Correspondence

Reply to: Insight May Limit Identification of Eating Disorders

To the Editor:

In their letter to the editor, Brodrick and McAdams (1) raised two measurement-related concerns regarding our previous report (2) on the prevalence and correlates of eating disorders (EDs) based on DSM-5 criteria using data from the 2012 to 2013 National Epidemiological Survey on Alcohol and Related Conditions-III. This DSM-5–based study (2) reported lower prevalence estimates for both bulimia nervosa and binge-eating disorder and a lower persistence rate for anorexia nervosa (AN) than expected based on previous DSM-IV studies (1,3). We (2) and a commentary by Hudson and Pope (3) highlighted these discrepancies with the only other nationally representative U.S. survey—the 2001 to 2003 National Comorbidity Survey Replication (4)—and the World Health Organization Survey (5), and discussed possible contributors to variations in prevalence estimates across studies (e.g., changes in diagnostic criteria, different interviews and interview structures such as length and ordering, fatigue, administration training methods, sampling, different date cohorts). Importantly, neither our (2) nor the Hudson *et al.* (4) sensitivity analyses exploring the potential impacts of looser or stricter diagnostic definitions revealed any substantial effects on prevalence estimates.

Brodrick and McAdams (1) suggested that the low estimates were because the Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5) "was not validated for eating disorders." The assessment of EDs is complex, and we agree with concerns about the need for validation of the AUDADIS-5 and any other instruments used in epidemiologic and clinical studies. Such concerns have long been a topic of frequent heated debate among clinicians and researchers, cogently addressed by Spitzer in 1983 (6) in his discussion of the "grim reality of diagnostic assessment in epidemiologic research," yet continue to be the source of much confusion. There are potential advantages and disadvantages to different assessment methodologies (e.g., self-report, semistructured vs. structured, trained laypersons vs. trained clinicians) (6,7) that must be considered in the interpretation of any study findings for their implications in some convergences and divergences that can be challenging to resolve.

Brodrick and McAdams (1) also argued that the AUDADIS-5's first item screen for binge eating, in contrast to a clinical interview, was likely to underestimate binge eating because "patients with eating disorders are often unaware of their disease." They cited the National Health Wellness Survey (8) as a comparison, but their criticism may be overly simplistic and unlikely the explanation. The National Health Wellness Survey used an unvalidated self-report survey with essentially the same question about binge eating, and participants would therefore be equally vulnerable to underrecognition of "unusually large amounts." It is well taken that larger serving sizes have become "normative," which could increasingly confound questions about binge eating, abnormality, and burden (9). However, certain self-reports can yield adequate data (7,10,11), and the AUDADIS-5 asks about binge eating much like various validated self-report screeners and other interviews (7,10–14). Noteworthy is that only 3.2% of National Health Wellness Survey participants meeting DSM-5 binge-eating disorder criteria on self-report surveys reported having ever been diagnosed (8); it is uncertain whether that self-report generated many false positives or whether clinicians failed to recognize binge-eating disorder.

As Kessler *et al.* (5) noted when addressing varying estimates across DSM-IV–based studies, even different versions of the same interview can yield different results. It is long established (6), though unfortunately ignored, that different interviews for psychiatric disorders can yield varied prevalence estimates and comorbidity patterns. For example, Oldham *et al.* (15) found that two face-to-face "established" diagnostic interviews given by psychiatrists yielded significantly different findings for the same series of patients with personality disorders; such findings are striking because the assessors were widely recognized clinical experts in personality disorders. More broadly, prospective research (16) has demonstrated that established self-report and diagnostic interview diagnoses had significant incremental predictive validity over diagnoses assigned by treating clinicians, but not vice versa, for personality disorders [i.e., which are characterized by limited insight by patients, not unlike the case suggested for AN (1)].

Brodrick and McAdams (1) also questioned whether persons with AN have sufficient insight to answer the question about the lowest weight not counting when they were ill (1). This AUDADIS-5 item gets at the well-known issue of determining intentional versus illness-induced weight loss (usually a sign of a serious medical problem). While EDs can be associated with shame/secrecy, and AN can be egosyntonic, individuals with EDs were found to provide reasonably accurate reports of weight/height [i.e., once termed a "useful cognitive distortion" (17)]. This echoes consistent findings that while individuals underestimate weight and overestimate height, measured and self-reported values are highly correlated, the magnitude of differences are modest (18,19), and the small magnitude of reporting errors is not systematically associated with ED pathology (20).

One of us (CMG) is also a clinician with interests in psychometrics because of concerns about our field's assessment limitations holding us back. Our comments are intended to highlight limitations that are frequently forgotten. Clinicians often overestimate their abilities (16) and are not immune to biases, including the well-known "clinic bias" (21,22). Treatment seeking is associated with confounds [e.g., Berkson's bias (23) and treatment-seeking being driven by clinical severity (24)]; thus, caution is indicated when generalizing from clinical to community samples. Furthermore, as also emphasized by Hudson and Pope (3), recent large-scale "community" studies suggest that a substantial proportion of AN cases (4,25) may not be nearly as severe or chronically life-threatening as suggested by previous hospital-based

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outcome studies (26). Thus, estimates of health burden should not "mix-and-match" the epidemiological prevalence data and severity data from clinical sources.

Our responses here are not to dismiss the limitations inherent in large epidemiological studies, or the challenges faced by the 2012 to 2013 National Epidemiological Survey on Alcohol and Related Conditions-III investigators attempting to generate estimates for complex psychiatric disorders in the United States. Our reply aims to provide evidence-based clarifications for assertions made by Brodrick and McAdams (1). We agree that it is important to consider implications of underestimation of prevalence and correlates of EDs. We conclude by also highlighting the disparity between funding for EDs (1,27) and the public health burden associated with EDs (2). We hope that our findings (2) add further support for including EDs in the Global Burden of Disease Study and other large-scale quantification effects (28).

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