The DSM-5 Task Force has recommended a new substance use disorder to replace substance abuse and dependence. This article provides an overview of substance abuse and dependence, a description of the DSM-5 substance use disorder, and implications and potential consequences of this change.

Keywords: DSM-5, substance use disorder, DSM-IV-TR

The Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association [APA], 2000) is currently under revision, with the fifth edition (DSM-5) set for release in May 2013. With thousands of licensed professional counselors across the United States using the DSM in their daily practice, the profession as a whole has a vested interest in the final outcome of the DSM-5.

A major proposed revision comes from the DSM-5 Substance-Related Disorders Work Group, which has recommended eliminating the current separate categories for substance abuse and substance dependence, replacing them with one disorder called "substance use disorder" (APA, 2010). Other recommended changes to this diagnostic category include adding a new "craving" criterion, eliminating the substance-related legal problems criterion, and using symptom counts to assess the severity of substance use disorder.

With an estimated 22.5 million individuals (8.9% of the U.S. population) classified with substance abuse or dependence based on the DSM-IV-TR (Substance Abuse and Mental Health Services Administration [SAMHSA], 2010), the proposed DSM-5 revisions have significant implications for how these individuals are diagnosed and treated. Counselors, therefore, need to be aware of the proposed changes and the potential impact to diagnosis and treatment planning. The purpose of this article is to (a) provide an overview of the DSM-IV-TR substance abuse and substance dependence disorders, (b) present information about the proposed DSM-5 substance use disorder, and (c) review implications and potential consequences of the new disorder.

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Currently, substance use disorders are divided into two discrete categories: substance abuse and substance dependence. The DSM-IV-TR applies 11 separate substances to each of these two classifications (e.g., alcohol, cannabis, cocaine, opioid). In practice, the substance dependence diagnosis is typically used for an individual who is physically and psychologically dependent, uses heavily, and has use-related problems (APA, 2000; Shuckit et al., 2005). In the DSM-IV-TR, an individual must meet at least three of seven dependence symptoms: tolerance; withdrawal; using larger amounts than intended; unsuccessful attempts to stop or control substance use; spending a great deal of time obtaining, using, or recovering from the effects of the substance; important activities given up or reduced because of substance use; and continued use despite substance-related physical or psychological problems.

In contrast, the diagnosis of substance abuse is given to someone who might use a substance and suffer adverse consequences, yet does not show dependence. The focus is primarily on the adverse social consequences of substance use. Diagnostically, the individual must meet at least one of the following symptoms: failure to fulfill major role obligations at work, home, or school; use in physically hazardous situations (e.g., drunk driving); substance-related legal problems; and continued use despite recurrent substance-related social or interpersonal problems (APA, 2000).

The separate substance abuse and dependence classifications were based on alcohol dependence syndrome (ADS) developed by Edwards and Gross in 1976. The ADS model characterized alcohol dependence—having the essential feature of impaired control over persistent, heavy drinking—as distinct from other alcohol-related consequences, such as social, legal, work, or health problems. This conceptualization became known as the biaxial concept of substance use disorders, with dependence constituting one "axis" or dimension, and consequences constituting the other. The biaxial concept was generalized to all drugs of abuse (Edwards, Arif, & Hodgson, 1981), and the distinction between dependence and its consequences guided the separate classifications for substance dependence and substance abuse in the DSM-III-R and DSM-IV-TR (Rounsaville, Spitzer, & Williams, 1986). The biaxial concept also assumed a hierarchical relationship between the two, with abuse considered a less severe disorder that can only be diagnosed in the absence of dependence.

Over the last 20 years, a large body of research has documented numerous problems with the differentiation between alcohol abuse and dependence. Problems became evident early in reliability and validity studies (APA, 2010). Although reliability of the DSM-IV-TR alcohol dependence diagnosis was strongly and consistently supported and is, in fact, one of the most reliable disorders in the DSM-IV-TR, the reliability for abuse...
was significantly lower, with kappa reliability coefficients around 0.6 to 0.7 (Hasin, Hatzenbuehler, Keyes, & Ogburn, 2006; Pollock, Martin, & Langenbucher, 2000; Üstün et al., 1997). Furthermore, some researchers have questioned whether diagnosing substance abuse as a psychiatric disorder based on one symptom alone was appropriate, particularly when studies found that more than 70% of individuals diagnosed with alcohol abuse met only one criterion—drunk driving (Hasin, Van Rossem, McCloud, & Endicott, 1997b; Schuckit et al., 2005).

The hierarchical view of dependence and abuse also became problematic. From this perspective, many clinicians assumed that abuse was a precursor of dependence. As such, a diagnosis of alcohol abuse could predict a clinical course leading to dependence. However, the extent to which alcohol abuse represents a prodromal phase of alcohol dependence is controversial (Hasin et al., 1997b; Hasin, Van Rossem, McCloud, & Endicott, 1997a; Schuckit & Smith, 1996; Schuckit, Smith, & Landi, 2000). For example, in two studies, 10% or fewer of respondents diagnosed with alcohol abuse developed alcohol dependence over 3- and 5-year follow-up periods (Shuckit et al., 2001, 2005).

Problems with the abuse/dependence distinction were further examined through studies that evaluated the relationship between the substance abuse and dependence criteria. Several studies using factor analysis on the DSM-IV-TR alcohol abuse and dependence criteria found a significantly better fit for a two-factor model that corresponds to abuse and dependence criteria, but with the two factors highly correlated (Grant et al., 2007; Harford & Muthen, 2001; Muthen, Grant, & Hasin, 1993; Muthen, 1995). The high correlation between abuse and dependence raised questions about the utility of the two-factor models; thus, a one-factor model was preferred. Studies using item response theory (IRT) analysis supported the one-factor model, with abuse and dependence forming a unidimensional structure with graded severity levels (Gelhorn et al., 2008; Langenbucher et al., 2004; Martin, Chung, Kirisci, & Langenbucher, 2006; Proudfoot, Baillie, & Teesson, 2006; Saha, Chou, & Grant, 2006).

A final concern with the two-factor abuse/dependence model is that of diagnostic orphans (Hasin & Paykin, 1999). Diagnostic orphans are individuals who meet one or two criteria for substance dependence, such as heavy use and/or tolerance, but do not have alcohol-related consequences, such as legal problems. Studies suggest that diagnostic orphans may be phenotypically similar to those with an alcohol abuse diagnosis, yet they qualify for neither abuse nor dependence according to the current DSM-IV-TR nosology (Ray, Miranda, Chelminski, Young, & Zimmerman, 2008).

Proposed DSM-5 Substance Use Disorder

Four major revisions have been recommended for the proposed DSM-5 substance use disorders. First, based on the research evidence that substance
abuse/dependence represents a unidimensional construct, the DSM-5 Substance-Related Disorders Work Group has proposed eliminating the substance abuse and dependence diagnoses and replacing them with one disorder, "substance use disorder," graded by severity (APA, 2010). The proposed criteria for substance use disorder will likely include 11 diagnostic criteria that are very similar to those now used in the substance abuse and dependence disorders in the DSM-IV-TR. To be diagnosed with the disorder, an individual must meet at least two criteria. The proposed 2/11 diagnostic threshold would help address concerns about diagnostic orphans by enabling them to be diagnosed and to qualify for treatment services.

Second, the work group is also considering the addition of a new diagnostic criterion to the disorder—craving. Craving is defined as a strong desire for a substance and is a common clinical symptom typically present in individuals with more severe levels of substance use disorder (APA, 2010). Jellinek et al. (1955) first recognized craving as a central feature of alcohol dependence. There is much empirical support for adding craving as a diagnostic criterion (Heinz, Beck, Grusser, Grace, & Wrase, 2009; Miller & Goldsmith, 2001; O'Brien, 2005; Oslin, Cary, Slaymaker, Colleran, & Blow, 2009; Weiss, 2005). For example, Keyes, Krueger, Grant, and Hasin (2011) analyzed data derived from the 1991–1992 National Longitudinal Alcohol Epidemiologic Survey (N = 18,352), which assessed the 11 DSM-IV-TR dependence/abuse criteria and alcohol craving in U.S. adults over the age of 17 years. They found that craving was highly related to the alcohol abuse/dependence criteria and better distinguished individuals with and without alcohol problems. Furthermore, although craving is not a diagnostic criterion of substance dependence in the DSM-IV-TR, it is one of the substance dependence criteria in the International Classification of Diseases (10th ed.; World Health Organization, 1993). Thus, including craving in the DSM-5 would increase the comparability of these two diagnostic systems.

Third, the DSM-5 Substance-Related Disorders Work Group has also recommended eliminating the legal problems criterion for substance use disorder (APA, 2010). IRT analyses of the DSM-IV-TR alcohol use disorder criteria have found such high severity estimates of the legal criterion that it is of limited value for clinicians (Martin et al., 2006; Shmulewitz et al., 2010). Furthermore, researchers have found low discrimination values and factor loadings between legal criterion and alcohol use disorder as an underlying continuum (Keyes et al., 2011; Martin et al., 2006; Mewton, Slade, McBride, Grove, & Teeson, 2011; Saha et al., 2006); as such, the criterion may not be related to the latent construct of substance use.

Finally, the DSM-5 Substance-Related Disorders Work Group has proposed the addition of a severity measure to help distinguish between individuals who have "moderate" or "severe" substance use problems. The proposed severity measure will consist of unweighted symptom counts to assess the severity level of substance use disorder, with cut scores of two to three criteria to reflect moderate severity and cut scores of four or more criteria.
to indicate severe severity (APA, 2010). Research studies assessed various measures of alcohol use disorder severity. Results indicated that when compared with scalar measures, simple unweighted symptom counts were equally effective, less time consuming, and associated with external correlates of the disorder, such as average daily volume, frequency of drinking, quantity of drinking, frequency of drinking five or more drinks, and family history (Dawson, Saha, & Grant, 2010; Gelhorn et al., 2008; Hasin & Beseler, 2009).

The DSM-5 Substance-Related Disorders Work Group has also recommended three additional severity measures to be used not for diagnosis but to evaluate change in severity over a brief period of time. As such, these measures would be useful primarily in evaluating progress in treatment. The three measures include (a) self-report of frequency of use (number of days patient used the substance, e.g., in the last week or the last month); (b) when possible, similar reports from another closely involved observer (e.g., a spouse); and (c) tests for the substance or substance-related biological products in appropriately timed samples of urine, blood, saliva, breath, or hair (such tests may disconfirm false-negative reports and encourage valid reporting; APA, 2010).

Implications and Potential Consequences of the Proposed Disorder

The proposed DSM-5 substance use disorder has many implications. These include the low symptom threshold required for diagnosis, pathologizing individuals who exhibit few or mild criteria, heterogeneity among those diagnosed, and predicted increases in prevalence rates.

First, some researchers believe that the new substance use disorder category is too lenient with a too-low diagnostic threshold. Requiring only two of 11 symptoms (2/11 threshold) would lead to using the diagnosis for many individuals whose substance involvement is mild, which has questionable clinical significance (Martin, Steinley, Verges, & Sher, 2011).

Second, some of the 11 draft criteria are ill-defined and not necessarily indicative of pathology, and some criteria are commonly misunderstood or overendorsed, particularly among young people (Martin et al., 2011). For example, in a 7-year study of 450 college students, O’Neill and Sher (2000) found that endorsement of tolerance symptoms varied over time, depending on how tolerance was operationalized. The conventional tolerance definition of “needing more to feel an effect/finding the same amount has less effect” demonstrated early high prevalence rates, which dropped dramatically by the 2nd year and continued to decline over the 7-year study period (p. 502). Another example is the symptom of “drinking more or longer than intended,” which includes the embedded assumption that a limit on use had been set; teenagers, however, typically intend to become intoxicated when they drink, rather than to keep to a limit; therefore, they often over-
endorse this symptom (Chung & Martin, 2005, p. 191). The "hazardous use" symptom is usually given for intoxicated driving, but it can reflect "simple heedlessness rather than disorder" (Martin et al., 2011, p. 1). These criteria are often incorrectly endorsed by drinkers for developmental or social reasons (e.g., conformity), rather than compulsive reasons, which increases the number of false positives (Martin et al., 2011).

Because the DSM-5 substance use disorder criteria require only two symptoms for diagnosis, there is much heterogeneity within the disorder. Although heterogeneity is partly inherent in the polythetic nature of disorders, in which a minimum number of symptoms is required for diagnosis (i.e., five out of nine), the degree of variability in the proposed 2/11 threshold is very high, with up to 55 two-symptom configurations possible (Martin et al., 2011). This means that the DSM-5 would give the same label to individuals whose substance problems are remarkably different and unlike one another. Therefore, the combined substance use disorder would lose valuable distinguishing information, lose its communicative meaning, and make determining appropriate treatment or level of care difficult (Frances, 2010).

Finally, a major concern of the proposed disorder is the estimated increase in prevalence of substance use disorders. Although the APA DSM-5 Task Force has elected to not investigate predicted changes in prevalence rates for proposed revisions, outside researchers have compared prevalence rates of the DSM-5 substance use disorder versus the DSM-IV-TR diagnosis. For example, Mewton et al. (2011) evaluated the proposed DSM-5 alcohol use disorder using epidemiological data from the 1997 Australian National Survey of Mental Health and Well-Being (N = 7,746). Under the DSM-5 criteria, prevalence of alcohol use disorders would increase by 61.7% when compared with those diagnosed under DSM-IV-TR. Martin et al. (2011) also evaluated predicted prevalence rates of the DSM-5's alcohol use disorder using data from the National Epidemiological Survey of Alcohol Use and Related Conditions. Using the current DSM-IV-TR criteria in the general population, the rate of alcohol dependence is now 5.02% and for alcohol abuse is 6.04%. Using the DSM-5, the rate of substance use disorder prevalence becomes a 12.4%.

The proposed substance use disorder, with its lowered diagnostic threshold and increased prevalence rates, leads to concerns about determining appropriate treatment or level of care and the allocation of scarce and expensive health care resources (Martin et al., 2011). Furthermore, the lack of distinction between milder and more severe forms could result in stigmatizing individuals whose substance problems are intermittent, temporary, or based on contextual and developmental factors (Frances, 2010).

**Conclusion**

The DSM-5 Substance-Related Disorders Work Group has proposed combining substance abuse and dependence into one disorder called substance...
use disorder (APA, 2010). In addition, they have recommended adding a new craving criterion, eliminating the substance-related legal problems criterion, and using unweighted symptom counts to assess the severity of substance use disorder.

The hope of the DSM-5 work group is that these proposed changes will reduce the number of problems reported for the current biaxial system conceptualization, such as poor reliability for substance abuse, the misconception of dependence and abuse as hierarchical, the problem of diagnostic orphans, and the numerous studies finding that abuse and dependence represent a unidimensional construct. Furthermore, unweighted symptom counts will be used to evaluate an individual's substance use severity level from moderate to severe.

Several researchers have expressed concerns about potential consequences of the proposed substance use disorder. First, requiring two of 11 symptoms would diagnose individuals with mild substance involvement in the same category as severe substance users. Second, some of the criteria can be misunderstood, particularly by youth, leading to overendorsement and increased false positives. Another concern is the predicted prevalence rate increase of up to 61.7% using the DSM-5 criteria as compared to the DSM-IV-TR. Finally, the 2/11 symptom threshold leads to much heterogeneity within the disorder, meaning that the DSM-5 would apply the same label to individuals whose substance use problems are very diverse.

References


