## Severity of Binge-Eating Disorder and Its Effects on Treatment Outcome

**To the Editor:** A valuable overview by Carlos Grilo[1] published in a recent supplement to the *Journal* provides an important update on the psychological and behavioral treatments of binge-eating disorder (BED), reviewing also the evidence about predictors of treatment outcome. This overview can possibly be complemented by recent evidence on the severity of BED, as defined by the *DSM-5*,[2] and its impact on treatment outcome.

BED, like other eating disorders, is characterized by substantial within-diagnosis heterogeneity such that different individuals with the same disorder may exhibit variation in terms of symptom severity, underscoring the need for reliable indicators of disease severity.[3,4] Importantly, the *DSM-5* introduced a new severity specifier for BED,[2] whose reliability, validity, and clinical significance have been recently established,[3] to address within-group heterogeneity and variability in severity of the disorder and assist clinicians in tracking patients' progress. Specifically, 4 BED severity groups based on the weekly frequency of binge-eating (BE) episodes were defined in the *DSM-5*[2] as follows: mild, 1–3 episodes/week; moderate, 4–7 episodes/wk; severe, 8–13 episodes/wk; and extreme, > 14 episodes/wk.

In his overview of psychological and behavioral treatments for people with BED, Grilo[1] suggested therapist-led cognitive-behavioral therapy (CBT) as the best-supported treatment option. The recent meta-analytic[5] evidence that more participants achieved abstinence from BE with therapist-led CBT versus waiting list (58.8% vs 11.2%) is in favor of CBT. However, and despite empirical evidence providing partial support of the theoretical model on which CBT is based,[6] the absence of attention to durability of effects[7] is among several factors requiring consideration when interpreting Grilo's[1] assertions. Further, the aforementioned meta-analytic[5] finding highlights that although CBT is regarded by Grilo[1] as the treatment of choice for BED, a substantial proportion of patients do not achieve BE abstinence. This picture represents only a general tendency if further refined by just-published research[3] that contributes to gaining insight into the severity-dependent response to CBT. Specifically, significant differences were observed in abstinence from BE (treatment outcome) achieved by 6.7%, 38.7%, 66.7%, and 98.5% of adults who were classified with *DSM-5* extreme, severe, moderate, and mild severity of BED[2] (see above) based on their pretreatment clinician-rated (weekly) frequency of BE episodes.[3] While, according to Grilo,[1] the overvaluation of shape and weight signals greater severity, factors external to eating disorder features addressed in CBT,[6] such as deficits in coping with aversive emotional states and psychiatric-disorder comorbidity, have recently emerged as the most relevant variables distinguishing the *DSM-5*–defined severity groups of BED that, as noted, showed a differential treatment outcome.[3] These findings are relevant also because the existing/alternative severity approaches for BED, such as subtyping based on overvaluation of shape and weight, were not predictive of BE remission.[8]

Two questions arising from the above and needing consideration in future treatment research for BED are whether (*a*) second-level treatment would be effective for those in whom first-level (eg, CBT)[1] treatment fails and (*b*) psychological/behavioral[1] and pharmacologic[9] interventions should be combined to promote more appropriate treatment for severe-to-extreme BED, since this should differ from treatment regimens for mild-to-moderate presentations.[3,10]

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**Dr Grilo Replies**

**To the Editor:** The Grilo[1] overview of psychological/behavioral treatments for binge-eating disorder (BED) concluded that cognitive-behavioral therapy (CBT) and interpersonal psychotherapy (IPT) are the most strongly supported interventions and that behavioral weight-loss (BWL) produces good outcomes plus modest short-term weight-loss. Grilo[1] noted that combining medications with CBT/BWL produces superior outcomes to pharmacotherapy-only but does *not* substantially improve CBT/BWL-only outcomes[2] and suggested that research on predictors/moderators of outcomes could provide important guidance to clinicians about which patients might require extra attention or how to rationally match treatments.

In their letter to the editor, Dakanalis and Clerici[3] argue that "the absence of attention to durability of effects[4] is among several factors requiring consideration when interpreting Grilo's[1] assertions." Dakanalis and Clerici[3] also suggested the importance of "severity-dependent response to CBT"; specifically, they (*a*) highlighted that the *DSM-5*[5] severity specifier of binge-eating frequency was associated with poorer outcomes in their naturalistic treatment study[6] and (*b*) questioned my assertion that overvaluation of shape/weight was predictive of binge-eating remission outcomes by citing 1 negative study.[7] Finally, Dakanalis and Clerici[3] noted the importance of finding ways to help nonresponders to initial treatments and suggested that clinicians "should" combine psychological/behavioral with pharmacologic approaches for more severe cases, without citing any evidence. The present reply letter refutes each of these assertions and offers evidence-based clarifications regarding BED treatment outcomes and predictors.

First, Dakanalis and Clerici's[3] comment regarding "the absence of durability of effects" reflects a *mis*-citation of Wilfley and colleagues,[4] who in fact argued the clear longer-term superiority of CBT for BED based on documented longer-term outcomes.[8,9] Additionally, I emphasize that CBT has demonstrated clear superiority to antidepressant pharmacotherapy both acutely and over the longer term in both blinded[10,11] and unblinded[12] comparative trials.

Second, Dakanalis and Clerici's[3] assertions regarding the "significant" prognostic significance of the *DSM-5* severity specifier for BED (based on binge-eating frequency) versus the "null" prognostic significance of overvaluation of shape/weight in one study[7] require clarification. Although there are isolated previous reports that higher binge-eating frequency predicts nonremission,[13] most controlled trials have not found that.[14,15] In contrast, shape/weight overconcern has been reliably associated with nonremission in several rigorous trials[15–18]; importantly, the negative prognostic significance of overvaluation of shape/weight has been documented through 12-month follow-ups[16,17] and even after adjusting for other indicators such as depression and self-esteem.[15,16]

Third, as reviewed critically,[2] findings from 11 published controlled trials testing combination treatments indicate that combining medications with CBT/BWL produces superior outcomes to pharmacotherapy-only but does *not* substantially improve outcomes achieved with CBT/BWL-only. Moreover, I am unaware of *any* empirical data supporting the claim[1] that clinicians "should" combine psychological/behavioral with pharmacologic approaches for more severe BED cases. I emphasize, however, that early "nonresponse" to treatment has reliably predicted poor outcomes (including nonremission) in several trials with psychological and medication approaches.[19–22] Early nonresponse, which is not associated with patient characteristics or BED severity,[19,21] represents a strong signal to clinicians that they consider alternative treatments.

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