DSM-IV Alcohol Abuse Due to Hazardous Use: A Less Severe Form of Abuse?*

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ABSTRACT. Objective: A majority of individuals that meet criteria for alcohol abuse based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), do so by endorsing the hazardous use criterion. We used a large, nationally representative data set to investigate whether alcohol abuse due to hazardous use is distinct from abuse attributable to other abuse criteria and whether abuse due to hazardous use is a less severe form of alcohol abuse. **Method:** Two waves of data, collected 3 years apart, from 34,653 individuals who participated in the National Epidemiological Survey on Alcohol and Related Conditions were used. Logistic regression was used to compare those with alcohol abuse due to hazardous use and those with alcohol abuse due to other criteria across several sociodemographic and psychiatric correlates at Wave 1 and across alcohol-related outcomes at the 3-year follow-up. Those with a lifetime history of alcohol dependence at Wave 1 were excluded. **Results:** Abuse due to hazardous use was more commonly noted in older individuals, those not living below the poverty line, and those without nicotine dependence and was more likely to be noted in White participants. Abuse due to hazardous use was also associated with lower rates of problematic drinking, alcohol dependence, and help seeking at 3-year follow-up. **Conclusions:** Individuals endorsing hazardous use are at greater risk than those endorsing no abuse criteria, but abuse due to hazardous use may represent a less severe form of alcohol-use disorders. This is troubling, because current DSM conceptualizations allow for endorsement of hazardous use to denote alcohol-use disorders. Future classifications may wish to consider a higher threshold for alcohol-use disorders, particularly when hazardous use is endorsed. (*J. Stud. Alcohol Drugs, 71,* 857-863, 2010)

THE MEASUREMENT CHARACTERISTICS of criteria used to assess Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994), alcohol abuse and dependence have been a subject of considerable scientific inquiry. Meeting criteria for DSM-IV alcohol abuse requires the endorsement of any one of four abuse criteria. These include (a) failure to fulfill major role obligations (e.g., taking care of family, work, school); (b) recurrent legal problems attributable to alcohol use; (c) continued use despite interpersonal/social problems, such as fights or arguments with family and friends; and (d) recurrent use in hazardous situations (e.g., driving a motor vehicle). Of these criteria, the highest endorsement is often reported for hazardous use—for instance, Grant (2000) found that meeting criteria for alcohol-use disorders by endorsing hazardous use was the most common subtype of alcohol abuse in a study of the U.S. general population.

More formally, several psychometric analyses using item response theory have examined the ability of individual abuse and dependence criteria to distinguish between individuals at high and low risk for alcohol-use disorders (Feingold and Rounsaville, 1995; Harford et al., 2009; Kahler and Strong, 2006; Langenbucher et al., 2004; Nelson et al., 1999; Saha et al., 2006). Across a host of these studies, the abuse criterion of hazardous use, or recurrent use of alcohol in hazardous conditions (Criterion A2), has been found to have high endorsement rates, moderate difficulty (where a criterion functions along a gradient of risk/liability distribution), and low discrimination (how well the criterion distinguishes those at high and low liability). This implies that, although a fairly large number of individuals endorse hazardous use, the criterion itself is indicative of only a mildly increased liability or risk to alcohol-use disorders. For instance, in the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), Saha et al. (2006, 2007) report intermediate severity but poor discrimination for hazardous use. This is also consistent with prior epidemiological investigations, such as that by Dawson et al. (2010), which found hazardous use to have among the highest endorsement rates and lowest severity in a nationally representative data set. Work by Proudfoot et al. (2006) also found hazardous use to have low discrimination and increased endorsement in an Australian community sample. Similarly, a recent multisite study of alcohol-use disorders in emergency room patients (Borges et al., 2010) found hazardous use to have the lowest discrimination, although the severity was considerably higher than that reported in general population samples.

When examining the correlates and short-term sequelae of alcohol abuse due to hazardous use or to other criteria,

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it is important to consider the potential role of concomitant alcohol dependence. Specifically, meeting criteria for abuse (either with hazardous use alone or with any combination of other abuse symptoms) may correlate with varying outcomes depending on whether criteria were also met for dependence, and this effect may be further compounded by the severity and chronicity of the dependence syndrome. Furthermore, current nosology allows for alcohol dependence to be hierarchically superior to DSM-IV abuse, such that meeting criteria for dependence subsumes a diagnosis of abuse. To focus more carefully on alcohol abuse and, consequently, so that subjects met criteria for an alcohol-use disorder by endorsing hazardous use alone, we chose to exclude from the current analyses those subjects who also reported co-occurring alcohol dependence. The fairly large sample size available to us made this feasible.

In the present study, we disentangle DSM-IV abuse into abuse attributable to endorsement of hazardous use and that due to other abuse criteria. Using two waves (3 years apart) of interview data collected from a nationally representative U.S. sample of more than 34,653 subjects, we examined (a) the sociodemographic and psychiatric correlates of abuse due to hazardous use (with or without other abuse criteria) versus other symptoms of alcohol abuse and (b) alcohol-related outcomes, at 3-year follow-up, in those endorsing hazardous use versus other symptoms of alcohol abuse.

Method

Sample

The NESARC is a nationally representative sample of 43,093 participants ages 18-99 years (at Wave 1). Comprehensive details regarding the survey design and sample characteristics are available elsewhere (Grant et al., 2003b). Wave 1 was collected during 2001-2002 by the U.S. Bureau of the Census on behalf of the National Institute on Alcohol Abuse and Alcoholism, and the sample includes data from adult, noninstitutionalized U.S. citizens and noncitizens (including Alaska and Hawaii). Approximately 57% of the sample was female, and 19% of the sample was Hispanic (76% White), with an oversampling for non-Hispanic Black households and young adults ages 18-24 years. After complete description of the study to subjects, informed consent was obtained. (Statements regarding the strict confidentiality of respondent privacy are available elsewhere; Grant et al., 2003b) The Alcohol Use Disorder and Associated Disabilities Interview Schedule–IV (AUDADIS-IV) was used to collect interview data from all individuals. The reliability and validity of assessments from the AUDADIS-IV are good and have been discussed in detail in related publications (Grant et al., 2003a; Ruan et al., 2008). A 3-year follow-up interview has also been completed. A response rate of 86.7% (Ruan et al., 2008), or an effective sample size of 34,653, with exclusions due to death, deportation, and mental or physical impairment, was achieved. The cumulative response rate at Wave 2 was the product of the Wave 2 response rate and the response rate from Wave 1 (81.0%), or 70.2%, and compares favorably with many cross-sectional studies. The current analyses use data on 24,524 individuals who reported having consumed at least one alcohol beverage during their lifetime but who did not meet criteria for a lifetime diagnosis of DSM-IV alcohol dependence (including past year and before past year) at Wave 1 and who had follow-up data at Wave 2.

Measures

Lifetime DSM-IV abuse criteria were coded using the AUDADIS-IV items.

Hazardous use. Hazardous use was assessed as endorsement of either recurrent use in situations where there was an increased chance of getting hurt or more than once driving a vehicle while drinking or driving a vehicle after having too much to drink.

Abuse due to other criteria. DSM-IV abuse criteria also included failure to fulfill major role obligations (drinking interfered with taking care of home/family, or job/school troubles because of drinking), recurrent legal problems (was arrested or had other legal trouble because of drinking), or continued use despite social/interpersonal problems (got into physical fights due to drinking or continued to drink despite trouble with family/friends).

Wave 1 correlates. In addition to sex, age (dummy coded as quintiles representing 18-29, 30-38, 39-48, 49-60, and 61 years or older at Wave 1), self-reported White ethnicity, and living below the poverty line at Wave 1 (based on published U.S. poverty thresholds), we used DSM-IV lifetime diagnoses of conduct disorder, major depressive disorder, manic disorder, generalized anxiety disorder, posttraumatic stress disorder (from a Wave 2 assessment adjusted to reflect disorder during Wave 1), panic disorder (with or without agoraphobia), social anxiety disorder, nicotine dependence, and any illicit drug abuse/dependence to characterize those reporting abuse due to hazardous use or due to other criteria.

Wave 2 alcohol-related outcomes. To determine drinking patterns in those reporting hazardous use or other abuse criteria at Wave 1, several alcohol-related measures (converted to dichotomous measures from self-reported categorical variables) were drawn from Wave 2. Where reports from the past 12 months and the period before the past 12 months were available, we created a Since Last Interview measure—however, for some measures, only past-12-month reports were available.

Current drinking: The participant consumed at least 1 drink in the past 12 months.

Recent occasional drinking: The subject consumed 12 or more drinks in the past 12 months.

Daily drinking: The person drank every day or nearly every day, either in the past 12 months or when drinking the heaviest since the last interview.

At-risk drinking: The individual usually consumed four or more (for women) or five or more (for men) alcoholic drinks in a drinking day, either in the past 12 months or when drinking the heaviest since the last interview.

Weekly heavy episodic drinking: At least once a week, the participant drank five or more (men) or four or more (women) drinks in 2 hours or less in the past 12 months.

Drank before 3 p.m.: At least once a week, the subject consumed alcoholic beverages before 3 p.m., in the past 12 months—this measure is related to an item from the Michigan Alcoholism Screening Test (MAST) (Selzer, 1971).

Drank after midnight: At least once a week, the person consumed alcoholic beverages after midnight in the past 12 months.

Drank alone: At least once a week, the individual consumed alcoholic beverages while alone in the past 12 months—this measure has been shown to be indicative of problem drinking (Horn et al., 1992) and relapse (Rohsenow and Monti, 1999).

Drank twice a day: At least once a week, the participant drank on two or more occasions on the same day in the past 12 months.

DSM-IV abuse: The subject met criteria for DSM-IV abuse since the last interview.

DSM-IV dependence: The individual met criteria for DSM-IV dependence since the last interview.

Got help: The participant had gone somewhere or saw someone to get help for drinking since the last interview.

Statistical analyses

Multivariate logistic regression models were fitted to data in STATA (Version 9.1) (StatCorp LP, College Station, TX). Dummy variables representing abuse due to hazardous use (with or without other criteria) and abuse due to other criteria were jointly modeled and a post hoc Wald chi-square test for the equality of the two odds ratios was used to determine whether the strength of the associations differed between the two types of abuse. Those also meeting criteria for a lifetime diagnosis of DSM-IV dependence at Wave 1 were excluded from these analyses to avoid heterogeneity (i.e., abuse with and without dependence). All analyses controlled for sex, dummy-coded age, ethnicity, and poverty. Additionally, in the multivariate models testing for the association between abuse type at Wave 1 and drinking outcomes at Wave 2, a lifetime diagnosis of conduct disorder was included to exclude the possible confound of childhood disruptive behavior in predicting escalation of drinking.

All analyses were appropriately weighted, clustered on primary sampling units (PSUs), and adjusted for strata (Grant et al., 2003b) and were conducted using the *svy* options in STATA, which allows for specification of design effects (weights, PSUs, and stratum). The *idonepsu* option was used to account for strata with single PSUs (Sarver, 2001). Sampling weights, PSUs, and strata were used for the combined Wave 1–Wave 2 sample. Relevant to these analyses, we also examined whether Wave 1 sociodemographic and psychiatric covariates were associated with nonresponse at Wave 2. We noted that sociodemographic measures, such as living below the poverty line, reporting hazardous use, and select psychopathology (such as internalizing disorders and drug and alcohol dependence) were associated with Wave 2 response. However, as noted by Grant et al. (2009), combined Wave 1–Wave 2 sampling weights adjust for differential response rates due to psychopathology and other factors.

Results

Abuse due to hazardous use or other criteria

Of the 24,525 subjects who had used alcohol but never met criteria for alcohol dependence, 24.4% (n = 5,981) met criteria for a lifetime diagnosis of DSM-IV alcohol abuse. Hazardous use was the most commonly endorsed abuse criterion, with 22.1% of the entire sample (without dependence) endorsing it. Of those meeting criteria for abuse (without dependence, n = 5,981), 64.5% did so by endorsing hazardous use alone. The endorsement rates of the other criteria were considerably lower (failure = 1.4%, legal = 4.3%, social/interpersonal = 5.6%), and only 8% of those meeting criteria for DSM-IV abuse without dependence did so solely due to one of these three criteria.

Table 1 shows the prevalence of abuse attributable to endorsement of hazardous use alone compared with endorsement of other abuse criteria (or hazardous use in conjunction with other abuse criteria) by sex and age. In general, DSM-IV alcohol abuse was more common in men (63%). Prevalence was also highest in those ages 39-48 years. In men, the prevalence of abuse attributable to hazardous use alone was fairly comparable with those for other abuse until the age of 38 years, after which abuse attributable to hazardous use markedly exceeded the prevalence of other forms of abuse. The difference in prevalence was far more dramatic for women, who consistently were more likely to meet criteria for abuse without dependence due to hazardous use alone. Hence, women and older men were considerably more likely to meet criteria for a lifetime history of DSM-IV abuse without dependence due solely to endorsement of hazardous use.

Correlates of hazardous use and abuse due to other criteria

Due to the fairly small number of individuals (n = 84) endorsing two or more abuse criteria that did not include hazardous use, we collapsed categories to create variables representing abuse due to hazardous use (irrespective of

TABLE 1. Prevalence of hazardous use (only) and DSM-IV abuse attributable to other criteria in 24,525 NESARC alcohol users without DSM-IV alcohol dependence

	Men (n = 10,558)			Women (n = 13,967)		
Age	n for each age category	Hazardous use only (n = 2,183)	Other abuse (n = 1,564)	n for each age category	Hazardous use only (n = 1,673)	Other abuse (n = 561)
18-29	1,791	11.4%	13.3%	2,566	9.7%	5.7%
30-38	1,909	18.8%	16.3%	2,747	13.9%	5.0%
39-48	2,384	23.8%	15.4%	2,928	16.1%	4.6%
49-60	2,152	22.7%	16.3%	2,765	11.8%	3.6%
≥61	2,322	19.1%	11.8%	2,961	5.7%	2.0%

Notes: Percentages are based on the n reported for each category. For instance, 9.7% of 2,566 18- to 29-year-old women met criteria for abuse due to hazardous use alone. Results for those without abuse are not shown but may be calculated as 100 − (hazardous use % + other abuse %). DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; NESARC = National Epidemiologic Survey on Alcohol and Related Conditions.

other criteria) and abuse due to any criteria other than hazardous use (irrespective of number of criteria). Compared with those not meeting criteria for abuse, older individuals (odds ratio [OR] = 1.26, 95% CI [1.15, 1.38]) and Whites (OR = 1.82, 95% CI [1.62, 2.05]) were more likely to meet criteria for abuse due to hazardous use, whereas those living below the poverty line (OR = 0.51, 95% CI [0.46, 0.59]) were less likely to meet criteria for abuse due to hazardous use. Although women were less likely to meet criteria for abuse (OR = 0.42, 95% CI [0.33, 0.53]), they did not show an overrepresentation of endorsement of hazardous use or other abuse criteria.

Compared with the category of no abuse, meeting criteria for abuse was significantly associated with a lifetime history of other DSM-IV psychopathology and substance-use disorders. However, as shown in Table 2, these psychiatric diagnoses tended to be more highly correlated with abuse attributable to other criteria compared with abuse due to hazardous use, although a majority of these differences were not statistically significant. DSM-IV nicotine dependence and manic disorder were significantly more associated with abuse due to other criteria, whereas any illicit drug dependence was more associated with abuse due to hazardous use.

Three-year drinking outcomes in those with hazardous use and abuse due to other criteria

Rates of all drinking outcomes at Wave 2 were lowest in the no abuse category. A further comparison of alcohol-related outcomes at the 3-year follow-up interview (Wave 2) by

TABLE 2. Correlates (adjusted for sex, age, White ethnicity, and poverty) of abuse including and excluding hazardous use in 24,525 NESARC participants who report lifetime alcohol use but do not meet criteria for DSM-IV alcohol dependence

	Endorsing (%)			Odds ratio [95% CI]	
Variable	No abuse (n = 18,544)	Hazardous use (n = 5,415)	Excluding hazardous use (n = 566)	Hazardous use	Excluding hazardous use
Conduct disorder	2.0%	6.6%	10.6%	2.78 [2.27, 3.41]	3.85 [2.66, 5.56]
Major depressive disorder	16.7%	20.2%	24.6%	1.67 [1.52, 1.85]	1.95 [1.51, 2.52]
Manic disorder	2.5%	3.3%	7.4%	1.33 [1.05, 1.69]*	2.44 [1.60, 2.71]*
Generalized anxiety disorder	3.9%	5.1%	6.6%	1.64 [1.36, 1.97]	1.86 [1.22, 2.83]
Posttraumatic stress disorder	7.9%	8.9%	10.8%	1.19 [1.01, 1.42]	1.66 [1.15, 2.40]
Panic disorder	4.8%	5.8%	7.4%	1.65 [1.40, 1.94]	2.34 [1.52, 3.59]
Social phobia	4.0%	6.1%	5.9%	1.81 [1.51, 2.17]	1.46 [0.91, 2.33]
Nicotine dependence	11.1%	25.1%	30.8%	2.79 [2.54, 3.06]*	3.76 [2.98, 4.75]*
Any illicit drug abuse/dependence	3.5%	18.9%	17.8%	5.93 [5.25, 6.81]*	4.38 [3.25, 5.90]*

Notes: Odds ratios that do not include 1.0 in the 95% confidence interval (CI) are statistically significant. NESARC = National Epidemiologic Survey on Alcohol and Related Conditions; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.
*Statistically different from each other in post hoc tests.

TABLE 3. Drinking consequences at 3-year follow-up (adjusted for age, sex, White ethnicity, poverty, and conduct disorder) of abuse including and excluding hazardous use in 24,525 NESARC participants who report lifetime alcohol use but do not meet criteria for DSM-IV alcohol dependence.

	Endorsing (%)			Odds ratio [95% CI]	
Variable	No abuse (n = 18,544)	Hazardous use (n = 5,415)	Excluding hazardous use (n = 566)	Hazardous use	Excluding hazardous use
Current drinker	69.5	79.3	75.6	1.30 [1.16, 1.45]	1.47 [1.09, 1.97]
12 drinks in past 12 months	51.6	68.9	67.5	1.56 [1.40, 1.74]	1.81 [1.38, 2.37]
Daily drinking (SLI)	7.0	12.0	12.7	1.47 [1.27, 1.70]	1.95 [1.39, 2.74]
Drank 5+/4+ drinks/day SLI	5.2	11.1	22.4	2.00 [1.73, 2.70]*	3.45 [2.64, 4.51]*
Past-12-month weekly heavy episodic drinking	0.7	1.4	4.2	1.60 [1.07, 2.40]*	2.57 [1.50, 4.40]*
Past-12-month weekly drank before 3 P.M.	2.0	4.1	7.1	1.63 [1.27, 2.10]*	3.48 [2.24, 5.41]*
Past-12-month weekly drank after midnight	2.2	3.6	7.1	1.63 [1.29, 2.06]	2.32 [1.48, 3.66]
Past-12-month weekly drank alone	5.9	10.3	11.1	1.67 [1.44, 1.94]	2.15 [1.57, 2.93]
Past-12-month weekly drank ≥2 occasions in a single day	1.1	1.8	3.5	1.57 [1.08, 2.27]*	3.02 [1.70, 5.38]*
DSM-IV abuse SLI	5.4	18.5	17.5	3.46 [3.02, 3.97]	3.05 [2.25, 4.14]
DSM-IV dependence SLI	2.7	6.8	13.0	1.96 [1.57, 2.45]*	2.89 [2.05, 4.07]*
Got help for drinking SLI	0.6	1.2	3.5	1.97 [1.30, 2.99]*	5.17 [2.66, 10.05]*

Notes: Odds ratios that do not include 1.0 in the 95% confidence interval (CI) are statistically significant. NESARC = National Epidemiologic Survey on Alcohol and Related Conditions; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; SLI = Since Last Interview measure.
*Statistically different from each other in post hoc tests.

abuse due to hazardous use and due to other criteria is presented in Table 3. Overall, with the exception of current and recent occasional drinking as well as DSM-IV abuse since the last interview, all drinking outcomes were considerably more associated with DSM-IV abuse (without dependence) due to criteria other than hazardous use. A number of these differences were statistically significant—most notably, rates of DSM-IV alcohol dependence (since last interview) were higher in the abuse due to other criteria category than in the abuse due to hazardous use category. Because our initial data set excluded a prior history of alcohol dependence, this indicates that new onsets of alcohol dependence were more common in those with abuse due to other criteria. This could not be attributed to subthreshold dependence at Wave 1, because both groups were equally likely (OR = 11.1 [without subthreshold dependence] vs. 11.3 [with subthreshold dependence]) to have increased likelihood of endorsing one to two dependence symptoms. Weekly episodic heavy drinking, drinking 5+/4+ drinks per day, weekly drinking before 3 P.M., and weekly drinking twice a day were more highly correlated with abuse due to other criteria. Seeking help for drinking since the last interview was also more frequently endorsed in the abuse due to other criteria category.

Discussion

In the current study, we sought to characterize a lifetime history of DSM-IV abuse without dependence: abuse due to hazardous use and abuse due to other criteria. Abuse due to other criteria was more commonly noted in younger individuals, those living below the poverty line, and those with nicotine dependence and was less likely to be noted in White participants. We also compared the drinking behaviors associated with these two categories of abuse—abuse due to other criteria likely represents a more severe form of alcohol-use disorders, because higher rates of problematic drinking, alcohol dependence, and help seeking were noted in this category.

Our study finds that there is considerable heterogeneity in individuals meeting criteria for DSM-IV abuse and that, when abuse is attributable to hazardous use, it represents a less severe form of alcohol-use disorders. This observation is congruent with prior work demonstrating that group differences in alcohol abuse are largely attributable to the frequent endorsement of hazardous use and the consequent reduction in overall impairment associated with abuse (Grove et al., 2010). Research also demonstrates that socioeconomic status

can modify the likelihood of endorsing hazardous use (e.g., driving while drinking is likely to be relevant to those who own vehicles; Keyes and Hasin, 2008)—this led Babor and Caetano (2008) to recommend that the prevalence of abuse always be accompanied by the prevalence of individual criteria, because a majority of abuse cases can be attributed to hazardous use.

The extant psychometrics literature has demonstrated low discriminative utility (or factor loadings) for the hazardous use criterion (Proudfoot et al., 2006; Saha et al., 2006, 2007). However, unlike the abuse criterion of legal problems, which often has comparably low factor loadings/discrimination but is rarely endorsed, hazardous use is among the most commonly endorsed abuse (or dependence) criterion. In our data, exclusion of hazardous use would reduce lifetime rates of DSM-IV abuse (without dependence) from 24.4% to 8.7%. Nonetheless, as shown by our data, when compared with individuals not meeting criteria for alcohol abuse, those meeting criteria for DSM-IV alcohol abuse due to hazardous use do report higher levels of comorbid psychopathology and have adverse drinking outcomes at follow-up. As a consequence, the diagnostic category of DSM-IV alcohol abuse includes individuals who are markedly heterogeneous in their liability to further alcohol-related problems and alcohol-use disorders.

Among those meeting criteria for alcohol abuse, hazardous use is a commonly reported criterion (Kahler and Strong, 2006; Saha et al., 2006, 2007). Given its ubiquitous nature, how can investigators continue to use this poorly discriminating criterion in their research? First, the apparent heterogeneity in the diagnostic category of abuse emphasizes the importance of using quantitative traits that capitalize on studying the range of variance and inter-criterion covariance, such as a factor score from an item-response or confirmatory-factor model. This is somewhat distinct from a symptom count, say of 1-11 for the 4 abuse and 7 dependence criteria in that, unlike a symptom count where a score of 1 may indicate abuse due to hazardous use or abuse due to some other criterion, a psychometric model incorporates information on measurement characteristics of each criterion into the computation of the score. This would, potentially, minimize the impact of heterogeneity within a diagnostic category attributable to criterion quality without hindering the prevalence of diagnostic abuse. Second, the criterion content of hazardous use can be improved—this could be accomplished by adding items that increased the difficulty of the criterion (e.g., hazardous use resulting in negative consequences) or by requiring a higher frequency of recurrent hazardous use (e.g., multiple instances of hazardous use). These additional items may be tailored not only to modestly reduce the high endorsement rates of hazardous use but also to increase the specificity of the criterion. However, this would lead to a reduction in rates of alcohol abuse. A third avenue would be to modify the number of criteria required for a diagnosis of abuse or, more specifically, to require more than one criterion for a diagnosis if hazardous use is endorsed. Given the large number of individuals in our data (64.5% of all those meeting criteria for abuse without dependence) who meet criteria for abuse solely on the basis of hazardous use, this latter option may also influence the prevalence of abuse in the general population. For instance, in these data, rates of lifetime abuse (with and without dependence) would decline from 32% to 13% if two or more symptoms were required for a diagnosis of abuse.

Recently, the DSM-V taskforce (see www.dsm5.org) provided an outline for proposed changes to the diagnosis of alcohol-use disorders. Included in these proposed changes is a combination of abuse and dependence criteria and the use of a severity continuum where endorsement of two or three abuse or dependence criteria (excluding legal problems and, potentially, with the addition of craving) would reflect moderate risk for alcohol-use disorders, whereas endorsement of four or more criteria would result in a diagnosis of severe liability to alcohol-use disorders. The elimination of the dichotomy between abuse and dependence is the first step toward excluding heterogeneity in the definition of alcohol-use disorders as shown in the present analyses.

These data are drawn on adults from a representative U.S. sample, and results may not generalize to clinical samples or to other cultures. Nonresponse to follow-up, although accommodated using sample adjustments, may have influenced our findings. Furthermore, our analyses used lifetime measures, which may be subject to recall bias. Analysis of past-12-month reports of hazardous use may serve as an alternative and should be examined in the future. However, from a clinical perspective, our findings suggest that, regardless of the symptoms by which a person meets the criteria for abuse, individuals with abuse symptoms are likely to be at heightened risk for a range of adverse correlates, for escalation of drinking, and for possible development of alcohol dependence. Nonetheless, the relative severity of these risks varies across different criteria, and, in particular, individuals who meet criteria for abuse by virtue of endorsing criteria other than hazardous use appear to have poorer outcomes.

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