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Ruth H. Striegel-Moore  
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# Comparison of Binge Eating Disorder and Bulimia Nervosa in a Community Sample

Ruth H. Striegel-Moore,<sup>1\*</sup> Fary M. Cachelin,<sup>2</sup> Faith-Anne Dohm,<sup>3</sup>  
Kathleen M. Pike,<sup>4</sup> Denise E. Wilfley,<sup>5</sup> and Christopher G. Fairburn<sup>6</sup>

<sup>1</sup> Department of Psychology, Wesleyan University, Middletown, Connecticut

<sup>2</sup> Department of Psychology, California State University at Los Angeles,  
Los Angeles, California

<sup>3</sup> Department of Psychology, Fairfield University, Fairfield, Connecticut

<sup>4</sup> Department of Psychiatry, Columbia University, New York, New York

<sup>5</sup> Department of Psychology, San Diego State University and University of California,  
San Diego, California

<sup>6</sup> Department of Psychiatry, Oxford University, Oxford, England

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**Abstract: Objective:** *This study examined the relationship between binge eating disorder (BED), a newly proposed eating disorder, and bulimia nervosa (BN).* **Method:** *Three groups recruited from the community were compared: women with BED (n = 150), women with purging BN (n = 48), and women with nonpurging BN (n = 14).* **Results:** *The three groups did not differ significantly in education, weight or shape concern, and current or lifetime prevalence of nine major mental disorders. Women with BED, compared with women with purging BN, were older, less likely to have a history of anorexia nervosa, and less likely to have been treated for an eating disorder. Obesity was more commonly associated with BED than with either subtype of BN.* **Discussion:** *Our results lend some support to BED as an eating disorder distinct from purging BN. More research is needed to clarify the position of nonpurging BN relative to BED and purging BN.* © 2001 by John Wiley & Sons, Inc. *Int J Eat Disord* 29: 157–165, 2001.

**Key words:** *binge eating disorder; bulimia nervosa; relationship*

## INTRODUCTION

Binge eating disorder (BED), primarily characterized by eating unusually large amounts of food with a sense of loss of control in the absence of the regular use of inappropriate compensatory behaviors, was proposed as a new diagnostic category in the

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\*Correspondence to: Dr. Ruth Striegel-Moore, Department of Psychology, Wesleyan University, 207 High Street, Middletown, Connecticut 06459. E-mail: rstriegel@wesleyan.edu

4th ed. of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association [APA], 1994). The proposal of BED as a new eating disorder, however, has been rather controversial (for review, see Striegel-Moore & Marcus, 1995). Critics have pointed to the apparent overlap between the diagnostic criteria for BED and bulimia nervosa (BN), especially nonpurging BN (Fairburn, Welch, & Hay, 1993). Others have proposed that BED may be a form of "burned out" BN (Raymond, Mussell, Mitchell, De Zwaan, & Crosby, 1995). To justify the clinical utility of the new diagnostic category of BED, it needs to be shown that individuals with BED are "significantly and meaningfully discriminable from individuals with bulimia nervosa" (Brody, Walsh, & Devlin, 1994 pp. 381). Typically, when justifying the need for separate disorders, experts point to group differences in one or more of the following: clinical manifestation independent of core diagnostic criteria, natural course, etiology, and response to treatment (Kendell, 1975).

To date, studies comparing BED and BN (purging [P-BN] or nonpurging [NP-BN]) typically have focused on clinical manifestation of the disorders, with mixed results. Comparisons of individuals with BED and individuals with P-BN have found that individuals with BED exhibit less comorbid psychopathology and report less subjective distress and better social adjustment than those with P-BN (Fichter, Quadflieg, & Brandl, 1993; Hay & Fairburn, 1998; Molinari, Ragazzoni, & Morosin, 1997; Raymond et al., 1995). Only three studies specifically compared individuals with BED and individuals with NP-BN (Hay & Fairburn, 1998; Santonastaso, Ferraro, & Favaro, 1999; Tobin, Griffing, & Griffing, 1997). Two of these studies provided evidence that NP-BN is a relatively rare disorder: in these studies, less than 10% of individuals with BN exhibited the NP subtype (Hay & Fairburn, 1998; Tobin et al., 1997). In a community-based study conducted in England, Hay and Fairburn (1998) found no significant differences between women with BED and women with NP-BN in self-reported psychopathology, self-esteem, or social adjustment. This finding is noteworthy in part because BED was defined using less stringent criteria than those specified in DSM-IV (APA, 1995); hence, one might have expected to observe less pathology among the group of women with BED. An Italian study (Santonastaso et al., 1999) also found no group differences in self-reported psychiatric symptoms, using a patient sample. Tobin et al. (1997) reported that patients with BED scored lower than patients with NP-BN on three symptom scales (Anxiety, Paranoia, and Psychoticism) of the Hopkins Symptom Checklist (Derogatis, 1983). However, a large number of comparisons were computed without adjustment for alpha error. On most of the comparisons, no group differences were found.

With the exception of Hay and Fairburn's (1998) study, this research is based on patient samples, thus limiting generalizability of results (Fairburn, Welch, Norman, O'Connor, & Doll, 1996). Moreover, these studies did not explore the possibility that BED represents simply an advanced stage of BN. Finally, previous studies tended to include small samples of individuals with BED. This study used data collected as part of the New England Women's Health Project (NEWHP), a community-based risk factor study of BED. Our report examined BED in relation to BN in an effort to address the critical question of whether the two syndromes differ in clinically meaningful ways, thus supporting BED as a separate diagnostic category. The aim of the present report was to compare women with a current (past 6 months) diagnosis of BED or BN on variables related to clinical manifestation (independent of diagnostic criteria), etiology, and course. Regarding clinical manifestation, we considered weight and shape concerns (required for a diagnosis of BN but not considered for a diagnosis of BED), obesity, psychiatric comorbidity, and history of treatment seeking (as one proxy for clinical significance; APA, 1994). In terms of etiology, our diagnostic interview assessed age of eating disorder onset and history of

anorexia nervosa (AN). Regarding clinical course, we ascertained a history of BN in individuals with BED and a history of BED in those with BN, using retrospective data obtained during the diagnostic assessment.

## METHODS

### Participants

Three groups of women with a current eating disorder diagnosis (APA, 1994) were compared in this study: women with BED, women with P-BN, and women with NP-BN. Criteria for BED were a minimum average frequency of binge eating episodes of twice a week for six consecutive months, distress over binge eating, presence of three of five behavioral indicators of loss of control over binge eating, and absence of regular extreme compensatory behaviors. Women who reported extreme compensatory behaviors of once a month or more were excluded from the BED group. Women with P-BN had to report a minimum average frequency of purging (use of laxatives, diuretics, or vomiting) of twice a week for three consecutive months; women with NP-BN had to report a minimum average frequency of compensatory behaviors of twice a week for three consecutive months including fasting (eating no solid foods for 24 hr or more) or excessive exercise (exercising despite pain or against a physician's advice, or exercising to an extent that interfered with work, school, or family responsibilities). All diagnostic categories were mutually exclusive.

### Recruitment and Procedure

The NEWHP recruited participants from respondents to a telephone survey targeting a random sample list of households (for detailed description of methods and main findings, see Striegel-Moore, Wilfley, Pike, Dohm, & Fairburn, 2000) and from respondents to advertisements (including posters, newspaper ads, and radio and television announcements) for a study of women's mental health. Eligibility criteria of the NEWHP included being female, either White or Black, U.S. born, between 18 and 40 years of age, and residing within driving distance of the nearest project office (Middletown, CT; Boston, MA; New York, NY). Exclusion criteria were age over 40, physical conditions known to influence eating habits or weight, current pregnancy, and current psychotic disorder.

Case identification was accomplished using a two-stage screening method: First, participants were interviewed using a telephone screening interview (Striegel-Moore et al., 2000). Second, for those deemed eligible based on the screening interview, an in-person interview<sup>1</sup> was conducted to confirm diagnostic status, collect risk factor information,<sup>2</sup> and complete several questionnaires. Staff measured height and weight at the end of the interview. The protocol was approved by the Institutional Review Boards of each par-

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<sup>1</sup>Due to participant's scheduling constraints or lack of access to transportation, 44 women (20.8%) were interviewed by phone. They did not differ significantly from the women who were interviewed in person in case status,  $\chi^2_{(2)} = 3.12, p = .21$ ; ethnicity,  $\chi^2_{(1)} = 1.83, p = .18$ ; education,  $\chi^2_{(2)} = 0.70, p = .70$ ; or age,  $F_{(1,210)} = 0.01, p = .93$ .

<sup>2</sup>The NEWHP was funded to study risk factors for BED only. A comprehensive report of results pertaining to risk factors is beyond the scope of this manuscript.

ticipating institution. Participants were ensured confidentiality of their responses and they were compensated for their time. The instruments utilized in the present report are described below.

The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-IV; First, Spitzer, Gibbon, & Williams, 1995) was administered to determine Axis I psychiatric disorders (current and lifetime). Eating disorder diagnoses, age of onset of eating disorder syndromes, and treatment history were confirmed further with the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993), a standardized interview designed to permit operationalized diagnoses of BN, BED, and AN.<sup>3</sup> To reduce participant burden, the EDE was abbreviated by eliminating items that are not used for making diagnoses. To measure severity of eating disorder symptoms, the EDE-Questionnaire (EDE-Q; Fairburn & Beglin, 1994), a self-report questionnaire derived from the EDE, was used. Of interest to the present report are two subscales, Weight Concern and Shape Concern. They are highly reliable measures (Wilfley, Schwartz, Spurrell, & Fairburn, 1997) of a symptom domain (undue importance of weight or shape for self-evaluation) required for a diagnosis of BN but not of BED. Body mass index (BMI; kg/m<sup>2</sup>) and obesity (BMI = 30 or more) were calculated. Groups were compared using analyses of variance (ANOVA) and chi-square analyses (or, when the frequency in a given cell fell below 5, Fisher's exact test).

## RESULTS

### Sample Description

The study sample included 212 women who met DSM-IV criteria for a current eating disorder: 150 women with BED (98 White, 52 Black), 48 women P-BN (37 White, 11 Black), and 14 with NP-BN (11 White, 3 Black). There was no significant ethnic difference in the proportion of Black and White women in each eating disorder category ( $\chi^2_{(2)} = 3.0, p = .22$ ).<sup>4</sup>

The three diagnostic groups did not differ in level of educational attainment (high school or less, some college, college or more),  $\chi^2_{(2)} = 5.08, p = .22$ . Most women had at least some college education (BED, 48%; P-BN, 56%; NP-BN, 29%) and about one third in each group had completed college (BED, 33%; P-BN, 33%; NP-BN, 36%). A small but statistically significant group difference was found for age,  $F_{(2,209)} = 6.66, p < .002, \eta^2 = .06$ . Women with BED were significantly older (mean age = 31.34,  $SD = 5.56$ ) than women with P-BN (mean age = 27.88,  $SD = 5.79, t = 3.65, p < .0001$ ), but did not differ from women with NP-BN (mean age = 30.21,  $SD = 7.24, t = 0.71, p = .48$ ). The two bulimic groups did not differ significantly in age ( $t = -1.34, p = .18$ ). To adjust for age differences, age was used

<sup>3</sup>Staff participated in an initial 60-hr SCID and a 40-hr initial EDE training workshop. Training was continued until individual supervision found 100% agreement between staff ratings and master trainer ratings on three consecutive SCID and EDE interviews, respectively. All interviewers participated in annual 2-day SCID and EDE refresher workshops. Staff participated in ongoing monthly SCID supervision meetings to avoid interviewer drift. Staff reviewed EDE tapes in weekly supervision meetings.

<sup>4</sup>The sample of Black women with BN was too small to permit an exploration of possible ethnic differences in the clinical presentation of BN. Because Black women were not significantly under or overrepresented in any of the three eating disorder categories, we chose to include Black women in the analyses reported here. Comparisons of Black and White women with BED are beyond the scope of this paper and will be described in a future report.

Table 1. Clinical manifestation of binge eating disorder (BED), purging bulimia nervosa (P-BN), and nonpurging bulimia nervosa (NP-BN)

|                                 | BED ( <i>n</i> = 150) |           | P-BN ( <i>n</i> = 48) |           | NP-BN ( <i>n</i> = 14) |           |
|---------------------------------|-----------------------|-----------|-----------------------|-----------|------------------------|-----------|
|                                 | <i>M</i>              | <i>SD</i> | <i>M</i>              | <i>SD</i> | <i>M</i>               | <i>SD</i> |
| Shape Concern                   | 4.38                  | 1.21      | 4.64                  | 1.38      | 4.65                   | 0.95      |
| Weight Concern                  | 4.02                  | 1.17      | 4.33                  | 1.40      | 4.51                   | 1.00      |
| Body mass index*                | 34.17                 | 9.24      | 26.36                 | 6.68      | 29.59                  | 11.54     |
|                                 | <i>f</i>              | %         | <i>f</i>              | %         | <i>f</i>               | %         |
| Obesity**                       | 98                    | 65.3      | 15                    | 31.3      | 5                      | 35.7      |
| Treatment for eating problem*** | 26                    | 17.3      | 22                    | 45.8      | 3                      | 21.4      |
| Treatment for weight problem    | 44                    | 29.3      | 14                    | 29.2      | 6                      | 42.9      |

\*BED > P-BN,  $p < .0001$ ; BED versus NP-BN and P-BN versus NP-BN,  $p < .05$ . \*\*BED > P-BN,  $p < .0001$ ; BED > NP-BN,  $p < .03$ ; P-BN versus NP-BN,  $p < .05$ . \*\*\*BED < P-BN,  $p < .001$ ; BED versus NP-BN and P-BN versus NP-BN,  $p < .05$ .

as a covariate in subsequent ANOVAs. To facilitate comparison of our results with findings reported in other studies, means are reported (age adjusted means available upon request).

### Clinical Manifestation, Etiology, and Natural Course

As shown in Table 1, the three groups did not differ on the Weight Concern,  $F_{(2,187)} = 1.10$ ,  $p = .34$ , or Shape Concern,  $F_{(2,187)} = 0.38$ ,  $p = .69$ , subscale of the EDE-Q.<sup>5</sup> A significant group difference was found for BMI,  $F_{(2,209)} = 10.81$ ,  $p < .0001$ ,  $\eta^2 = .09$ . Women with BED had significantly greater BMI values than women with P-BN ( $t = 4.71$ ,  $p < .0001$ ), but did not differ from women with NP-BN ( $t = 1.75$ ,  $p = .07$ ). The two bulimic groups did not differ significantly in BMI ( $t = -0.97$ ,  $p = .23$ ). Significant group differences also were found in the prevalence of obesity,  $\chi^2_{(2)} = 19.53$ ,  $p < .0001$ ,  $\phi = .30$ . Specifically, obesity (BMI  $\geq 30$ ) was significantly more common among women with BED than among women with P-BN,  $\chi^2_{(1)} = 17.24$ ,  $p < .0001$ ,  $\phi = .30$ , and women with NP-BN,  $\chi^2_{(1)} = 4.81$ ,  $p < .03$ ,  $\phi = .17$ . The two bulimic groups did not differ in prevalence of obesity,  $\chi^2_{(1)} = 0.10$ ,  $p = .75$ . Significant group differences were found regarding a history of treatment for an eating disorder,  $\chi^2_{(2)} = 16.22$ ,  $p < .0001$ ,  $\phi = .28$ . The women with P-BN were more likely than the women with BED to have been treated for an eating disorder,  $\chi^2_{(1)} = 16.08$ ,  $p < .001$ ,  $\phi = .29$ . The women with NP-BN were no more or less likely than the women with BED (Fisher's  $p = .72$ ) or P-BN (Fisher's  $p = .13$ ) to have been treated for an eating problem. The three groups did not differ significantly,  $\chi^2_{(2)} = 0.23$ ,  $p = .89$ , regarding a history of treatment for a weight problem.

Examination of the frequency of nine specific current or lifetime comorbid psychiatric diagnoses found no significant differences among the three groups (Table 2). Moreover, the three groups did not differ in the lifetime prevalence of having had at least one Axis I disorder.

The three groups did not differ significantly,  $F_{(1,206)} = 0.09$ ,  $p = .92$ , in the average age

<sup>5</sup>EDE-Q results remained essentially unchanged when adjusting for group differences in BMI (detailed data available upon request).

Table 2. Current and lifetime Axis I disorders in women with binge eating disorder (BED), purging bulimia nervosa (P-BN), and nonpurging bulimia nervosa (NP-BN)

|                                      | BED<br>( <i>n</i> = 150) |      | P-BN<br>( <i>n</i> = 48) |      | NP-BN<br>( <i>n</i> = 14) |      | $\chi^2_{(2)}$ | <i>p</i> |
|--------------------------------------|--------------------------|------|--------------------------|------|---------------------------|------|----------------|----------|
|                                      | f                        | %    | f                        | %    | f                         | %    |                |          |
| Major depression, ever               | 86                       | 57.3 | 23                       | 47.9 | 7                         | 50.0 | 1.44           | .49      |
| Major depression, current            | 23                       | 15.3 | 5                        | 10.4 | 1                         | 7.1  | 1.29           | .53      |
| Bipolar, ever                        | 8                        | 5.3  | 5                        | 10.4 | 1                         | 7.1  | 1.53           | .47      |
| Bipolar, current                     | 4                        | 2.7  | 3                        | 6.3  | 1                         | 7.1  | 1.75           | .42      |
| Dysthymia                            | 7                        | 4.7  | 4                        | 8.3  | 1                         | 7.1  | 0.98           | .61      |
| Alcohol abuse or dependence, ever    | 52                       | 34.7 | 22                       | 45.8 | 4                         | 28.6 | 2.39           | .30      |
| Alcohol abuse or dependence, current | 0                        | 0    | 2                        | 4.2  | 0                         | 0    | N/A            |          |
| Drug abuse or dependence, ever       | 52                       | 34.7 | 12                       | 25.0 | 4                         | 28.6 | 1.64           | .44      |
| Drug abuse or dependence, current    | 6                        | 4.0  | 0                        | 0    | 0                         | 0    | N/A            |          |
| Panic disorder, ever                 | 26                       | 17.3 | 7                        | 14.6 | 3                         | 21.4 | 0.41           | .82      |
| Panic disorder, current              | 12                       | 8.0  | 5                        | 10.4 | 3                         | 21.4 | 2.77           | .25      |
| Agoraphobia, ever                    | 4                        | 2.7  | 1                        | 2.1  | 1                         | 7.1  | 1.06           | .59      |
| Agoraphobia, current                 | 2                        | 1.3  | 0                        | 0    | 1                         | 7.1  | 3.99           | .14      |
| Social phobia, ever                  | 21                       | 14.0 | 11                       | 22.9 | 1                         | 7.1  | 3.01           | .22      |
| Social phobia, current               | 9                        | 6.0  | 4                        | 8.3  | 0                         | 0    | 1.32           | .52      |
| OCD, ever                            | 4                        | 2.7  | 3                        | 6.3  | 1                         | 7.1  | 1.75           | .42      |
| OCD, current                         | 3                        | 2.0  | 1                        | 2.1  | 0                         | 0    | 0.29           | .87      |
| Any Axis I, ever                     | 122                      | 81.3 | 43                       | 89.6 | 10                        | 71.4 | 3.00           | .22      |

Note: OCD = obsessive-compulsive disorder.

of onset of their first eating disorder (BED:  $M = 20.74$ ,  $SD = 8.4$ ; P-BN:  $M = 18.50$ ,  $SD = 6.9$ ; NP-BN:  $M = 20.38$ ,  $SD = 6.61$ ). A history of AN was reported in 1 woman with BED (0.7%), 9 women with P-BN (18.8%), and 2 women with NP-BN (14.3%). Compared with women with BED, women with P-BN (Fisher's  $p = .0001$ ) and women with NP-BN (Fisher's  $p = .02$ ) were significantly more likely to have a history of AN. The two bulimic groups did not differ significantly in history of AN (Fisher's  $p = 1.00$ ).

Regarding the question of whether BED represents a burned out form of BN, we found that only a minority of women with BED ( $n = 17$ , 11.3%) reported a history of BN (12 P-BN and 5 NP-BN). Conversely, over one fourth ( $n = 14$ , 29.2%) of the women with P-BN or NP-BN ( $n = 4$ , 28.6%) reported a history of BED.

## DISCUSSION

This study compared women with BED and women with P-BN and NP-BN in an effort to examine the clinical utility of BED as a distinct eating disorder category. Our study has several strengths relative to previous investigations comparing BED and BN. BED has only recently been described and few investigators have accumulated large case series. Our sample of women with BED is much larger than samples reported by other investigators. Furthermore, to our knowledge, this is the first published study in the United States comparing women with BED and BN involving a community-based sample. Another strength is the fact that all diagnoses were operationally defined and established based on state-of-the-art research interviews administered by highly trained staff.

The main limitation of this study was the relatively small number of NP-BN cases; these individuals represented a minority in our sample of women with an eating disorder. This



is consistent with results of a large case series of patients reported by Tobin et al. (1997). Of 267 consecutive individuals seeking treatment for an eating disorder at one of several tertiary treatment centers, only 21 (8%) met criteria for NP-BN. Similarly, in the community sample of 250 women with recurrent binge eating recruited in England, only 16 (6%) were found to meet criteria for NP-BN (Hay & Fairburn, 1998). Although our study was not designed to determine prevalence rates of various eating disorders in the community, taken together with the results reported by Fairburn's group and Tobin's group, our data lead us to speculate that NP-BN is a rare disorder. The apparent low rates of NP-BN suggest that this subgroup is going to be difficult to study, unless investigators pool data across multiple centers.

In terms of clinical manifestation, the three groups did not differ on either the Weight Concern or Shape Concern subscales of the EDE-Q, which measure core attitudinal features of BN. Our results are consistent with findings reported in a study comparing 105 female patients with BED with 53 female patients with BN (subtype not specified; Wilfley, Schwartz, Spurrell, & Fairburn, *in press*). Body image disturbance is not currently included as a criterion symptom of BED in DSM-IV. It is believed that weight or shape concerns, when reported in this population, may simply reflect the obesity that often accompanies BED (Eldredge & Agras, 1996). However, mean weight and shape concern scores observed in our sample of women with BED were comparable to mean scores reported by Telch and Stice (1998) in a community-based study of BED that limited recruitment to obese individuals. Moreover, our results remained unchanged when adjusting for group differences in BMI. The notion that weight concern might be a clinical feature of BED is further supported by findings demonstrating that weight dissatisfaction in BED decreases as frequency of binge eating decreases, even when BMI does not change (Cachelin et al., 1999).

By definition, BED involves episodic overeating in the absence of severe weight control efforts. It is not surprising, therefore, that women with BED had the highest BMIs among the three groups and were significantly more likely to meet the criterion for obesity compared with women with BN. Our finding adds to the growing literature documenting that obesity is an important medical comorbidity among women with BED (Bruce & Agras, 1992). Our data further suggest that obesity is a distinguishing feature between the syndrome of BED and the syndrome of BN (regardless of subtype). It is interesting to note, however, that in this community-based sample, BED was not synonymous with obesity. Although a majority of women with BED met the criterion for obesity, a considerable minority (35%) did not. This is consistent with results reported by Fairburn et al. (1998). To date, women with BED who are not obese have received relatively little empirical attention.

All three groups had equal frequency of current and lifetime Axis I comorbidity as determined by a structured clinical interview. The comorbidity rates observed in our BED sample are consistent with previous reports of high levels of psychiatric comorbidity in community samples of women with BN (Garfinkel et al., 1995; Kendler et al., 1991) or BED (Telch & Stice, 1998) and underscore the clinical significance of the syndrome of BED.

The women with BED were significantly less likely than the women with P-BN to have been treated specifically for an eating disorder. As a newly recognized disorder, BED may go undetected in part because health professionals may be unfamiliar with the diagnosis or the symptoms of BED. Rates of eating disorder treatment were similarly low among the women with NP-BN, although this group did not differ statistically from women with BED or women with P-BN on treatment history, possibly due to the small sample size of women with NP-BN. Health professionals may not readily recognize NP-BN as an eating



disorder because of the absence of purging. There are high rates of obesity and psychiatric comorbidity among women with BED. Recent research has reported promising outcomes regarding the efficacy of psychological treatments for BED (Wilfley & Cohen, 1997). The low rates of treatment seeking among women with BED point to the need for better efforts in terms of (a) encouraging treatment seeking among individuals with the disorder and (b) increasing screening and treatment referral by professionals who may be in contact with these women. About one third of women with BED reportedly had received treatment for a weight problem. Health professionals working with overweight individuals need to be prepared to detect and initiate treatment of eating disorders in this population.

We are intrigued by the pattern of results regarding the history of AN in our sample. Specifically, about 20% of women with P-BN and 13% of women with NP-BN met lifetime criteria for AN. This result confirms other reports that a subset of women with AN cross over to BN (Garfinkel et al., 1995; Sullivan, Bulik, Fear, & Pickering, 1998) and that AN and BN have common risk factors (Kendler et al., 1991; Walters & Kendler, 1995). In contrast, only 1 of 150 women with BED met lifetime criteria for AN (restricting subtype). Hence, AN does not appear to be a risk factor for the development of BED.

It is also of note that only about 1 in 10 women with BED reported a history of BN. This suggests that BED does not seem to represent a burned out form of BN (any type). The relatively high rate of lifetime diagnoses of BED (29%) among women with BN, regardless of subtype, warrants further exploration. One methodological concern is that it may be difficult for participants to accurately recount periods of binge eating accompanied by nonpurging compensatory behavior such as fasting or excessive exercise. As a result, such past periods may be misclassified as BED. Longitudinal studies of the natural course of BED are needed to clarify whether BED does, indeed, precede BN in a subgroup of individuals.

In conclusion, the high rates of obesity and comorbid psychiatric disorders in women with BED are well established in the literature and our findings provide further support for the view of BED as a clinical disorder. The significantly elevated rates of obesity among women with BED versus women with P-BN, the differentially lower risk of AN in women with BED compared with BN, and the low rates of a history of BN among women with BED support the view that BED is a disorder distinct from P-BN. However, this conclusion must remain tentative until research has examined, in more detail and with prospective data, risk factors for and the natural course of these disorders. Studies with larger sample sizes of NP-BN cases are needed to determine whether this disorder is more similar to P-BN (supporting continued classification under BN) or more similar to BED (supporting merging BED and NP-BN). The low rates of NP-BN will make such research challenging.

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