The DRAM, Vol. 10(6) – When is a disorder a disorder? Reconceptualizing alcohol use disorder

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The APA's Diagnostic and Statistical Manual (DSM: American Psychiatric Association, 2000) uses a count of criteria within a certain domain to define alcohol use disorder (i.e., endorsing one of four criteria for DSM-IV alcohol abuse or three of nine criteria for DSM-IV alcohol dependence, or two of eleven criteria for DSM-5 alcohol use disorder). Studies suggest that this approach to diagnosis tends to overestimate alcohol use disorders in the general population (Regier et al., 1998). This week the DRAM reviews a study that applied a theoretically-derived definition of alcohol use disorder to existing data to improve the conceptual clarity and validity of alcohol use disorder diagnosis (Wakefield & Schmitz, 2014).

Methods

- In this review, we report on the study's findings from one general population survey[1]:
    - 18-54 year olds (N=7,599) from the National Comorbidity Survey (NCS: Kessler et al., 1997).
- NCS participants completed full diagnostic interviews measuring lifetime and past year occurrence of multiple mental health disorders, including alcohol use disorder.
- Researchers re-defined alcohol use disorder as requiring evidence of ***both*** harm and dysfunction:
    - They operationalized harm as endorsement of one or more alcohol use disorder criteria related to negative consequences (i.e., interference with responsibilities, interference with other valued activities, relationship problems, risky behavior, legal problems, health problems, emotional problems).
    - They operationalized dysfunction as endorsement of one or more

criteria related to inability to control drinking (i.e., withdrawal, inability to quit, irresistible urge).

- The researchers compared the prevalence rates obtained using this definition to those obtained using standard DSM-IV and DSM-5 definitions, and examined how the different definitions related to service utilization and duration of disorder.

Results

- The Figure displays prevalence rates of alcohol use disorder using DSM criteria counts and using the harm and dysfunction rules.
- For both lifetime and past year rates, rates obtained using the harm and dysfunction definition were significantly lower than those using DSM count criteria.
- Participants with alcohol use disorder defined by the harm/dysfunction criteria had longer disorder duration, and higher rates of Alcoholics Anonymous and Narcotics Anonymous attendance, treatment-seeking, and comorbidity than participants with alcohol use disorder defined by standard criteria (see Figure).

	DSM-IV Criteria[a] [% or M (95%CI)]	**DSM-5 Criteria[b] [% or M (95%CI)]**	**Harm/Dysfunction Criteria[c] [% or M (95%CI)]**
% Qualifying for Lifetime Alcohol Use Disorder*	24.9 (23.1, 26.7)	19.5 (18.0, 21.0)	6.8 (5.9, 7.7)
% Qualifying for Past Year Alcohol Use Disorder*	9.9 (8.9, 11.0)	9.8 (8.9, 10.7)	4.3 (3.7, 5.0)
Mean # of Years w/ Disorder among Those Who Qualified for Disorder*	8.3 (7.6, 9.0)	9.1 (8.3, 9.9)	12.1 (11.1, 13.1)
% of Those Who Qualified for Disorder Reporting Having Ever Sought Treatment*	11.8 (10.4, 13.3)	14.9 (12.9, 16.8)	27.1 (22.1, 32.2)
% of Those Who Qualified for Disorder Reporting Any AA or NA Attendance*	18.4 (15.7, 21.1)	22.6 (19.1, 26.0)	44.6 (38.3, 50.9)
% of Those Who Qualified for Disorder Also Qualifying for Mood or Anxiety Disorder*	47.7 (44.0, 51.4)	50.7 (47.0, 54.4)	62.4 (57.4, 67.4)

Figure. Alcohol use disorder prevalence rates, duration, and associated help-seeking for three different operationalizations of disorder (adapted from Wakefield & Schmitz, 2014). Click image to enlarge.

Note. 95% CI = 95% Confidence Interval; AA = Alcoholics Anonymous; NA = Narcotics Anonymous

*Harm/Dysfunction significantly different from DSM-IV and DSM-5, $p < .05$

[a] DSM-IV rules for diagnosis of alcohol use disorder: Endorsing one of four criteria for alcohol abuse or three of nine criteria for alcohol dependence

[b] DSM-V (published in 2013) rules for diagnosis of alcohol use disorder: Endorsing two of 11 criteria for alcohol use disorder.

[c] Harm/Dysfunction Criteria rules for diagnosis of alcohol use disorder: Endorsing at least one harm-related criterion and at least one dysfunction-related criterion.

Limitations

- All of the data rely on self-report and in some cases retrospective self-report. Self-report can be influenced by multiple conscious and subconscious biases.
- DSM-5, though it bases diagnosis on counts of criteria, is not meant to be used to make dichotomous diagnoses. Individuals score along a severity continuum for alcohol use disorder; therefore, the DSM-5 diagnostic rules are more nuanced than the current study suggests.
- It is possible that the harm/dysfunction criteria identify more severe cases of alcohol use disorder at the expense of excluding mild cases that might be particularly amenable to intervention.

Conclusions

Because our current diagnostic criteria for substance use disorders rely on counts of various diverse criteria, it is unclear that they identify a single underlying construct. The reviewed study provides a theoretical basis for diagnosis and the results suggest that this diagnostic approach might be more valid and conceptually meaningful than the current approach.

– Sarah Nelson

What do you think? Please use the comment link below to provide feedback on this article.

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[1]The study reported results from both the National Comorbidity Survey and the Epidemiologic Catchment Area (ECA) Study. The results from the ECA study were similar to those from the NCS, but less comprehensive and are not presented here.