

The DRAM Vol. 11(8): How high? The prevalence and comorbidity of newly-defined alcohol use disorders in the general population

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The American Psychiatric Association updated its Diagnostic and Statistical Manual of Mental Disorders during 2013. The resulting DSM-5 changed some of the diagnostic categories, as described [here](#). For example, the DSM-5 combined alcohol abuse and alcohol dependence into one single construct called Alcohol Use Disorder (AUD; see Table 1). AUDs are highly prevalent in the United States, and people with AUDs often experience other forms of mental illness (Hasin et al., 2007). However, published national estimates of AUD prevalence are based on older DSM-IV criteria, considering abuse and dependence separately. Today's DRAM reviews the first nationally representative study on the prevalence and comorbidity of AUD in the general population (Grant et al, 2015).

Table 1: Changes between DSM-IV Alcohol Abuse/Dependence and DSM-5 Criteria for Alcohol Use Disorder

DSM-IV Alcohol Abuse/Dependence	DSM-5 Alcohol Use Disorder
Have to meet 1 of 4 criteria to qualify for alcohol abuse, or 3 out of 7 criteria to qualify for alcohol dependence	Have to endorse 2 out of 11 combined criteria to qualify
Dichotomous diagnosis results in either alcohol abuse or alcohol dependence	Diagnosis re-categorized on a severity scale as mild (meeting 2-3 criteria), moderate (meeting 4-5 criteria), or severe (meeting ≥ 6 criteria)

Legal problems criterion	Legal problems no longer a criterion for disorder
No craving criterion	Craving added to the set of criteria for disorder

Methods

- 36,309 participants completed the third wave of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC-III), a nationally representative study of alcohol use behaviors in the United States. The researchers used [probability sampling](#) to ensure the sample was representative of the US general population and achieved a response rate of 60.1%.
- The researchers interviewed participants using the Alcohol Use Disorder and Associated Disabilities Interview Schedule 5 (AUDADIS-5; Grant et al, 2011), which measures DSM-5 criteria for AUDs, nicotine use disorders (NUD), specific drug use disorders (DUDs), and some mood, anxiety, trauma, eating, and personality disorders.
- The researchers investigated the lifetime and past-year prevalence of AUD, whether it co-occurred with other disorders measured by the AUDADIS-5, and whether those with AUD reported seeking treatment.

Results

- According to the DSM-5 criteria, 13.9% of Americans had an AUD in the past year. More people—29.1%—had had an AUD during their lifetime.
- A series of [logistic regressions](#) controlling for potential risk factors found that people with DSM-5 defined AUD were more likely than those without AUD to have a drug use disorder, major depressive and bipolar I disorder, posttraumatic stress disorder, and antisocial and borderline personality disorders (see Table 2).
- In another set of analyses, the researchers used DSM-IV criteria to compare the prevalence of combined AUD from the NESARC-III against the earlier NESARC-II, conducted during 2004-2005 (Hasin et al., 2007). The rate of past-year AUD increased from 8.5% to 12.7%, and the rate of lifetime AUD increased from 30.3% to 43.6%.

Table 2: [Odds Ratios](#) and [Confidence Intervals](#) of 12-Month and Lifetime DSM-5 AUD and other Disorders (adapted from Grant et al, 2015).

Disorder	Past Year AUD		Lifetime AUD	
	Any	Severe	Any	Severe
Drug use disorder	3.3* (2.88-3.76)	5.3* (4.52-6.27)	4.1* (3.72-4.57)	6.4* (5.76-7.22)
Major depression	1.2* (1.08-1.36)	1.4* (1.19-1.76)	1.3* (1.15-1.39)	1.3* (1.18-1.50)
Bipolar I	1.4* (1.08-1.78)	1.4* (1.03-1.90)	2.0* (1.59-2.44)	2.4* (1.84-3.11)
Antisocial personality disorder	1.6* (1.28-1.94)	1.8* (1.40-2.36)	1.9* (1.67-2.26)	2.4* (2.06-2.83)
Borderline personality disorder	1.9* (1.66-2.23)	2.5* (2.02-3.17)	2.0* (1.74-2.19)	2.5* (2.17-2.87)
Posttraumatic stress disorder	1.0 (0.86-1.22)	1.2 (0.93-1.57)	1.3* (1.10-1.48)	1.4* (1.19-1.68)

Limitations

- As with most surveys, self-reports of behavior and symptoms can be unreliable. Survey respondents might misinterpret questions about some symptoms of DSM-5 alcohol use disorder or intentionally mis-report, which could artificially inflate the prevalence or conversely, lead to underreporting of conditions.
- This article reported only on cross-sectional results from the NESARC-III. Cross-sectional designs cannot establish causality or track the emergence of symptoms over time.

Conclusion

Using the new DSM-5 criteria, the researchers found that nearly 14% of American adults—nearly 1 in 7 adults- experienced an alcohol use disorder in the past year. The study also found a high level of comorbidity between AUDs and other mental

health disorders, especially substance and mood disorders. This indicates a need for educating mental health practitioners to treat multiple conditions. The NESARC-III indicated a higher prevalence of AUDs in the general population compared to one decade earlier, for reasons that are still unclear. Future longitudinal studies could trace the development of symptoms and comorbidity patterns over time, improving our understanding of the onset and interaction of alcohol and substance use disorders with other psychiatric disorders.

— Kat Belkin

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