Bulimic Eating Disorders in Primary Care: Hidden Morbidity Still?

Jonathan M. Mond · Tricia C. Myers · Ross D. Crosby · Phillipa J. Hay · James E. Mitchell

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Abstract The current study examined the features of women with bulimic-type eating disorders (n = 24)attending primary care in two smaller urban regions of the USA. The assessment included measures of eating disorder psychopathology, medical comorbidity, impairment in role functioning, potential barriers to treatment and actual use of health services. Eating disorders, primarily variants of bulimia nervosa and binge eating disorder not meeting formal diagnostic criteria, were associated with marked impairment in psychosocial functioning. Although twothirds of participants recognized a problem with their eating, less than 40% had ever sought treatment from a health professional for an eating or weight problem and only one in ten had sought such treatment from a mental health specialist. Only one-third had ever been asked about problems with eating by a primary care practitioner or other health professional. However, more than 80% had sought treatment from a health professional for symptoms of anxiety or depression. Most reported some degree of discomfort in discussing eating problems with others, and half reported that they would not be truthful about such problems if asked. Having an eating disorder was associated with several chronic medical conditions, including

The prevalence of psychiatric disorders is higher among patients treated at primary care clinics than in general population samples (Goldberg, 1995). Therefore, primary care studies are a useful means by which to examine the features of psychiatric conditions without the need for very large sample sizes. Further, the vast majority of individuals with a mental health problem initially seek treatment for their symptoms from a primary care practitioner (Ustun,

2000). This signifies, within the field of psychiatric epidemiology, the importance of studying mental health

problems in the primary care setting.

Various studies of eating disorders (EDs) in primary care have been conducted during the past two decades (Currin, Schmidt, Treasure, & Jick, 2005; Hay, Marley, & Lemar, 1998; Hoek, 1991; Johnson, Spitzer, & Williams, 2001; King, 1989; Meadows, Palmer, Newball, & Kenrick, 1986; Turnbull, Ward, Treasure, Jick, & Derby, 1996; van Son, van Hoeken, Bartelds, van Furth, & Hoek, 2006; Whitehouse, Cooper, Vize, Hill, & Vogel, 1992). Most of these have focused on incidence and/or prevalence rates, the types of cases identified, and the nature and degree of

J. M. Mond (⊠)

School of Biomedical and Health Sciences, University of Western Sydney, Campbelltown Campus, Locked Bag 1797, Penrith DC, NSW 1797, Australia e-mail: j.mond@uws.edu.au

T. C. Myers · R. D. Crosby · J. E. Mitchell Neuropsychiatric Research Institute, Fargo, USA

P. J. Hay School of Medicine, University of Western Sydney, Campbelltown, Australia



joint pain, gastrointestinal problems and fatigue. Although the small sample size limits any firm conclusions, the findings suggest that the health burden of bulimic-type eating disorders is substantial but remains largely hidden. Efforts may be needed to improve the eating disorders "mental health literacy" of both patients and primary care practitioners in order to facilitate early, appropriate

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intervention.

psychiatric comorbidity. Thus, it is well established that bulimia nervosa (BN) and variants of BN not meeting formal diagnostic criteria, including binge eating disorder (BED), are the most common cases of EDs in the primary care setting (Hay et al., 1998). These disorders are associated with high levels of comorbidity with anxiety and affective disorders, as well as overweight and poor physical health (Johnson et al., 2001).

Evidence also suggests that only a small minority of bulimic-type EDs are identified by primary care practitioners, notwithstanding elevated rates of consultation prior to and during the onset of symptoms (Hay et al., 1998; Johnson et al., 2001; Ogg, Millar, Pusztai, & Thom, 1997; Sansone, Wiederman, & Sansone, 1997). This likely reflects a range of factors, including poor insight, reluctance to disclose bulimic behaviors and poor knowledge of the nature and treatment of bulimic-type EDs among both patients and primary care practitioners (Crow, Peterson, Levine, Thuras, & Mitchell, 2004; Currin, Waller, & Schmidt, 2009; Hay et al., 1998, Hay, de Angelis, Millar, & Mond, 2006; Mond, Hay, Rodgers, & Owen, 2006, 2008).

The goal of the present study was to provide an update on the status of bulimic EDs in primary care, focusing on features—such as functional impairment and health service utilization—that have tended to be neglected in previous research. We also sought to elucidate specific aspects of the doctor-patient interaction that might hinder early, appropriate intervention. We hypothesized that there remains a substantial, but largely hidden, health burden associated with these more commonly occurring EDs.

Method

Study Design and Participants

A detailed account of the recruitment of participants has been given previously (Mond, Myers et al., 2008). In brief, participants were women aged 18-40 years who attended one of two primary care practices in smaller urban regions of the USA. Information packets that included a six-page questionnaire, a cover letter outlining the nature and purpose of the study, consent forms and pre-paid envelopes, were distributed by receptionist staff to all potentially eligible female participants attending the practices during the study period. The questionnaire included measures of eating disorder psychopathology, quality of life, height and weight, and socio-demographic information. BMI was calculated from self-reported height and weight (Mond, Hay, Rodgers, Owen, & Beumont, 2004). The study design was approved by the local Institutional Review Board (IRB) Committee.

From a total of 500 packets distributed over a 3-month period, 257 completed questionnaires (51.4%) were returned. This is a conservative estimate of true response because, due to staff changes during the study period, it could not be verified that all packets were distributed. Because one of the practices was attached to a University campus, students were over-represented amongst participants. There was also some evidence that individuals with ED symptoms were over-represented among participants, perhaps due to greater perceived relevance of the study aims (Mond, Myers et al., 2008). In other respects, participants were representative of the total population of young adult women in the region.

The mean (SD) age of participants was 27.6 (6.5) years. Their mean (SD) BMI was 28.1 (7.2) kg/m². Nearly half (45.6%) of the participants were married or living as married, 39.7% were single and 14.8% were separated or divorced. More than half (61.3%) had one or more children. Nearly all (94.6%) had completed high school, approximately one-third (31.9%) had completed an associates or bachelors degree and 7.8% had completed graduate school. Approximately half were employed full-(38.5%) or part-(13.2%) time, 28.0% were full-time students, 10.9% listed caring for children as their main activity, and 4.3% were seeking employment. Most participants (87.9%) were Caucasian, 5.1% were Native American, 3.1% African American, 1.6% Hispanic and 1.2% Asian.

All participants who returned a completed questionnaire were approached to participate in a second phase of the study. This involved administration of a telephone interview, which included diagnostic items of the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993) and questions addressing medical comorbidity, health service utilization and potential barriers to treatment developed by the authors. Interviews were completed with 147 women, which represented a response rate of 66.8% at the second phase after individuals who could not be contacted (n=37) were taken into account. There were no significant differences between participants with whom interviews were completed and those who were not interviewed on any of the study variables.

Assignment of Eating Disorder Diagnoses

ED diagnoses, including anorexia nervosa (AN), BN and BED, were assigned according to the operational criteria for DSM-IV outlined in the EDE manual (American Psychiatric Association, 1994; Fairburn & Cooper, 1993). Hence, for the diagnosis of BN and BED, 12 or more episodes of binge eating over the past 3 months were required. Participants who reported an "undue influence of weight or shape on self-evaluation" and any regular ED



behavior for each of the past 3 months, and who did not meet criteria for AN or BN or BED, received the diagnosis of "eating disorder not otherwise specified" (EDNOS) (Hay et al., 1998). ED behaviors assessed were: objective bulimic episodes; subjective bulimic episodes; self-induced vomiting; misuse of laxatives, diuretics or diet pills; extreme dietary restriction; and excessive exercise. For the assessment of bulimic episodes, self-induced vomiting, misuse of laxatives, misuse of diuretics and misuse of diet pills, "regular" was defined as "at least weekly", whereas regular extreme dietary restriction and excessive exercise were recognized if these behaviors occurred, on average, three or more times per week (Mond, Hay, Rodgers, Owen, Crosby et al., 2006). The "undue influence of weight or shape on self-evaluation" was defined as a score of 4 or higher on the "importance of weight" and/or "importance of shape" items of the EDE for each of the past 3 months (Fairburn & Cooper, 1993).

Twenty-five participants (17.0% of the interviewed sample) met the study criteria for a clinically significant ED. There were no participants who met the study criteria for AN. One participant met the study criteria for BN purging subtype, whereas four participants met criteria for BN non-purging subtype. Three participants met criteria for BED, while a further three participants met criteria for BED, except that their overeating episodes were not objectively large. The remaining 15 participants reported extreme weight or shape concerns and regular extreme weight control behaviors, with or without subjective bulimic episodes, in the absence of objective bulimic episodes. Data for one participant were omitted from the analysis due to missing data. Hence, data for 24 individuals with EDs were included.

Study Measures

Eating Disorder Examination Questionnaire (EDE-Q)

The EDE-Q (Fairburn & Beglin, 1994) is a 36-item, selfreport version of the EDE that focuses on the past 28 days and is scored using a 7-point, forced-choice, rating scheme. Scores on each item range from "0" to "6", with higher scores indicating higher symptom levels. Scores on four subscales (Restraint, Eating Concern, Weight Concern and Shape Concern) and a global score may be derived from 22 items addressing attitudinal aspects of ED psychopathology (Mond, Rodgers, Hay, & Owen, 2006). Since only diagnostic (i.e., behavior and "importance of weight/shape") items of the EDE were administered at interview, the EDE-Q subscale and global scores were used as a continuous measure of ED psychopathology. A high level of agreement between EDE-Q and EDE subscale and global scores has been demonstrated in a range of different study populations (cf. Mond, Hay et al., 2004).



The SCOFF (Morgan, Reid, & Lacey, 1999), a brief self-report measure specifically designed to screen for cases of EDs in primary care, is comprised of five "yes/no" questions addressing the presence or absence of core aspects of ED psychopathology, namely, perceived loss of control over eating, preoccupation with food, body image distortion, weight cycling and the use of self-induced vomiting as a means of weight-control. The number of positive responses is summed to yield a total score ranging from 0 to 5 (Mond, Myers et al., 2008; Morgan et al., 1999).

Medical Outcomes Study 12-item Short-Form

The 12-item Short-Form (SF-12) (Ware, Kosinski, & Keller, 1996) is a 12-item measure of health-related quality of life. Items are summarized into two weighted scales (Physical Component Summary Scale, PCS; Mental Component Summary Scale, MCS), that assess impairment in everyday functioning associated with physical and mental health problems. Each scale is scored to have a mean of 50 and standard deviation of 10 (in the US population), with lower scores indicating higher levels of impairment (Ware et al., 1996). A score of between 40 and 31 indicates moderate impairment, whereas a score of 30 or less indicates severe impairment (Sanderson & Andrews, 2002). An additional measure of functional impairment was obtained as the number of days in the past 4 weeks on which participants' were unable to manage their work, academic or household responsibilities on account of any health problem (Mond & Hay, 2007).

Barriers to Treatment

Questions were included to address aspects of participants' interaction with a health professional or others that might reduce the likelihood of appropriate treatment being received. Specifically, participants were asked how comfortable they would be talking to a family member, close friend or health professional about a problem with their eating, whether a doctor had ever asked them about a problem with their eating, and whether they would have been truthful had they been asked. Participants' recognition of their (own) ED behavior was assessed with the question: "Do you think you might currently have a problem with your eating"?

Medical Comorbidity

A series of yes/no questions asked whether participants had experienced each of a range of chronic medical conditions during the past 12 months, including: diarrhea, constipation,



indigestion, swelling or fluid retention, asthma, bronchitis or emphysema, chronic back, neck or pelvic pain, gastrointestinal problems, amenorrhea or other menstrual irregularity, migraine or other persistent headache, faintness or dizziness, fatigue or general malaise, tooth decay, dermatitis, hypertension, hypercholestoremia, diabetes, urinary tract infection or pelvic inflammatory disease, osteoporosis and anemia.

Health Service Utilization

Participants were asked whether they had ever sought advice or treatment from a health professional for an eating or weight problem and, if so, whether this was in relation to a problem with eating, a problem with weight, or a problem with both eating and weight (Mond, Hay, Rodgers, & Owen, 2007). Participants were similarly asked whether they had ever sought advice or treatment from a health professional for a general mental health problem, such as feeling depressed or anxious and, if so, the nature of the problem for which advice or treatment was sought. For both eating and general mental health problems, additional questions addressed the specific health professionals who had been approached. A separate question assessed the frequency of primary care consultations for any health problem during the past 12 months.

Statistical Analysis

The data were primarily descriptive. Associations between categorical variables were examined by means of Chi-Square tests, whereas differences between study subgroups on continuous variables were examined by means of independent sample t-tests or the (non-parametric) Mann–Whitney U test, depending on the distribution of the variable concerned and the sample size. Because sample size was dictated primarily by logistical considerations and statistical power to detect differences between certain subgroups was low, a p value of .05 was employed for all tests and no adjustment was made for multiple comparisons (Rothman, 1990). All analysis was conducted using SPSS version 16.0.

Results

The characteristics of participants with an ED (n = 24) and those who did not have an ED (non-ED; n = 122) are summarized in Table 1. There were no significant differences between groups on socio-demographic variables (all p > .10).

Of the 24 participants with an ED, 16 (66.7%) believed that they might currently have a problem with their eating

(22.0% for non-ED, $\chi_1^2 = 19.4$, p < .01). Participants with an ED were more likely than non-ED participants to have ever been asked about problems with eating by a primary care practitioner (33.3 vs. 15.4%; $\chi_1^2 = 4.3$, p < .05), and less likely to report that they would be truthful about such problems were they to be asked (50.0 vs. 83.7%, $\chi_1^2 = 13.4$, p < .01). Participants with an ED were more likely than non-ED participants to report that they would be uncomfortable talking about eating problems with a family member (extremely, very or somewhat uncomfortable = 33.4 vs. 5.7%; $\chi_4^2 = 28.1$, p < .1) or close friend (16.7 vs. 1.6%; $\chi_4^2 = 17.3$, p < .01), and less likely to report being very or extremely comfortable talking about eating problems with a health professional (41.6% vs. 58.6%, $\chi_4^2 = 5.7$, p = .34).

Health Service Utilization

The proportion of participants with an ED who had consulted a primary care practitioner four or more times for any health problem during the past 12 months tended to be higher than that for non-ED participants (47.8% vs. 29.5%, $\chi_2^2 = 3.0$, p = .09). Of the 24 participants with an ED, 9 (37.5%) had ever sought advice or treatment from a health professional in relation to an eating or weight problem (non-ED = 17.9%; $\chi_1^2 = 4.6$, p < .05). Of these, 5 had sought treatment for a weight problem, 3 had sought treatment for both eating and weight, and data for one participant were missing. Only three of the participants with an ED (12.5%) had sought advice or treatment for an eating or weight problem from a mental health specialist, namely, a psychologist or psychiatrist, and only one had ever been told by a health professional that they had an ED.

Most of the participants with an ED (83.3%) had sought advice or treatment from a health professional in relation to a general mental health problem (non-ED = 41.0%; $\chi_1^2 = 12.4, p < .01$). Of the 20 participants with an ED who had sought advice or treatment in relation to a general mental health problem, all but three had done so in relation to a problem with depression (n = 8) or both anxiety and depression (n = 9). Thirteen of the 24 participants with an ED (54.2%) had ever sought advice or treatment for a general mental health problem from a mental health specialist. Most (65.2%) had at some point been told by a health professional that they suffered from a mental health problem. Whereas 54.2% of participants with an ED had used anxiolytic (33.3%) or antidepressant medication (54.2%) during the past 12 months, 20.3% of non-ED participants had done so $(\chi_1^2 = 12.0, p < .01)$.

Participants with an ED who had sought advice or treatment for an eating or weight problem tended to be older and have higher BMIs, higher levels of ED psychopathology, and higher levels of impairment in both physical



Table 1 Differences between participants with an eating disorder (ED) (n = 24) and participants who did not have an eating disorder (non-ED) (n = 122) on study variables

	Non-ED Mean (SD)	ED Mean (SD)	t/z	p
Age	27.3 (6.7)	29.0 (5.4)	1.18	.24
BMI	27.7 (7.2)	29.2 (8.2)	0.92	.36
EDE-Q subscales ^a				
Restraint	1.3 (1.4)	2.5 (1.5)	3.55	<.01
Eating concern	0.9 (0.9)	2.6 (1.0)	7.79	<.01
Weight concern	2.1 (1.6)	4.0 (1.2)	5.61	<.01
Shape concern	2.6 (1.7)	4.6 (1.2)	5.26	<.01
Global score	1.8 (1.3)	3.5 (1.0)	6.39	<.01
SCOFF total score ^b	0.9 (1.2)	2.5 (1.3)	5.12	<.01
SF-12 PCS ^c	50.9 (11.2)	48.4 (15.8)	-0.92	.36
SF-12 MCS ^c	48.6 (12.3)	38.5 (17.4)	-3.45	<.01
Days "out-of-role" (DOR) (past 28 days)	1.9 (4.4)	9.6 (8.5)	4.71	<.01
	%	%	χ2	р
Obese (BMI ≥ 30)	28.5	45.8	2.8	.09
SCOFF items ^d				
Food dominates life	12.2	66.7	35.8	<.01
Lost control	28.5	58.3	8.1	<.01
Believe to be fat	18.7	37.5	4.2	.04
Vomit	1.6	4.2	0.7	.42
Lost 15 pounds	4.9	12.5	2.0	.15
Severe impairment (MCS \leq 30)	7.3	29.2	9.9	<.01
≥14 DOR	4.9	41.7	28.0	<.01

^a Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994)

and mental health functioning, than those who had not. However, only differences between groups with respect to age (z=-2.6, p<.01), BMI (z=-2.9, p<.01) and the SF-12 PCS (z=-1.9, p<.05) were statistically significant. In addition, participants with an ED who recognized a current problem with their eating tended to be more likely to have sought advice or treatment for an eating or weight problem than those who did not (50.0% vs. 12.5%, $\chi_1^2=3.2, p=.07$).

Medical Comorbidity

In the past 12 months, diarrhea (16.7% vs. 3.3%, $\chi_1^2 = 7.0$, p < .01), fatigue/general malaise (37.5% vs. 17.1%, $\chi_1^2 = 5.2$, p < .05), gastrointestinal problems (20.8% vs.

3.3%, $\chi_1^2 = 10.8$, p < .01), chronic neck, back or pelvic pain (50.0% vs. 21.1%, $\chi_1^2 = 8.7$, p < .01), and pain associated with a single joint (45.8% vs. 17.9%, $\chi_1^2 = 9.0$, p < .01), were significantly more common among participants with an ED than among non-ED participants, whereas differences between groups with respect to indigestion (16.7 vs. 6.5%, $\chi_1^2 = 2.8$, p = .10), swelling/fluid retention (16.7 vs. 6.5%, $\chi_1^2 = 2.8$, p = .10) and asthma, bronchitis or emphysema (20.8 vs. 8.1%, $\chi_1^2 = 3.5$, p = .06) approached significance. Associations with diarrhea (adjusted odds ratio = 6.3, p < .05), fatigue/general malaise (2.7, p < .05), joint pain (3.6, p < .01), back, neck or pelvic pain (3.6, p < .05), and gastrointestinal problems (8.5, p < .01), remained significant after age and BMI were statistically controlled.



^b Morgan et al. (1999)

^c Medical Outcomes Study (12-item) Short Form Physical Component Summary scale (PCS) and Mental Component Summary scale (MCS)

^d SCOFF items: Would you say that food dominates your life? Do you worry that you have lost control over how much you eat? Do you believe that you are fat when others say you are too thin? Do you make yourself vomit because you feel uncomfortably full? Have you recently lost 15 lbs or more in a 3-month period?

Discussion

Summary of Main Findings

We examined the features of young adult women with EDs attending primary care practices in two smaller urban regions of the USA. Participants with EDs, primarily variants of BN and BED not meeting formal diagnostic criteria, had marked impairment in psychosocial functioning. Having an ED was also associated with several chronic medical conditions, including joint pain, gastrointestinal problems and fatigue. Although two-thirds of participants with an ED recognized a problem with their eating, less than 40% had ever sought advice or treatment from a health professional in relation to an eating or weight problem and only one in ten had sought such treatment from a mental health specialist. However, more than 80% of participants with an ED had sought advice or treatment from a health professional for symptoms of general psychological distress. Most individuals with an ED reported some degree of discomfort in discussing eating problems with family members, close friends or a health professional and half reported that they would not be truthful about such problems if asked. Participants with an ED who recognized a problem with their eating were more likely to have consulted a health professional in relation to a problem with eating or weight than those who did not.

Study Limitations and Other Methodological Considerations

Several limitations of the present research need to be considered when interpreting these findings. First, sample size was small. Comparisons involving subgroups of participants with an ED in particular should be viewed as tentative. Second, response rate at the first phase of the study was fair only and no information was available concerning the characteristics of individuals who did not complete the screening questionnaire. The comparatively high prevalence of EDs (17.0%) in the interviewed sample likely reflects, in part, an over-representation of individuals with symptoms at this first phase. Since our goal was to describe the characteristics of individuals with symptoms—rather than to estimate prevalence—this bias was advantageous. Nevertheless, it is possible that women with EDs who chose not to participate in the study differed from those who participated on one or more of the study measures (Mond, Rodgers, Hay, Owen & Beumont, 2004). It should also be reiterated that one of the two practices from which participants were recruited was attached to a University campus and it is possible that University-based practices operate differently with respect to either patients' willingness to confide or physicians' willingness to listen.

The generalizability of the findings might also have been limited by the use of a comparatively low threshold for ED case status. However, individuals identified as having an ED were highly symptomatic and, importantly, were typical of the sorts of cases likely to present to primary care practitioners (Hay et al., 1998; Mond, Myers et al., 2008). Indeed, the present findings can be seen as providing further evidence for the clinical significance of variants of BN that do not meet formal diagnostic criteria (Mond et al., 2006; Mond & Hay, 2007; Mond, Rodgers, Hay et al., 2004).

Although we considered the use of health services for comorbid mental health problems, there was no assessment of comorbid psychopathology per se. Hence, it was not possible to consider the extent to which the medical and psychological impairment observed among individuals with an ED might have reflected the presence of anxiety or affective symptoms. This is significant because the prevalence of anxiety and affective disorders is elevated in primary care and among community cases of individuals with EDs (Goldberg, 1995; Hudson, Hiripi, Pope, & Kessler, 2007). The extent to which impairment observed among individuals with an ED might be attributed to comorbid mental health problems is a moot point, although the assumptions that are made in this regard have implications for treatment approaches and for prevention programs (Mond, Rodgers, Hay et al., 2004). We suspect that there may be a tendency to view ED behavior as "secondary" to general psychological distress among both patients and primary care practitioners and that this may account, in part, for the fact that individuals with BN and related disorders typically do not receive treatment for an eating problem (Mond et al., 2007). This is unfortunate because there is good evidence that individuals with bulimic EDs benefit from specific psychotherapy (Devlin & Fischer, 2005; Hay & Bacaltchuk, 2009).

The assessment of potential barriers to treatment was confined to a small number of questions that were of particular interest to the authors. Ideally, the relative importance of a broad range of variables potentially influencing treatment-seeking would be explored in prospective, community-based study (Anderson & Newman, 1973). We hope that the present research will serve as a reminder of the need for further research addressing barriers to treatment among individuals with EDs in primary care and health service utilization for EDs more generally (Garvin & Striegel-Moore, 2001; Striegel-Moore, Dohm, Kraemer, Schreiber, Crawford, & Daniels, 2005; Mond et al., 2007).

Finally, we relied exclusively on patients' reports of their experience of treatment-seeking, as opposed to considering actual rates of detection and treatment based on physician records (e.g. Hay et al., 1998; Johnson et al., 2001). We focused on the patient's perspective because this



has been largely neglected in primary care studies, but clearly both sources of information are useful.

Study Implications

The present findings suggest that there is ample opportunity for primary care practitioners to work with patients to improve the recognition and management of bulimic EDs in primary care. Individuals with these disorders, while unlikely to seek treatment specifically for an eating problem, are very likely to seek treatment in relation to symptoms of general psychological distress and/or medical complications associated with disordered eating or overweight. Hence, where a patient presents with these complaints, and where there is evidence of a preoccupation with weight, shape or dietary intake, a few simple questions concerning eating attitudes and behaviors should be initiated (Hay et al., 1998). We are aware of two brief measures that may be helpful in this regard, namely, the Patient Health Questionnaire (PHQ; Spitzer, Kroenke, & Williams, 1999) and the SCOFF (Morgan et al., 1999). Both have been found to have good sensitivity and specificity in the primary care setting and are therefore suitable for the purpose of determining whether further assessment may be needed (Mond, Myers et al., 2008; Spitzer et al., 1999; Striegel-Moore et al., in press).

Although detection per se was not assessed in the present study, the fact that only one-third of participants with an ED reported that they had ever been asked about a problem with eating by a primary care practitioner or other health professional suggests that early, appropriate intervention is still the exception rather than the rule among women with bulimic-type EDs. At the same time, most participants reported that they would experience some degree of discomfort in discussing eating problems with a health professional and many indicated that they would not have been truthful about such problems had they been asked. Hence, efforts may need to be made to improve the ED "mental health literacy" of both patients and primary care practitioners (Currin et al., 2009; Hay et al., 2006; Mond, Hay et al., 2008). In particular, primary care practitioners need to be aware of and sensitive to perceived or actual stigma surrounding, as well as the ego-syntonic nature of secrecy and control associated with, bulimic behaviors, and the consequent reluctance to disclose ED attitudes and behaviors (Gowers & Shore, 1999).

Finally, it is notable that one-third of participants with an ED did not recognize a problem with their eating. Awareness of the more commonly occurring EDs, including BED and disorders characterized by extreme weight-control behaviors in the absence of binge eating (cf. Mond, Hay, Rodgers, Owen et al., 2006), may be poor among both individuals affected and primary care practitioners (Crow

et al., 2004; Hay et al., 1998; Mond, Hay et al., 2006, 2008; Striegel-Moore et al., 2005). This likely reflects, at least in part, the fact that current classification schemes for EDs do a poor job of capturing the spectrum of disordered eating that occurs in the community (Hay et al., 1998; Mond, Rodgers et al., 2004; Wilfley, Bishop, Wilson, & Agras, 2007) and also the tendency to study—and treat—what we define (Keel, Mayer, & Harnden-Fischer, 2001). It is hoped that appropriate revisions to the DSM diagnostic criteria (cf. Wilfley et al., 2007), including the incorporation of a more dimensional approach to the classification of mental health problems (Regier, Narrow, Kuhl, & Kupfer, 2009), will pave the way for better recognition and management of bulimic EDs in primary care.

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