



**Ask Dr. Kushner about treating comorbid patients**

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# Which to treat first: Comorbid anxiety or alcohol disorder?

Therapies that target just one problem are insufficient for patients who have both

**M**en and women with anxiety disorders are at three times the general population's risk of being alcohol-dependent (*Table, page 56*),<sup>1</sup> and those who seek treatment for an anxiety disorder are at even higher risk of alcohol disorder.<sup>2,3</sup> This comorbidity can complicate treatment attempts if either disorder remains unaddressed, leading to increased relapse risk and multiple treatment episodes.

Based on our research and clinical work in helping patients with comorbid alcohol dependence and anxiety disorders,<sup>2,4-6</sup> this article describes:

- potential relationships between anxiety disorders and alcohol disorder
- pros and cons of 3 approaches to treating this comorbidity
- how to identify and address alcohol disorder in patients with anxiety disorders, depending on available resources.

## 3 comorbidity models

The most common understanding of this comorbidity (*Figure 1, page 56*) is that having an anxiety disorder predisposes one to develop an alcohol or substance use disorder via self-medication—using alcohol or drugs to modulate anxiety and negative affect.<sup>7-9</sup> However, substance use disorder experts have argued that the social, occupational, and physiologic effects of substance use can generate new anxiety symptoms in vulnerable individuals.<sup>10</sup> In other words, physiologic and/or environmental disruptions from chronic alcohol or substance



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## Anxiety and alcohol abuse

### Clinical Point

Therapies aimed at treating either anxiety or alcohol disorder are not satisfactory for treating comorbid patients

Table

## Comorbidity rates of anxiety disorders and alcohol dependence\*

Anxiety disorder	Odds ratio for having alcohol dependence	
	Men	Women
Any	3.2	3.3
Panic disorder	3.8	3.7
Social phobia	2.6	3.6
Generalized anxiety disorder	3.6	3.4
Specific phobia	2.8	2.9

\* Numbers indicate odds of having alcohol dependence when the anxiety disorder is present vs absent.

Source: 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), reference 1

use could promote conditions and circumstances in which anxiety symptoms are more likely to emerge or worsen.

Although DSM-IV-TR does not delve into the causes of mental disorders, it states that substance use can cause or “induce” an anxiety syndrome with symptoms that resemble or are identical to those of the various anxiety syndromes that are not related to substance disorder (*Box*).<sup>11,12</sup>

Alternatively, the idea that a third factor can serve as a common cause for both conditions fits with the view that substance use disorder and anxiety disorder can be phenotypic expressions of a common underlying genetic/physiologic liability.<sup>13</sup>

Finally, these models are not mutually exclusive. Anxiety symptoms or substance use could cause or aggravate the other.

### Which comes first?

Anxiety disorder typically begins before a substance use disorder in comorbid cases, although some studies have reported the opposite pattern or roughly simultaneous onset of both disorders.<sup>2</sup>

Using a prospective method in college students, we found that the risk of developing alcohol dependence for the first time as a junior or senior more than tripled among students who had an anxiety diagnosis as a freshman.<sup>14</sup> We also found, however, that students who were alcohol

dependent as freshman were 4 times more likely than other freshman to develop an anxiety disorder for the first time within the next 6 years.

In short, having either an anxiety or alcohol disorder earlier in life appears to increase the probability of developing the other later. This finding supports the idea that the types of associations that link pathologic anxiety and substance use vary among individuals and, perhaps, within individuals over time.

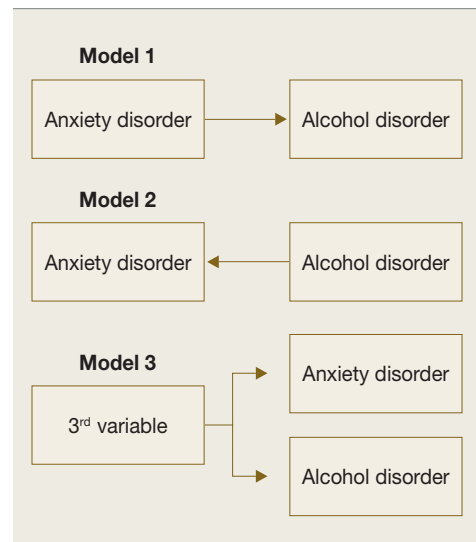
### 3 treatment approaches

Treating 1 of the comorbid conditions— anxiety or alcohol disorder—does not tend to resolve the other.<sup>3,15</sup> This suggests that therapies aimed at treating a single disorder are not satisfactory for treating comorbid cases. Possible multi-focused approaches include:

- serial (or sequential) approach—treating comorbid disorders one at a time
- parallel approach—providing simultaneous but separate treatments for each comorbidity
- integrated approach—providing one treatment that focuses on both comorbid disorders, especially as they interact with one another.

Figure 1

## Hypothetical models of comorbidity



Each has strengths and weaknesses, and the approach you choose for your patient may depend on clinical circumstances and available resources.

**Serial treatment** has the structure to empirically evaluate whether the initially untreated comorbid condition is resolved by treating the other condition. For example, you could treat an anxiety disorder as usual and refer the patient for alcohol disorder treatment only if drinking remains an active problem following anxiety treatment. This approach also allows you to use well-established treatment systems, programs, and specialists as usual.

One disadvantage to the serial approach, however, is that the initially untreated comorbid disorder could undermine the resolution of the treated disorder. We found, for example, that treating either the anxiety or the alcohol disorder alone fails to resolve the comorbid condition and might leave a patient vulnerable to relapse before serial treatment can be completed.<sup>3,15</sup>

When implementing a serial treatment, it is not always clear which disorder to treat first. Distinguishing comorbid disorders as “primary” or “secondary” often is done inconsistently and imprecisely, so treatment decisions based on these terms can be erroneous. Using the order of disorder onset also is an unreliable guide to which disorder is in priority need of treatment.<sup>7,16</sup>

Based on our experience and research, where and why the comorbid patient presents for treatment should be factored heavily in these treatment decisions. For example, individuals seeking anxiety treatment who have a comorbid alcohol use disorder typically possess little insight into their drinking problem and a frank resistance to clinician-driven attempts to modify their drinking behavior. We would expect a similar reaction from patients presenting for alcohol disorder treatment who are told they must first obtain psychiatric treatment for anxiety symptoms. The serial approach often necessitates that patients be treated initially for the problem for which they present and then referred afterward for the comorbid condition as needed.

**Box**

## What is substance-induced anxiety disorder?

DSM-IV-TR describes an anxiety disorder as independent from a coexisting substance use disorder only if the anxiety disorder:

- began distinctly before the substance use disorder
- or persisted during periods of extended abstinence (>1 month) from substance use/abuse.

Otherwise, substance abuse is presumed to have induced the anxiety disorder. This perspective implies that no specific treatment beyond drug/alcohol abstinence is required to resolve a substance-induced anxiety disorder.

In a large community-based sample, Grant et al<sup>11</sup> found that <0.5% of individuals with comorbid anxiety and substance abuse met the strictly defined DSM-IV-TR criteria for a substance-induced anxiety disorder. Cases in which a comorbid anxiety disorder resolved during periods of substance abuse abstinence were especially rare. This observation suggests that substance-induced anxiety syndrome as defined by DSM-IV-TR is very rare in clinical practice.

DSM-IV-TR diagnostic criteria do not recognize an “anxiety-induced substance use disorder,” in which pathologic anxiety might induce a substance use disorder. Conceptually, however, this idea is as reasonable as substance-induced anxiety disorder and fits within the self-medication model.<sup>12</sup>

In an open-label pilot treatment study of 5 subjects with social anxiety disorder and a co-occurring alcohol use disorder (C.L.R., S.W.B., unpublished data, 2007), we first treated the anxiety disorder with the selective serotonin reuptake inhibitor paroxetine, up to 60 mg/d. After 6 weeks, we addressed the comorbid alcohol problem using a brief alcohol intervention. This approach met with little or no resistance to reduce drinking—all 5 subjects successfully decreased their alcohol consumption, and none dropped out of treatment. A controlled follow-up trial is planned to provide empiric support for

### Clinical Point

Based on our research, factor heavily into treatment decisions where and when a comorbid patient seeks care



## Anxiety and alcohol abuse

### Clinical Point

Our CBT-based integrated treatment approach includes psychoeducation, cognitive restructuring, and cue exposure

serial treatment of anxiety and alcohol use disorders in mental health treatment settings.

**Parallel treatments**, which can mitigate some disadvantages of the serial approach, increasingly are being used in chemical dependency treatment settings, where it is common to have psychiatric consultations. Based on our experience, however, this approach is far less common in psychiatric treatment settings, where clinicians do not routinely treat (or sometimes even assess for) comorbid alcohol or drug disorder in anxious and depressed patients. Also, the parallel approach often requires coordinating the times, locations, and strategies of treatments systems and clinicians, which can lead to problems:

- Substance use disorder treatment expertise is not always available for patients in mental health treatment.
- Clinicians from disparate systems may not fully understand the impact of the comorbid disorder and the culture of the parallel treatment system.
- Practitioners (or patients) might see medications or cognitive-behavioral therapy (CBT) exercises for anxiety as contradicting core tenants of the parallel treatment approach.
- It is not certain that standard treatments validated in non-comorbid patients would have the same therapeutic benefits when administered in a parallel treatment.<sup>5</sup>

**Integrated treatments** seek to address both comorbid disorders in a single treatment program. Our group has found, for example, that a CBT program aimed at treating comorbid anxiety could be successfully integrated with a standard alcohol disorder treatment.<sup>17</sup>

Several factors limit the use of integrated treatments, however:

- Few such programs exist.
- Treatment providers in mental health and addiction settings typically are not cross-trained.
- Personnel and other institutional supports are often lacking for integrated treatment programs.

## Integrated treatment plan

Our CBT-based integrated approach to alcoholism treatment in patients with a comorbid anxiety disorder incorporates 3 components:

- psychoeducation
- cognitive restructuring
- cue exposure.

**Psychoeducation.** The goal of psychoeducation is to explain the biopsychosocial model of anxiety disorder, alcohol disorders, and their interactions. This information is the general platform on which the specific treatment program is established in the next phase of the treatment.

In addition to providing basic epidemiologic facts, we use simple language and graphics to emphasize the vicious cycle that can emerge between drinking and anxiety, wherein the more one uses alcohol to manage anxiety in the short run the more anxiety there is to manage in the long run.

We introduce the role of cognitions, thoughts, beliefs, and expectations in how individuals react to situations to produce anxiety and drinking urges. Finally, we teach patients a standard paced diaphragmatic breathing exercise designed to minimize hyperventilation commonly identified among individuals with anxiety disorders.

**Cognitive restructuring.** We teach patients about thinking patterns that contribute to initiating and maintaining anxiety and panic. We also teach patients how to recognize and restructure cognitions that promote alcohol use as a means of coping with anxiety, such as focusing on alcohol's short-term calming effects instead of its longer-term anxiogenic effects. This phase requires clinical expertise in CBT skills; a wide range of resource materials is available to walk the patient (and clinician) through cognitive restructuring exercises (see *Related Resources, page 64*).

**Cue exposure** involves systematic therapist-guided exposure to fear-provoking situations and sensations with the goal of decoupling them from anxiety-inducing thoughts about catastrophic outcomes.

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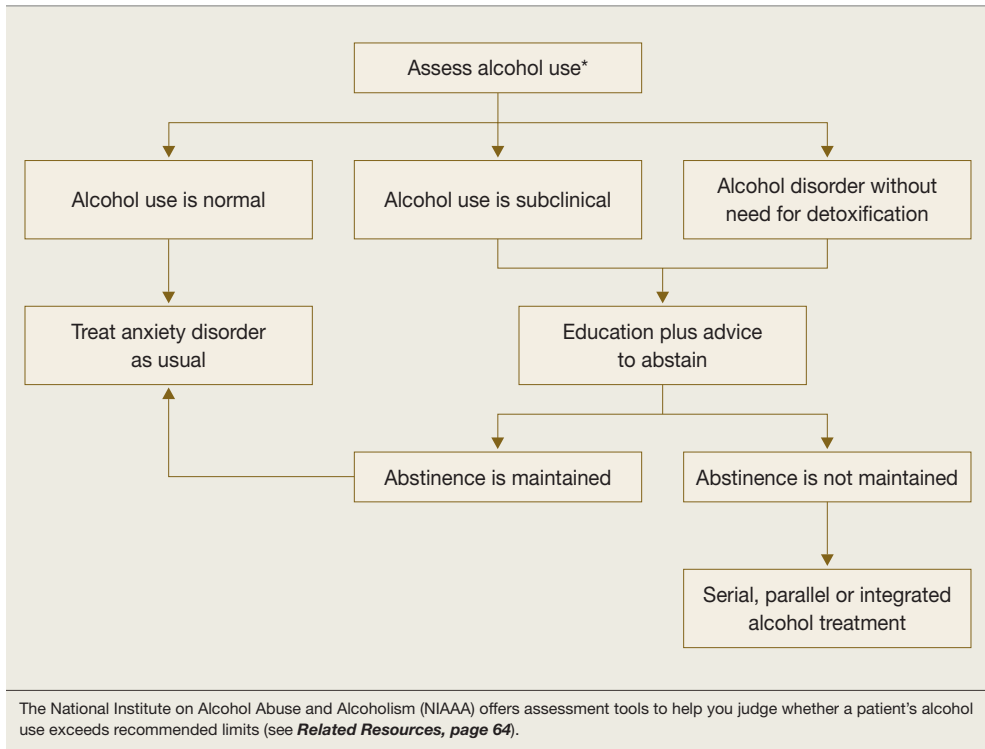
## Anxiety and alcohol abuse

### Clinical Point

Exposure therapy helps patients decouple anxiety feelings from drinking urges and practice alternate coping strategies

**Figure 2**

## Identifying and addressing alcohol use in patients with anxiety disorder



Exposures are used:

- for reality testing
- to allow patients to practice new anxiety management skills
- to increase patients' sense that they can successfully cope in feared situations ("self-efficacy").

We expand this approach to include alcohol-relevant cues associated with anxiety states. Exposures—imaginal and in vivo—incorporate this information to help patients decouple anxiety feelings from drinking urges and to practice alternate coping strategies.

### Pilot data for integrated Tx

After 4 months of participating in an integrated CBT program, 32 alcoholism treatment patients with panic disorder were significantly less likely to meet criteria for panic disorder, compared with 17 patients who received standard chemical dependency treatment without the CBT program (M.G.K., C.D., B.F., unpublished data, 2007). Before treatment, both

groups averaged approximately 2.5 panic attacks per week. At follow-up the group that received CBT averaged <0.5 panic attacks per week, whereas the control group averaged approximately 2 panic attacks per week.

Overall, there was a positive effect for CBT treatment in terms of relapse to full alcohol dependence—10% in the treatment group met this criteria vs 35% in the control group. Integrated CBT treatment was more effective in reducing relapse risk among patients who reported the strongest baseline expectations that alcohol consumption helps to control their anxiety symptoms: 0% in the treatment group relapsed to full alcohol dependence vs. 57% in the control group. For comorbid cases that had the weakest anxiety-reduction expectancies, 21% in the CBT group met the relapse criterion compared with about 20% in the control group.

In summary, an integrated CBT program for comorbid panic disorder appears to provide the greatest added value to standard alcoholism treatment among

patients who expect alcohol to relieve their anxiety symptoms.

### Treatment in a psychiatric setting

Our group is in the process of generating a database upon which to make empirically based treatment recommendations. Until then, we can offer treatment recommendations based upon experience and the limited data available.

When planning psychiatric treatment for a patient with an anxiety disorder, start by assessing the patient's alcohol use (Figure 2). The National Institute on Alcohol Abuse and Alcoholism (NIAAA) offers assessment tools (see *Related Resources, page 64*) to help you judge whether a patient's alcohol use exceeds recommended limits (for example, 7 drinks per week for women and 14 per week for men).

Teach individuals whose drinking is excessive and/or regular (especially deliberate drinking aimed at coping with anxiety) about the risk associated with alcohol use and potential interference of alcohol/drugs with successful anxiety treatment. Suggest

that patients reduce their drinking, and solicit their input into what would be a reasonable goal, such as those suggested in the NIAAA clinical guidelines (see *Related Resources, page 64*). Also advise patients to refrain from drinking/using before or during anxiety exposures so they can obtain the maximum benefits of treatment.

Individuals who are severely alcohol dependent or fail to meet their reduced drinking goals may require additional treatment. Options include:

- referral to a specialized addiction treatment setting
- pharmacotherapy with FDA-approved medications for treating alcohol dependence, such as naltrexone, acamprosate, or disulfiram.

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continued

### Clinical Point

Integrated CBT treatment was more effective for patients with the strongest expectations that alcohol helps control their anxiety

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Matt G. Kushner, PhD

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## Anxiety and alcohol abuse

### Clinical Point

Patients who are severely alcohol dependent may require referral to a specialized addiction treatment setting or pharmacotherapy

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## Related Resources

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### Drug Brand Names

Acamprosate • Campral  
Disulfiram • Antabuse  
Naltrexone • Depade, ReVia

### Disclosure

The authors report no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

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## Bottom Line

Neither alcohol dependence treatment-as-usual nor anxiety disorder treatment-as-usual alone appears to be adequate for most patients with this comorbidity. Serial, parallel, or integrated treatments can reasonably be used, but each has its own advantages and disadvantages. Factor into clinical decisions pragmatic issues, including how the patient understands his or her problem and available resources.