Questionnaire for eating disorder diagnoses had good sensitivity in a clinical and non-clinical sample of women


Objective
To determine the criterion validity of diagnoses made by putting into operation the full range of Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) eating disorder criteria into a questionnaire format (Questionnaire for Eating Disorder Diagnoses [Q-EDD]).

Design
Blinded comparison of diagnoses made using the Q-EDD with clinical interviews or clinical judgment, the diagnostic standards.

Setting
Midwestern and southern USA.

Participants
The first sample (non-clinical) comprised 136 women between 18 and 41 years of age (mean age 25 y) who were mostly first year students (79%) at a large midwestern public university. The second sample (clinical) comprised 37 women between 15 and 44 years of age (mean age 25 y) who were referred from therapists in several states.

Description of test and diagnostic standards
The Q-EDD was designed as a self report questionnaire that yields frequency data for individual behaviours and categorical labels. Using decision rules, individual participant responses were combined into an assessment of meeting or not meeting all criteria for a specific diagnosis or category. The independent Structured Clinical Interview (the diagnostic standard in the first sample) followed the format of the Structured Clinical Interview for Axis I DSM-IV Disorders (SCID) for Module H. On the basis of the interview, the interviewer judged whether the participant met each of the DSM-IV criteria for eating disorders and placed each participant into a diagnostic category. In the second sample, the diagnostic standard was clinical judgment.

Main outcome measures
Sensitivity, specificity, and likelihood ratios.

Main results
In the first sample, the 136 participants included 33 women with an eating disorder and 103 women with no eating disorder. One woman with an eating disorder was misclassified by the Q-EDD as having no eating disorder and 2 women with no eating disorder were misclassified as having an eating disorder. Thus, sensitivity was 97% and specificity was 98% (the likelihood ratio of a positive test was 49.9, and the likelihood ratio of a negative test was 0.031)*. When the Q-EDD was used to differentiate among women with an eating disorder and symptomatic and asymptomatic diagnoses, the accuracy rate was 90% (1 woman misclassified as not having an eating disorder was misdiagnosed as symptomatic and of the 2 women misclassified as having an eating disorder, 1 was symptomatic and the other was asymptomatic). For the bulimic v anorexia differentiation, 1 woman with anorexia was misclassified by the Q-EDD as bulimic. In the second sample, 8 women with an eating disorder were misclassified by the Q-EDD as not having an eating disorder resulting in a sensitivity of 78%. Of these 8 women, 6 were misclassified as asymptomatic and 2 as asymptomatic by the Q-EDD (accuracy rate 78%). There were no misses on the categories for anorexia and bulimia.

Conclusion
The Questionnaire for Eating Disorder Diagnoses had good sensitivity for diagnosing women with eating disorders in clinical and non-clinical samples.

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Commentary
The Q-EDD has the laudable aim of serving as a economical self report instrument for diagnosing eating disorders. It is a useful addition but certainly not a diagnostic panacea. The Q-EDD yielded a low false positive rate in the non-clinical population; however, it failed to diagnose 22% of patients with an eating disorder in the clinical population (a high false negative rate). Rather than replacing the Eating Attitudes Test (EAT) and Eating Disorder Inventory 2 (EDI-2), the Q-EDD has a very different mission. The EAT is not a “diagnostic measure.” Rather, it is a continuous scale of “eating concerns” derived from clinical signs and symptoms of those with eating disorders. The EAT generates high false positive rates in non-clinical samples (many patients with high scores do not have eating disorders on interview) and should be used as part of a 2 stage screening process. The Q-EDD is probably better for screening but is not practical as a treatment outcome measure or a measure of subclinical eating concerns in non-clinical populations. By the same token, the EDI-2 is not intended for diagnosis (although the accompanying EDI-2 Symptom Checklist assesses symptom frequency for most behaviours used in diagnosis). Instead it is a multiscale instrument used to assess a broad range of psychological traits in the heterogeneous eating disorder population (eg, perfectionism, ineffectiveness, maturity fears, impulse control, asceticism). The Q-EDD aims for diagnosis; in contrast, the EDI-2 yields a clinical profile for evaluating individual patients or meaningful subgroups.

The Q-EDD is a useful addition and complementary to the EAT and EDI-2. For diagnosis, however, there is still nothing better than the interview as the diagnostic standard.

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