveness of treatment and monitoring as the illness waxes and wanes over time. The interventions described above can all be delivered within the continuing care model. (See 'Interventions' above and "Continuing care for addiction: Components and efficacy" and "Continuing care for addiction: Implementation".)

SOCIETY GUIDELINE LINKS

Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Alcohol use disorders

and withdrawal".)

INFORMATION FOR PATIENTS

UpToDate offers two types of patient education materials, "The Basics" and "Beyond the Basics." The Basics patient education pieces are written in plain language, at the 5th to 6th grade reading level, and they answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials. Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are written at the 10th to 12th grade reading level and are best for patients who want in-depth information and are comfortable with some medical jargon.

Here are the patient education articles that are relevant to this topic. We encourage you to print or e-mail these topics to your patients. (You can also locate patient education articles on a variety of subjects by searching on "patient info" and the keyword(s) of interest.)

- Basics topics (see "Patient education: Alcohol use — when is drinking a problem? (The Basics)")
- Beyond the Basics topics (see "Patient education: Alcohol use — when is drinking a problem? (Beyond the Basics)")

SUMMARY AND RECOMMENDATIONS

- **Introduction and terminology** – Alcohol use disorder is a highly prevalent and disabling condition. It is associated with high rates of medical and psychiatric comorbidity as well as early mortality. Psychosocial treatments can reduce alcohol consumption and increase abstinence, either alone or in conjunction with pharmacologic treatment. (See 'Introduction' above and 'Terminology' above.)
  - **At-risk drinking** – At-risk drinking is defined as greater than 14 drinks per week or 4 drinks on an occasion for males, or greater than 7 drinks per week or 3 drinks on an occasion for nonpregnant females.
  - **Binge drinking** – Binge drinking is variably defined as "extended alcohol or other substance consumption (often operationalized as over at least two days) to the point of

intoxication during which the person gives up their usual activities and obligations in order to use the substance".

- **Treatment goals** – The goal of treatment for alcohol use disorder is broadly seen as restoration of medical and social well-being by control of drinking and its consequences. (See 'Treatment goals' above.)

- **Interventions** – An algorithm describes our approach to choosing psychosocial treatment for alcohol use disorder (algorithm 1).

  - **Motivational interviewing** – Motivational interviewing is an evidence-based technique for eliciting behavior change by helping the patient explore and resolve ambivalence about change. (See 'Motivational interviewing' above and "Substance use disorders: Motivational interviewing".)

  - **Cognitive-behavioral therapy (CBT)** – CBT is a structured goal-directed form of psychotherapy in which patients learn how their thought processes contribute to their behaviors and develop adaptive ways of behaving. (See 'Cognitive-behavioral therapy' above and "Substance use disorders: Psychosocial management", section on 'Cognitive-behavioral therapy'.)

  - **Residential programs** – Residential programs provide a 24-hour, drug- and alcohol-free environment for patients at high risk of relapse in their home environments. Residential programs vary in their intensity and breadth of services and professional staffing. (See 'Residential treatment' above and "Substance use disorders: Determining appropriate level of care for treatment", section on 'Residential services'.)

  - **Mutual help groups** – Mutual help groups include 12-step programs such as Alcoholic Anonymous (AA) and other models. They are common adjuncts to treatment for alcohol use disorder. Although there are differences among them, they commonly emphasize working toward abstinence through group sharing and support. (See 'Mutual help groups' above.)

  - **Contingency management** – Contingency management offers incentives to discourage substance use and encourage abstinence, has been found to be efficacious for patients with alcohol dependence or heavy drinking. (See 'Contingency management' above and "Substance use disorders: Principles, components, and monitoring during treatment with contingency management" and "Substance use disorders: Training, implementation, and efficacy of treatment with contingency management".)

- **Medical management** – Medical management is a manualized therapy that mimics management of medical conditions and is effective in the treatment of alcohol use disorder. (See 'Medical management' above.)

- **Combined behavioral intervention** – Combined behavioral intervention is an intervention combining elements of CBT, 12-step facilitation, motivational interviewing, and support system involvement. (See 'Combined behavioral intervention' above.)

- **Brief intervention** – Brief intervention has been shown to be efficacious for unhealthy mild alcohol use disorder. There are few studies and no proven efficacy of brief intervention for patients with moderate to severe alcohol use disorder. (See 'Brief intervention' above.)

- **Internet-delivered therapy** – Clinical trials have suggested that psychotherapies and other treatments for alcohol use disorder may be effectively delivered virtually or over the internet. (See 'Internet- or videoconference-delivered therapy' above.)

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