# Comorbid Anxiety and Alcohol or Substance Use Disorders: An Overview

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### Abstract

The comorbidity between anxiety and alcohol or substance use disorders represents a common and serious clinical challenge, characterized by a high worldwide prevalence. The co-occurrence of these disorders complicates treatment, management and prognosis of both disorders, but it remains often unrecognized and untreated. Mental health professionals should accurately assess and evaluate this comorbidity, although related etiological links and temporal relationships are still unclear and, probably, heterogeneous and multifactorial. Individuals may misuse alcohol and substances to self-medicate their anxiety, avoidant and phobic symptoms, and, on the other hand, anxiety disorders may be induced by alcohol and/or substance misuse. Integrated treatment appears the most promising approach, but there is paucity of evidence on pharmacological and non-pharmacological treatments addressed to both anxiety and substance use disorders. This chapter provides a comprehensive overview of main epidemiological and clinical issues, etiological/temporal

links hypotheses, and treatment options for the comorbidity between anxiety and addictive behaviors.

## 92.1 Introduction

Anxiety is a physiological defensive response for approaching or avoiding threatening stimuli [36]. Excessive levels of anxiety may impair performance and lead to suboptimal behavioral responses and ultimately to mental disorders [36]. Clinical evidence demonstrate that people with anxiety disorders, such as social phobia, generalized anxiety, panic, agoraphobia without history of panic, and specific phobia disorders, often misuse alcohol, prescription (e.g., benzodiazepines) and/or illicit drugs (e.g., stimulants or cannabinoids), being more vulnerable to addictive behaviors than general population. At the same time, individuals primarily treated for an alcohol or drug use disorder are more likely to suffer from a comorbid anxiety disorder, as a direct effect of substance use on anxiety symptoms. Comorbid anxiety and alcohol or substance use disorders represent a serious clinical challenge, influencing both treatment and prognosis.

All clinicians and mental health professionals who care people with anxiety and substance use disorders should have a comprehensive knowledge of main relevant clinical and epidemiological issues such as the following:

- Prevalence and correlates of substance use disorders among subjects suffering from anxiety disorders
- Etiological hypotheses and temporal relationships underlying this comorbidity
- Methods to assess and classify comorbid anxiety and alcohol/substance use disorders

- Specific clinical features, course and prognosis of people with this comorbidity
- Main evidence on prevention and treatment strategies

In this chapter, we provide a comprehensive overview on these issues, summarizing data derived from research that may be useful to the routine clinical practice.

## 92.2 Epidemiology

Comorbid anxiety and alcohol or substance use disorders are highly prevalent both in general and clinical populations. Data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) on 43,093 adults shows that the 12-month prevalence of any DSM-IV substance use disorder among respondents with a 12-month DSM-IV independent anxiety disorder is 15.0% [20]. As regards specific drug use disorders involved, cannabis use was the most common (15.1%), followed by cocaine (5.4%), amphetamine (4.8%), hallucinogen (3.7%), opioid (3.2%), sedative (2.6%), tranquilizer (2.5%), and inhalant/solvent (0.6%) use disorders [16]. People suffering from any anxiety disorder had an odds ratio (OR) of 1.9 (95% CI: 1.7–2.1) for any substance use disorder and of 1.7 (95% CI: 1.5–2.0) for any alcohol use disorder. The likelihood to develop a dependence syndrome was high with ORs of 2.8 (95% CI: 2.4–3.2) and 2.6 (95% CI: 2.2–3.0) for substance and alcohol dependence, respectively [20]. Panic disorder with agoraphobia seems showing the strongest association with a co-occurring substance use disorder.

Other relevant data from North American samples, are provided by the Mental Health Supplement to the Ontario Health Survey [21], a Canadian study on 7195 individuals aged 15–64 years and interviewed using the World Mental Health Composite International Diagnostic Interview (CIDI). A lifetime alcohol abuse or dependence by diagnostic subgroup was found in 8.7% of people with any anxiety disor-

der (OR vs. healthy controls: 3.4; 95% CI: 1.6–7.1), and in 18.0% of people with comorbid anxiety and depressive disorders (OR vs. healthy controls: 7.6; 95% CI: 3.5–16.7).

Relevant epidemiological data are available also from European populations. Data from the French representative sample of the Mental Health in General Population (MHGP) survey [29] on 36,105 adults, showed a prevalence for alcohol abuse of 7.1%, 6.5%, 4.9%, and 3.6% among subjects suffering from agoraphobia, panic disorder, social phobia, generalized anxiety disorder, respectively. The results highlighted an OR of 1.7 (1.4–2.0) for alcohol abuse among people with any anxiety disorder. Similar results were found for drug addiction, with a prevalence of 6.5%, 4.4%, 3.7%, and 2.8% among individuals suffering from panic disorder, social phobia, agoraphobia, and panic disorder, respectively. Drug addiction was significantly associated with the diagnosis of any anxiety disorder, with an overall OR of 2.1 (95% CI: 1.8–2.5).

Baseline data from the Netherlands Study of Depression and Anxiety (NESDA), including 2329 subjects with lifetime DSM-IV anxiety (social phobia, generalized anxiety disorder, panic disorder, agoraphobia) or depressive disorders and 652 controls, showed a significant association between alcohol dependence and comorbid anxiety disorder (OR: 2.4; 95% CI: 1.5–3.8) or for an anxiety disorder associated to a depressive disorder (OR: 4.3; 95% CI: 3.0–6.2) [9].

Epidemiological data are available also from the National Survey of Mental Health and Well Being (NSMHWB), a cross-sectional survey conducted in 1997 and based on 10,641 Australian adults. This study showed that the respondents with an alcohol use disorder (abuse or dependence) were three times more likely to suffer from a 12-month anxiety disorder. On the other hand, people suffering from any anxiety disorder had a prevalence of 16.0% for any past-year alcohol use disorder [13]. More recently, updated data from the NSMHWB, involving 8841 Australians aged 16–85 years, confirmed high rates of comorbidity, especially considering generalized anxiety disorder and social phobia [41].

Finally, some relevant epidemiological information is available also from Latin America. For example, a cross-sectional household survey in a sample of 2302 Brazilian adults from Bahia, Brazil [2], highlighted a prevalence of comorbid anxiety disorders and alcoholism of 14.4%, with an OR of 2.7 (95% CI: 1.7–4.2).

Generally, the comorbidity between anxiety and alcohol or substance use disorders appears a worldwide phenomenon, with similar prevalence rates and high and significant risk of co-occurrence as compared with general population.

A systematic review of 22 unique epidemiological surveys (1990–2014) confirmed the concerning interplay between anxiety and substance use disorders [28]. Relevant meta-analysis showed an association between any anxiety disorders and alcohol abuse (OR: 1.6; 95% CI: 1.3–2.0), abuse/dependence (OR: 2.1; 95% CI: 2-0-2.2), and dependence (OR: 2.5; 95% CI: 2.2–2.9), with similar effect size considering 12-month or lifetime alcohol use disorders. Consistently, anxiety disorders were associated with illicit drug abuse (OR: 2.4; 95% CI: 2.0–2.8), abuse/dependence (OR: 2.1; 95% CI: 1.2–3.9) and dependence (OR: 4.2; 95% CI: 3.4–5.1). Also in this case, no significant differences were found considering 12-month or lifetime illicit drug use disorders [28].

## 92.3   Etiological Hypotheses and Temporal Relationships of Comorbid Anxiety and Substance Use Disorders

The underlying mechanisms influencing the association between anxiety and alcohol/substance use disorders are unclear because of relevant clinical heterogeneity as different drugs and alcohol may not share identical relationships with different anxiety disorders. This comorbidity is a complex and heterogeneous psychopathological entity and a number of explanatory models have been proposed. Three main etiological hypotheses are worth to be mentioned.

First, an anxiety disorder may be a direct predictor of addictive behaviors. This direction of

the association is supported by evidence suggesting that some individuals may use alcohol and/or illicit substances to self-medicate their anxiety or depressive symptoms (the "self-medication" hypothesis) [26]. For example, alcohol shares several pharmacological effects with sedatives, anxiolytic, hypnotics, or anticonvulsants agents. Further scientific support for the "self-medication" hypothesis comes from longitudinal studies. Data from the NESARC on 34,653 US adults showed that those who had used alcohol or other drugs for reducing their fear, anxiety, or avoidance, had a significant risk of incident alcohol or substance dependence, with adjusted ORs of 2.6 (95% CI: 1.0–6.7) and 5.0 (95% CI: 1.7–14.2), respectively [42]. However, further findings from NESARC [32] did not support the self-medication hypothesis, highlighting that both mood and anxiety disorders may influence the transition from substance use to abuse and/or dependence rather than from abstinence to use. The representative National Comorbidity Survey (NCS) showed that a self-medication intent was present in 21.9% of individuals with any anxiety disorder, with the highest prevalence (35.6%) among people with a generalized anxiety disorder [7]. Longitudinal data seem to support the occurrence of 'primary' mood or anxiety disorders and subsequent substance use disorders among those who self-report self-medication [46]. More generally, social phobia (social anxiety disorder) has been predominantly identified as a primary disorder preceding substance use, although the temporality of other anxiety and substance use disorders is less clear. Indeed, individuals with comorbid social or specific phobia and alcohol dependence are more likely to experience anxiety disorder as primary diagnosis. On the other hand, among individuals with comorbid panic disorder or generalized anxiety disorder and alcohol dependence, it is more likely that individuals had an alcohol dependence as primary diagnosis [38]. A study based on 2801 adult Norwegian twins recently confirmed that social phobia had the strongest association with alcohol use disorder, predicting it over and above the effect of other anxiety disorders, which were better explained by shared genetic risk factors [45].

The second etiological hypothesis posits that alcohol and other substances directly promote the development of anxiety syndromes, in terms of consequences of chronic alcohol/substance use and/or related withdrawal syndromes. For example, although alcohol is a fast-acting and effective anxiolytic agent, it can also increase the levels of anxiety, when the consumption is excessive and the subjects develops withdrawal symptoms, which determine a vicious cycle between anxiety and alcohol use. Another relevant example involves early cannabis exposure that may be related to the subsequent development of an anxiety disorder. A recent study [17] on a cohort of 1756 young Australians recruited in secondary schools showed that the continuity of cannabis use from adolescence to the age of 29 was associated to a risk 3–4 times higher of having a comorbid anxiety disorder. Data from the Netherlands Mental Health Survey and Incidence Study (NEMESIS), a prospective study on 3854 adults who had no lifetime anxiety disorders at baseline, highlighted a significant association between baseline cannabis use and 3-year incidence of any anxiety disorder (especially generalized anxiety and panic disorders), after adjusting for age, gender, education, urbanicity, employment, partner status [47]. Furthermore, the existence of anxiety disorders induced by specific classes of substances, such as alcohol, cannabis, cocaine/other stimulants, and opioids, is supported by different neurobiological findings. Recent advances on the complex relationships between stress, anxiety, and alcohol use disorders, show that synaptic communication in brain regions regulating stress and anxiety-related behaviors, such as amygdale and bed nucleus of the stria terminalis, are modulated by endogenous factors like dopamine and corticotrophin-releasing factor (CRF) as well as by acute and chronic use of alcohol [44]. The CRF, a stress-related neuropeptide, has been implicated also in the anxiogenic effects of cocaine withdrawal, as well as in some of long-term effects of cocaine [18]. Cannabis, mainly through the cannabinoid type 1 (CB1) receptors, can induce biphasic responses on anxiety- and fear-related behaviors. Generally, low doses of cannabis tend to induce anxiolytic-like effects,

whereas high doses often cause an increase of anxiety symptoms [35]. Finally, as regards heroine, morphine or other opioids, it should be highlighted that the opioid system seems to play a key role in the neural modulation of anxiety. The activation of opioid system leads to anxiolytic effects both in healthy subjects and in individuals suffering from anxiety disorders since the opioid neurotransmission may serve as an adaptive mechanism addressed to blunt acute negative and distressing affective responses [15]. At the same time, blockade or down-regulation of opioid systems and second messengers is associated with the occurrence of severe anxiety, similar to opiate withdrawal [15].

The third hypothesis is that there may be an independent mediator explaining the relationship between anxiety and alcohol/substance use disorders rather than a direct causal association. Generally, studies on the common-factor models for anxiety and substance use disorders are limited, and publications directly addressing this topic are sparse and focused on alcohol use disorders. Anxiety and alcohol or substance use disorders may share genetic and environmental factors, including family history for anxiety or substance use disorders or traumatic experiences. A representative study showed that, despite it was unlikely that a family history was the third factor explaining this comorbidity, childhood trauma, at least in women, might be partially responsible for the association between these disorders [31]. Mediators of the relationship between anxiety disorders and addictive behaviors may be also some personality traits characterized by a high level of anxiety sensitivity. Individuals with increased levels of sensitivity to anxiety, and who do not have a diagnosable anxiety disorder, may be more likely to develop both anxiety and alcohol or substance use disorders. Furthermore, it has been investigated whether some molecular mechanisms could represent the common factor between anxiety and alcohol/substance use disorders. For example, it has been hypothesized that a decreased function of cAMP response element-binding protein (CREB) in the central nucleus of the amygdale might regulate both anxiety and alcohol intake via the reduced expression of neuropeptide Y (NPY), and, therefore, might provide a common link between anxiety and alcohol use disorders [39].

## 92.4   Diagnosis and Classification

Anxiety disorders among people suffering from substance use disorders, as well as alcohol or drug addictive behaviors among people with an anxiety disorder, remain often unrecognized and, consequently, untreated. Despite the scientific background of this comorbidity being mainly based on DSM-IV-TR criteria [3], diagnostic issues should necessarily take into account the modifications approved by the recently released DSM-5 [4]. As regards anxiety disorders, these no longer include neither obsessive-compulsive disorder (now in the chapter "Obsessive-Compulsive and Related Disorders"), nor post-traumatic and acute stress disorders (included in the chapter "Trauma- and Stressor-Related Disorders"). At the same time, DSM-5 includes several changes in criteria of the new chapter "Substance-Related and Addictive Disorders", such as the exclusion of the abuse/dependence dichotomy, the introduction of craving as a diagnostic criterion, and the dimensional classification of alcohol and substance use disorders.

Actually, all subjects suffering from any anxiety disorders should be screened for alcohol or substance use disorders at the initial assessment. Early diagnosis and treatment can improve consistently course, prognosis and treatment outcomes of both disorders. However, often it is difficult to ascertain the diagnosis and to assess whether anxiety symptoms are alcohol or substance-induced or represent signs of an independent anxiety disorder. Because of the overlapping of symptoms, a detailed interview is often a step needed to fully differentiate symptoms, which should resolve with abstinence, from anxiety and alcohol/substances use disorders. Therefore, it is important to carefully assess not only symptoms but also distinct diagnoses and clinical syndromes using standardized structured diagnostic interviews, such as SCID (Structured Clinical Interview for DSM Disorders), CIDI

(Composite International Diagnostic Interview), or MINI (Mini-International Neuropsychiatric Interview).

Observing symptoms over a sustained period of abstinence may represent the best way to differentiate substance-induced from independent anxiety disorders. Anxiety may return to baseline levels after the period of withdrawal, so clinicians should always re-evaluate and re-assess clinical features after an appropriate period of abstinence. The minimum duration of abstinence to establish the presence of an independent or substance-induced anxiety disorder is heterogeneous and based on half-life of involved drugs. For example, some benzodiazepines or methadone may require several weeks of abstinence to exclude a secondary anxiety disorder, whereas alcohol or cocaine necessitate shorter periods of abstinence to make valid diagnoses [5].

To diagnose a primary, and not substance-induced, psychiatric disorder, clinicians should verify whether (a) the onset of symptoms occurred before the substance use disorder, (b) the symptoms persist after a period of abstinence according to the characteristics of withdrawal course of each substance, and (c) symptoms exceed those produced by the specific misused substance. On the other hand, clinicians should suspect a secondary anxiety disorder if (a) the anxiety syndrome develops only during periods of active alcohol or substance misuse, (b) the symptoms are well-matched with specific symptoms of intoxication or withdrawal of the involved substance, and (c) the age at onset is atypical for a primary anxiety disorder.

Significant amounts of alcohol and substance use screening tools are available and may be helpful in detecting potential disorders. For example, the ASSIST (Alcohol, Smoking and Substance Involvement Screening Test), developed for the World Health Organization (WHO), is used to detect substance use and related problems in primary and general medical care settings [24]. As regards alcohol use disorders, AUDIT (Alcohol Use Disorders Identification Test) [43] is probably the most widely used screening tool. Relatively recent data from the NESDA [8], including 1756 individuals suffer-

ing from a past-year depressive and/or anxiety disorder, showed that AUDIT accurately detected alcohol dependence in depressed and/or anxious men and women, as compared to the gold standard of a CIDI-based diagnosis. However, the overall accuracy in detecting alcohol abuse was limited, without appropriate and identifiable cut-off scores for sensitivity and specificity.

The Addiction Severity Index (ASI) is a multidimensional and semi-structured interview used to measure substance use severity, health-related outcomes, and social problems in individuals suffering from alcohol and other drug use disorders, both at admission to treatment and at follow-up [34]. The ASI can be used appropriately for screening of anxiety disorders, since the clusters of psychological composite scores are significantly related to a current psychiatric diagnosis, especially depressive and anxiety disorders. Therefore, this instrument may be useful for both the assessment of substance use severity and the screening of patients who need an additional evaluation or treatment for their comorbid mental disorder.

However, psychometric scales and diagnostic interviews need to be always integrated with all other information sources useful to assess and differentiate primary and secondary anxiety disorders. Laboratory data, age of onset of anxiety and substance disorders, collateral information, and a family history for anxiety and/or substance use disorder, should be accurately collected.

## 92.5    Clinical Features, Course, and Prognosis

According to a recently published systematic review [49], anxiety, illicit drug, and alcohol use disorders accounted, respectively, for 14.6%, 10.9%, and 9.6% of overall disability-adjusted life years (DALYs) caused by mental and substance use disorders.

The comorbidity between anxiety and substance use disorders makes difficult treatment and management of both disorders, with mutual negative effects. Individuals with an alcohol use

and co-occurring anxiety disorders are significantly more disabled and use health services more than individuals without this comorbidity [13]. Furthermore, subjects with comorbid generalized anxiety and substance use disorders are more likely than those with a generalized anxiety disorder only to have a lifetime history of any psychiatric disorder, pathological gambling, and an antisocial personality disorder [1]. A severe current alcohol dependence represents an important risk factor for unfavorable course of depressive and/or anxiety disorders, with persistent and unremitted symptoms [10]. The relationship is bidirectional, since the severity of depressive/anxiety symptoms are additional independent predictors of the recurrence of an alcohol dependence [11]. Data from Wave 1 (2001–2002) and Wave 2 (2004–2005) of NESARC showed that substance users with a comorbid generalized anxiety disorder had a worse health-related quality of life, higher rates of treatment seeking, and greater self-reported drug use, supporting the need to define specific treatment options for this clinical population [30]. Similar results were found from the NCS in a variety of clinical domains, such as rates of health care utilization, additional psychiatric diagnoses, physical health problems, and interpersonal stress. Among most of comorbid individuals, social anxiety disorder onset predated that of alcohol dependence, with the former increasing the vulnerability for misusing alcohol [12].

Anxiety disorders are well-known conditions associated to suicidal behaviors. Patients with anxiety disorders are 3.0–3.5 times more likely to complete suicide, 2.5–3.0 times to have suicidal ideations, 2.5 times to attempt suicide [25]. A comorbidity for an alcohol or a substance use disorder may consistently increase this risk. Findings from NESARC study [37] highlighted that individuals with both substance use and any anxiety disorder had an OR of 3.2 (95% CI: 2.4–4.3) for suicide attempts as compared with people without these psychiatric conditions. In particular, substance users with co-occurring anxiety disorders showed a significant higher risk (OR: 1.6; 95% CI: 1.3–2.0) of suicide attempts than those without this comorbidity.

All these findings support the need of further research on innovative intervention strategies to optimally treat co-occurring anxiety and substance use disorders and to prevent clinically severe consequences.

## 92.6  Treatment and Management

Although several pharmacological and psychological treatments such as cognitive-behavioral therapy have been studied for treatment of anxiety disorders, there is a paucity of evidence on effective treatments for the comorbidity with alcohol or substance use disorders [33]. Furthermore, relevant management is complicated because of different patterns of anxiety and substance use disorders may interact, making difficult to generalize results [48]. New research directions for treatment of comorbid anxiety and substance use disorders are actually needed and should be focused on the following: (a) identification of specific comorbid relationships between these disorders and their underlying processes (e.g., anxiety sensitivity), (b) mechanisms that may maintain the comorbidity, and (c) well-conducted evaluations of treatments that target these mechanisms [6].

Treatment of co-occurring anxiety and alcohol or substance use disorders can be oriented either by dealing primarily with one of the two disorders (generally the more compelling in terms of severity) or, alternatively, by addressing these together. Over the past several decades, empirical studies and clinical guidelines recommendations have undergone a broad shift in approaching this comorbidity, highlighting the importance to provide simultaneous and integrated treatment for both disorders, regardless of the status of the comorbid condition [48]. However, the availability of substances but also the social contexts in terms of individual and local issues might influence treatment outcomes in different countries, where integrated models might perform differently [14]. Consistently, research conducted in this field has yielded inconsistent results, with some studies demonstrating no clear advantage for the simultaneous treatment of anxiety

disorders and addictive behaviors. For example, a meta-analysis [23] suggests that, due to the potential serious consequences of unsuccessful treatment for alcohol use disorders, an integration with interventions addressing co-occurring anxiety disorders could be important, even if the amount of absolute benefit is moderate or even smaller. Inconclusive results were shown also by a systematic review [22] analyzing integrated psychosocial treatment for substance use and comorbid anxiety or depressive disorders, as, although promising, these did not give any significant additional benefit. Generally, a potentially effective strategy may be the early treatment of the disorder the patient is ready to address, while, simultaneously, a motivational approach may be used to improve readiness to change the comorbid problem.

At the same time, there is a lack of consistent evidence for effective pharmacological interventions for both anxiety and substance use disorders, whereas only sporadic interventions studies are available from the scientific literature, e.g., for alcohol use disorders. Selective serotonin reuptake inhibitors (SSRIs) seem effective in reducing and preventing anxiety symptoms, but there is a lack of clinical trials assessing their efficacy in comorbid patients. Among them, paroxetine may be effective for co-occurring social anxiety and alcohol dependence [19]. In addition, preliminary data are available for buspirone in comorbid anxiety and alcohol use disorder [19]. Relevant studies have shown mixed results on comorbid generalized anxiety and alcohol use disorders, but no significant improvement in anxiety or substance use outcomes among subjects with opioid dependence receiving methadone maintenance treatment [5, 33]. Despite benzodiazepines are effective in the treatment of anxiety disorders, their use in individuals with current or lifetime alcohol or substance use disorders may be complicated by their potential for abuse and dependence. More generally, although the use of medications for comorbid psychiatric disorder is encouraged, it is still unclear whether a full detoxification should be achieved before starting psychopharmacological treatment [48].

Finally, use of agents specifically addressed to substance use disorders in individuals suffering from comorbid anxiety disorders is underexplored [5]. In one randomized study conducted at three Veterans Administration outpatient clinics on 254 patients with mental disorders and alcohol dependence, the efficacy of disulfiram and naltrexone, or their combination, was investigated. Subjects treated with an active medication showed more consecutive weeks of abstinence and less symptoms of craving than those treated with placebo, but there were no significant differences in other measures of alcohol consumption. Furthermore, subjects treated with disulfiram experienced significantly fewer obsessive-compulsive and phobic symptoms over time, whereas no clear advantage of combining medications was observed [40].

A secondary analysis of a study evaluating efficacy of naltrexone in veterans suffering from alcohol dependence, showed that among subjects taking antidepressant medications for mood and anxiety symptoms, those randomized to naltrexone had significantly smaller percent drinking days than those receiving placebo. On the other hand, for patients not on antidepressant medication the difference between naltrexone and placebo was not significant [27].

## 92.7 Conclusions

The dual diagnosis between anxiety and co-occurring alcohol or substance use disorders is a common and serious clinical issue. This comorbidity tends to complicate treatment, management, and prognosis of both disorders. Clinicians face a number of heterogeneous combinations of anxiety and substance use disorders. The prevalence of alcohol or substance use disorders among subjects with anxiety disorders is high worldwide. Etiological links and temporal relationships of this comorbidity are still unclear and, probably, multi-factorial. Individuals may misuse alcohol and substances to self-medicate their anxiety and avoidant and phobic symptoms, although these symptoms often remain unrecognized and untreated. Clinicians should assess this

comorbidity using structured diagnostic interviews, and observing symptoms over a sustained period of abstinence to differentiate substance-induced from independent anxiety disorders. A comprehensive diagnostic evaluation should include also alcohol and substance use assessment. While some pharmacological and psychosocial treatments have shown effectiveness for separate treatment of anxiety and substance use disorders, there is a lack of evidence on treatments addressed to both disorders as dual diagnosis label means more complex needs rather than two distinct problems.

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