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Mental health literacy and eating disorders: What do women with bulimic eating disorders think and know about bulimia nervosa and its treatment?

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Abstract

Background and Aims: Attitudes and beliefs concerning the eating disorder bulimia nervosa (BN) were examined in a community sample of women ($n = 158$) with BN-type eating disorders.

Method: A vignette was presented describing a fictional person meeting diagnostic criteria for BN. Participants gave their opinions on a range of issues concerning the nature and treatment of the problem described.

Results: Most participants believed that BN would be difficult to treat and that relapse would be likely, were initial treatment successful. Primary care practitioners, psychologists, counsellors and close friends were perceived as helpful in the treatment of BN by the vast majority of participants. Lifestyle changes, including taking vitamins and minerals, were also highly regarded, whereas participants were ambivalent about the benefits of psychiatrists and antipathetic towards the use of prescription medication. Most participants believed that BN is common among women in the community and many had occasionally or often thought that it “might not be too bad” to have such a problem. Low self-esteem was considered the most likely cause of BN.

Conclusions: Beliefs and attitudes likely to be conducive to low or inappropriate treatment seeking exist among women with BN-type eating disorders in the community. Poor “mental health literacy” therefore needs to be addressed in early intervention programs for these disorders. Health professionals need to be aware of patients’ belief systems and their potential effects on treatment-seeking and adherence to treatment.

Keywords: *Eating disorders, bulimia nervosa, mental health literacy*

Background

Bulimic eating disorders, namely, bulimia nervosa (BN), binge eating disorder (BED), and variants of these conditions not meeting formal diagnostic criteria, are common among women in the community and associated with marked impairment in psycho-social functioning (Mond et al., 2004a; Hay & Mond, 2005). Effective treatment for these disorders is available in the form of specific psychotherapy, namely, cognitive behaviour therapy (CBT) (American Psychiatric Association [APA], 2006). However, most individuals

affected by bulimic eating disorders do not receive evidence-based treatment. Rather, where treatment is received, it is likely to be for a comorbid mental health problem, for medical complications associated with disordered eating, or for a problem, or perceived problem, with weight (Mond et al., 2007a).

Jorm and colleagues (1997) introduced the term “mental health literacy” (MHL) to refer to “knowledge and beliefs about mental disorders that aid their recognition, management or prevention”. These authors, and others, have proposed that poor MHL is a major factor in low or inappropriate treatment-seeking among individuals affected by mental disorders (Andrews et al., 2000; Jorm et al., 2000a). Findings from recent studies support this hypothesis as it relates to individuals with anxiety, affective and substance-use disorders (Jorm et al., 2000b; Meltzer et al., 2000; Mojtabai et al., 2003).

Recently, we investigated MHL concerning eating-disordered behaviour (Mond et al., 2004b,c,d). We found that young adult women in the community ($n = 207$) were sceptical of the benefits of mental health specialists in the treatment of BN, preferring the use of primary care practitioners and/or the advice of a family member or friend. Lifestyle changes, including taking vitamins and minerals, were also highly regarded, whereas participants were ambivalent or antipathetic towards “medical interventions”, namely, treatment by a psychiatrist and the use of prescription medication. Further, while most participants believed that BN would be distressing and difficult to treat, there was a perception among some participants that bulimic behaviours may be normative, and even desirable. Finally, most participants believed that BN is primarily the manifestation of underlying low self-esteem, rather than a mental health problem per se.

Although these findings suggest that further study of MHL relating to BN would be of interest, participants were healthy women, recruited from a general population sample, rather than being individuals with eating disorder symptoms. Whereas the beliefs and attitudes of the general community have implications for the way in which individuals with mental disorders are perceived, and treated, by others (e.g., Mond et al., 2006b), the MHL of individuals with symptoms has implications for the way in which these individuals manage their symptoms. Replication of our previous findings in a community sample of women with eating disorders would lend credence to the hypothesis that poor MHL is indeed a factor in low or inappropriate treatment-seeking in this sub-group. Further, findings from research of this kind may indicate specific targets for early intervention programs (Currin & Schmidt, 2005).

The aim of the present study was therefore to examine MHL concerning BN in a community sample of women with eating disorders. We hypothesized that attitudes and beliefs likely to be conducive to low or inappropriate treatment seeking would be observed, namely: the perception that treatment is difficult and/or ineffective; the perception that non-specific treatments and treatment providers are helpful, more helpful than specialist treatment; the perception that BN is primarily a problem of low self-esteem; and the perception that bulimic behaviours are “normative”.

Method

Study design and participants

The research was conducted as part of the *Health and Well-Being of Female ACT Residents Study*, a two-phase epidemiological study of disability, health-service utilization and MHL associated with community cases of the more commonly occurring eating disorders (Mond et al., 2006a; Mond et al., 2007). At the first phase of the study, self-report questionnaires were completed by 5,255 female residents (aged 18 to 42 years) of the Australian Capital

Territory (ACT) region of Australia, a highly urbanized region that includes the city of Canberra (population 323,000 in 2002). The sample comprised approximately 10% of the total population of females aged 18 to 42 in the region and was representative of this population on a range of socio-demographic variables (Mond et al., 2007a).

Respondents who met the screening criteria for a clinically significant eating disorder (Mond et al., 2004e) were approached to participate in the second phase of the study, involving a face-to-face interview. The interview included the MHL survey as well as diagnostic items of the Eating Disorder Examination (EDE) (Fairburn & Cooper, 1993). Interviews were completed with 324 individuals, which represented a response rate of 76.6% at the second phase (Mond et al., 2007a).

Participants in the present study were 158 individuals (48.8% of the interviewed sample) who met DSM-IV criteria for an eating disorder according to operational criteria outlined in the EDE (Fairburn & Cooper, 1993; APA, 1994). Participants who reported extreme weight or shape concerns and any regular eating disorder behavior and who did not meet criteria for AN, BN or BED were assigned the diagnosis of EDNOS (Hay et al., 1998). Current diagnoses were: BN: $n = 30$ (purging: $n = 9$, non-purging: $n = 21$), BED: $n = 20$; and EDNOS: $n = 108$. The failure to identify any individuals currently meeting DSM-IV criteria for AN is consistent with findings from other epidemiological studies and likely reflects the low base rate of the disorder, the overly restrictive nature of current diagnostic criteria for AN, and personality characteristics associated with the disorder that affect participation rates (Hudson et al., 2007).

Participants' mean (SD) age was 28.8 (6.6) years. Their mean (SD) body mass index (BMI) was 27.1 (7.0) kg/m². Approximately half (54.2%) of the participants were employed full-time. An additional 12.9% nominated "caring for children" as their main activity and 13.5% nominated "full-time study" as their main activity. Approximately half (53.5%) of participants were married (38.2%) or living as married (15.3%) and 40.0% had one or more children. Most participants (90.5%) were born in Australia and almost all (94.9%) had English as a first language. Most (89.1%) had completed 12 years of formal education, 29.1% an undergraduate degree or diploma and 8.2% a post-graduate qualification.

The Mental Health Literacy Survey

The mental health literacy survey was administered at the start of the (second phase) interview and occupied approximately 20 minutes. A vignette describing a (fictional) 19 year-old female ("Kelly") who met criteria for BN (purging subtype) (APA, 1994) was first read aloud by the interviewer. A transcript of the vignette was provided so that participants could follow the description as it was read and participants were advised that they could refer back to the vignette at any time. The vignette is given in Appendix A.

Following presentation of the vignette, participants were first asked: "What would you say is Kelly's *main* problem?". They were required to choose one answer only from a list of options provided. Options, listed in random order, were: "bulimia nervosa", "anorexia nervosa", "an eating disorder, but not anorexia or bulimia", "yo-yo dieting", "poor diet", "low self-esteem/lack of self-confidence", "depression", "an anxiety disorder or problem", "stress", "a nervous breakdown" and "no real problem, just a phase".

Participants were required to indicate whether each of a number of possible interventions would be "helpful", "harmful", or "neither helpful nor harmful" for Kelly (see Table I) and to give their opinion concerning Kelly's likely prognosis with and without treatment (Table II). Difficulty of treatment per se was assessed with the question: "How difficult do you think Kelly's problem would be to treat?".

Table I. Perceived helpfulness of interventions for bulimia nervosa: Percentage (%) of participants rating each intervention as “helpful” or “harmful” for Kelly.

Interventions	Helpful	Harmful	Most helpful ^a
<i>People</i>			
Counsellor	88.0	1.3	17.2
GP or family doctor	78.5	3.2	10.2
Dietitian or nutritionist	79.0	3.8	19.7
Self-help support group	55.1	19.0	5.7
Psychologist	84.8	2.5	18.5
Close friend	74.7	3.2	9.6
Community mental health worker or team	64.6	9.5	2.5
Family member	56.3	7.6	3.8
Social worker	58.2	7.0	6.4
Psychiatrist	41.8	17.7	3.8
Alternative therapist	41.4	3.8	1.3
Commercial weight-loss program	22.2	56.3	1.3
Minister or priest	17.1	14.6	–
<i>Treatments and activities</i>			
Getting information about problem & available services	94.3	0.6	17.1
Just talking about the problem	79.9	2.5	24.7
Cognitive behaviour therapy (CBT)	88.0	2.5	32.9
Interpersonal psychotherapy (IPT)	70.3	3.2	0.6
Getting out and about more/finding some new hobbies	96.8	3.2	10.8
Relaxation therapy, meditation, etc.	80.3	18.5	1.3
Psychotherapy focusing on past causes	69.6	7.0	6.3
Assertiveness/social skills training	63.9	1.9	1.9
Using a self-help treatment manual	43.0	15.8	1.3
Hypnosis	29.7	11.4	–
Alternative therapy	38.9	1.9	0.6
Admission to a private psychiatric ward or clinic	14.6	62.7	–
Trying to deal with the problem on her own	3.8	72.8	–
Admission to the psychiatric ward of a public hospital	3.2	84.2	0.6
Drinking alcohol to relax	1.3	84.2	0.6
Doing more exercise/getting even fitter	7.0	76.6	0.6
<i>Medicines</i>			
Vitamins and minerals	72.2	0.6	66.2
Tonics or herbal medicines	41.8	3.2	11.7
Anti-depressants	22.8	46.2	20.1
Tranquillizers	3.8	79.7	1.9

^aPercentage (%) of participants rating interventions within each category – people, treatments/activities and medicines – as likely to be *most helpful* for Kelly.

Table II. Beliefs about prognosis for bulimia nervosa: Percentage (%) of participants endorsing possible outcomes for Kelly with and without treatment.

	Prognosis with treatment	Prognosis without treatment
Full recovery, no further problems	19.0	0.6
Full recovery, but problems will probably re-occur	42.4	0.6
Partial recovery	13.3	0.6
Partial recovery, but problems will probably re-occur	25.3	11.4
No improvement	–	25.3
Get worse	–	61.4

Perceived severity was assessed with the question: “How distressing do you think it would be to have Kelly’s problem?”. Perceived acceptability was assessed with the question: “Have you ever thought that it might not be too bad to be like Kelly, given that at times, she has been able to lose a lot of weight?”. Perceived prevalence was assessed with the question: “How many women aged 18 to 42 in the community do you think might have Kelly’s problem at any given point in time?” (Figure 1). Finally, participants were required to indicate whether each of a range of possible etiological factors was “very likely”, “likely”, or “not likely” to be a cause of Kelly’s problem developing in *anybody* (Table III).

Statistical analysis

The data were largely descriptive and are presented as the percentage of participants choosing specific options for each question. Associations between participants’ demographic characteristics, namely, their age and level of education, and responses to the question concerning the “main problem”, the questions concerning prognosis, and the questions concerning the interventions considered most helpful, were examined by means of Chi-Square tests. For the questions concerning the perceived helpfulness of particular interventions and perceived significance of specific causes, mean ratings were examined as a function of age and education using non-parametric (Mann-Whitney U or Kruskal Wallis H) tests. Given the multiple comparisons, only findings significant at the .01 level were considered.

Results

When asked about the *main problem* of the person described in the vignette, the modal response was “low self-esteem” (48.4%), followed by “bulimia nervosa” (18.5%) and “an

Figure 1. Perceived prevalence of ‘Kelly’s problem’: percentage of participants endorsing each option.

Table III. Beliefs about the causes of bulimia nervosa: Percentage (%) of participants rating each factor as “very likely” or “not likely” to be a cause of “Kelly’s problem”.

Possible causes	Very likely	Not likely	Most likely ^a
Having low self-esteem/lacking self-confidence	79.7	0.0	43.0
Being sexually abused as a child or adolescent	64.6	7.6	2.5
Being a perfectionist	62.7	8.2	1.9
Portrayal of the “ideal” body weight/shape in the media	60.8	2.5	12.0
Problems from childhood	58.2	5.1	8.9
Being overweight as a child or adolescent	56.3	6.3	4.4
Having a pre-existing psychological problem	53.8	3.8	3.2
Strict dieting from an early age	52.5	5.7	1.9
Mother and/or sister unhappy with weight or shape	48.1	13.3	3.8
Day-to-day problems	42.4	9.5	14.6
Over-exercising	41.1	12.0	1.3
A recent traumatic event	38.0	19.6	–
Having a parent(s) with a psychological problem(s)	36.3	15.3	1.3
Being a nervous person/having a nervous disposition	17.1	25.3	–
The problem is inherited/genetic	16.5	43.0	0.6
Being separated or divorced	14.6	31.0	–
Having a university education	2.5	79.7	–
Being wealthy	1.9	74.7	–

^aPercentage (%) of participants rating each factor as *most likely* to be a cause of Kelly’s problem.

eating disorder, but not anorexia or bulimia” (11.5%). Together, these responses accounted for 78.4% of all responses.

Table I shows the proportion of participants who believed that specific interventions would be helpful (or harmful) for Kelly, as well as the proportion of participants who believed that specific interventions within each category – people, treatments/activities and medicine – would be *most helpful*.

When asked who they would first approach were they to have a problem such as the one described, participants in the present study most often mentioned “a close friend” (27.1%), a “GP or family doctor” (20.6%), a family member (12.3%) or counsellor (10.3%).

Most participants believed that Kelly’s problem would be moderately (37.6%), very (38.2%), or extremely (15.9%), difficult to treat. Participants’ beliefs concerning Kelly’s likely prognosis, with and without treatment considered appropriate, are given in Table II.

Whereas most participants believed that it would be very (50.0%) or extremely (30.4%) distressing to have Kelly’s problem, 39.9% of participants had occasionally thought that “it might not be too bad” to have Kelly’s problem, 24.1% had often thought this, and 7.0% had always thought this. Responses to the question concerning perceived prevalence are summarized in Figure 1.

Table III shows the percentage of participants who considered various factors as “very likely” or “not likely” to be a cause of Kelly’s problem developing in anybody, as well as the proportion of participants who considered each factor *most likely* to be a cause.

Associations between age and education and responses

Older participants (30 to 42 years) were more likely than “younger” participants (18 to 29 years) to believe that hypnosis would be helpful (47.0% vs 17.6%, $z = -3.94$, $p < .01$). Whereas younger participants were more likely to report that they would approach a close

friend first, in the event of having a problem such as the one described (42.4% vs 8.7%), older participants were more likely to report that they would approach a general practitioner (GP) first (36.2% vs 7.1%) ($\chi^2 = 52.74$, $p < .01$). Participants who had completed tertiary study were more likely to believe that being a perfectionist was very likely to be a cause of BN than those who had not (79.7% vs 50.5%; $z = -3.58$, $p < .01$).

Discussion

We examined MHL concerning BN in a community sample of women with BN-type eating disorders. Most participants believed that BN is a distressing condition that is difficult to treat. However, most participants also believed that BN is common among women in the community and many had at some stage thought that “it might not be too bad” to have such a problem. Primary care practitioners, psychologists, counsellors and close friends were all perceived as helpful in the treatment of BN by the vast majority of participants. Lifestyle changes were also highly regarded, whereas participants were ambivalent about the benefits of psychiatrists and alternative therapy and antipathetic towards inpatient psychiatric treatment, commercial weight-loss programs and the use of prescription medication. Low self-esteem was considered the most likely cause of BN.

In many respects, these findings mirror those obtained in our earlier research, involving a general population sample of women (Mond et al., 2004b,c,d). Women with eating disorders were somewhat more negative about the benefits of seeing a psychiatrist and using anti-depressant medication, and somewhat more pessimistic about prognosis, than healthy women. In addition, participants in the present study were more likely than those in our previous research to consider bulimic behaviours to be normative. However, these are differences of degree rather than kind. Generally, the present findings suggest that many aspects of MHL apply to healthy women and to women with eating disorders alike. Hence, the findings of the present study lend credence to the hypothesis that poor MHL is a factor in low or inappropriate treatment-seeking among individuals with a high level of eating disorder symptoms.

Beliefs about the helpfulness of specific interventions

Participants' awareness of the benefits of CBT in the treatment of BN, and their ability to distinguish this from other forms of psychotherapy, is encouraging, since CBT is the most effective treatment for BN and related disorders (APA, 2006). On the other hand, specific psychotherapy is not always effective, and relapse following initially effective treatment is not uncommon (Keel et al., 2005). In this respect, participants' somewhat pessimistic views concerning prognosis following treatment may constitute a legitimate recognition of the difficulty of treating this disorder. Similarly, participants' negative views concerning the helpfulness of anti-depressant medication need to be interpreted in light of the fact that the primary role of this medication is as an adjunct to specific psychotherapy, particularly where there is co-morbid depression, rather than as a first line of treatment (APA, 2006). Participants' negative views concerning commercial weight-loss programs may reflect recognition of the fact that these programs are unlikely to be of sustained benefit in terms of either reducing eating disorder psychopathology or achieving weight loss (Tsai & Wadden, 2005; Grilo, 2007).

Primary care practitioners and close friends were both highly regarded in the treatment of BN by women with eating disorders. Interestingly, whereas younger participants most often reported that they would approach a close friend first, were they to have a problem such as

the one described, older participants most often reported that they would approach a GP first. A greater reliance on friends and family for emotional support among younger women may reflect the developmental stage of this sub-group (Mond et al., 2007b). There may also be a greater reluctance to disclose bulimic behaviours among younger women, for whom the onset of symptoms is comparatively recent. In any case, the preference of younger participants for disclosure to friends supports the contention that prevention programs for the eating disorders need to extend to the social milieu of affected and at-risk individuals (Austin, 2000). The greater perceived helpfulness of hypnosis among older participants may reflect a greater willingness to experiment with alternative treatment approaches among individuals with chronic symptoms.

Acceptability of bulimic behaviours

The findings of the present study suggest that women with BN-type eating disorders are likely to consider bulimic behaviours to be “normative”, since most participants believed that the prevalence of the problem among women in the community was likely to be in the order of 50% and close to one third of participants had often or always thought that it “might not be too bad” to have the problem described. It is possible that perceptions of this kind place the individual at greater risk for the development of an eating disorder, for example, by normalizing the use of extreme weight-control behaviours (Mond et al., 2004c). Alternatively, individuals with a high level of symptoms may adjust their attitudes, perceiving bulimic behaviours to be more acceptable, in order to alleviate dissonance between attitudes and behaviours (Vander Wal & Thelen, 1997). Irrespective of which of these interpretations is favoured, the perception that bulimic behaviours are normative may reduce the likelihood that need for treatment is recognized.

Beliefs about causes

The significance attached to low self-esteem as a cause of BN, evident both in responses to the initial question concerning the “main problem” and in participants’ beliefs about causes of BN, is of interest, since low self-esteem, and negative affect more generally, is regarded as central in etiological models of BN (Stice, 2001). Nevertheless, the perception that BN is primarily a problem of low self-esteem may be conducive to seeking treatment for a comorbid mental health problem, as opposed to treatment for an eating problem (Mond et al., 2004a). The wide range of other factors considered likely to play a role in the etiology of BN also is consistent with the literature (Stice, 2001), whereas the low importance attached to genetic factors in the etiology of BN would appear to be at odds with evidence from twin and family studies of BN and related disorders (Bulik et al., 1998). It is interesting to speculate as to whether information concerning the biological bases of eating-disordered behaviour, presented, for example, in the context of a prevention or early intervention program, would be conducive to a more balanced view of psychiatrists and/or the use of anti-depressant medication (Mond et al., 2004d).

Implications

In recent years, there has been a shift in eating disorders health promotion from community-based prevention programs to early intervention in primary care (Currin & Schmidt, 2005). This is justifiable, first, because primary prevention programs for eating disorders have not generally been successful (Barr Taylor, 2005), and second, because the vast majority of

individuals who seek treatment for an eating problem will do so through a primary care practitioner (Mond et al., 2007a). However, efforts to improve the detection and management of bulimic eating disorders in primary care have met with mixed success (Fairburn, 2006). Poor MHL of sufferers may be a limiting factor in this regard. The findings of the present study indicate specific beliefs and attitudes that may need to be addressed. Efforts to improve the MHL of individuals with BN and related disorders will need to be complemented by efforts to encourage primary care practitioners and other health professionals to recognize individuals' belief systems and their potential effects on treatment-seeking and adherence to treatment (Jorm et al., 2000a).

Strengths and limitations

Conduct of the present research as part of a large-scale epidemiological study made it possible to investigate MHL in a community-based sample of women with a high level of eating disorder symptoms. To our knowledge, this is the first study to collect information of this kind. A wide range of attitudes and beliefs were considered and assessment of both eating disorder psychopathology and MHL was carried out by trained interviewers. The principal limitation of the study is that the use of forced-choice responses is inevitably associated with a loss of information. In addition, interpretation of the findings is limited to attitudes and beliefs concerning the purging form of BN. A different pattern of responses may have been observed had a vignette of non-purging BN or BED been presented. Finally, it should be reiterated that the ACT is a highly urbanized region. Different findings, including a more pronounced effect of education on responses, may have been observed in a more heterogeneous sample.

In conclusion, beliefs and attitudes likely to be conducive to low or inappropriate treatment-seeking exist among women with eating disorders in the community. Hence, efforts to improve MHL need to be incorporated in early intervention initiatives for BN and related disorders. Primary care practitioners and other health professionals treating individuals with these disorders need to be aware of patients' belief systems and their potential effects on treatment-seeking and adherence to treatment.

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Appendix A

The vignette used in the mental health literacy survey

Kelly is a 19-year-old second-year arts student. Although slightly overweight as an adolescent, Kelly's current weight is below average for her age and height. However, she *thinks* she is overweight. Upon starting university, Kelly joined a fitness program at the gym and also started running regularly. Through this effort she gradually began to lose weight. Kelly then started to “diet”, avoiding all fatty foods, not eating between meals, and trying to eat set portions of “healthy foods”, mainly fruit and vegetables and bread or rice, each day. Kelly also continued with the exercise program, losing several more kilograms. However, she has found it difficult to maintain the weight loss and for the past 18 months her weight has been continually fluctuating, sometimes by as much as 5 kilograms within a few weeks. Kelly has also found it difficult to control her eating. While able to restrict her dietary intake during the day, at night she is often unable to stop eating, bingeing on, for example, a loaf of bread and several pieces of fruit. To counteract the effects of this bingeing, Kelly takes laxative tablets. On other occasions, she vomits after overeating. Because of her strict routines of eating and exercising, Kelly has become socially isolated.