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ORIGINAL ARTICLE

Gender and help-seeking for an eating disorder: findings from a general population sample

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Abstract

Purpose This study aimed to compare gender differences in eating disorder (ED) features and to examine the role of gender as a predictor of ED help-seeking controlling for other putative determinants, namely weight/shape overvaluation, age, BMI, and impairment in role functioning.

Methods Demographic, ED symptoms, and related data were collected during household interviews of individuals aged ≥ 15 years. One hundred and forty-eight participants (164 after data were weighted) with an ED syndrome were identified.

Results Compared to women, men with an ED were younger and had lower levels of purging and overvaluation. However, men and women with an ED had similar levels of functional impairment, binge eating and strict dieting. In univariate analyses, males in general, but not males with an ED, were significantly less likely than females to seek help for an ED. In multivariate analysis of people with an ED, only BMI was significantly associated with treatment-seeking.

Conclusion Functional health impairment and common ED behaviours were similar for men and women with EDs. Gender may not be a primary reason to be more or less likely to seek help for an ED. Rather, other features, most notably, a higher BMI, appear to be stronger predictors of ED-specific help-seeking.

Level of evidence Level V, cross-sectional descriptive study.

Keywords Eating disorder · Help-seeking · Males · Females

Introduction

Eating disorders (EDs) are more common in females than in males [1]. However, men with EDs present with similar clinical features [2, 3] and associated impairment in health-related quality of life (HRQoL) [4] as do women with EDs.

Only a minority of people with EDs seek treatment and this is usually for weight loss, rather than for the mental health care of an ED. Help-seeking is impeded due to both personal barriers (e.g., lack of insight) [5, 6] and structural barriers (e.g., difficulty meeting treatment costs) [7]. Men with EDs may encounter particular additional or greater barriers than women when they do attempt to seek help [8, 9].

While it has been assumed that women are more likely to seek treatment for an ED than men [10], this was not supported by a recent review by Regan et al. [11]. This finding may be due to methodological limitations of the reviewed studies, such as negligible to low numbers of males, participant self-identification rather than researcher assessment of an ED, and the use of a "female-centric" clinical interview

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instrument. The community-based studies [12–14] in this review did not report on effects of gender on help-seeking. In contrast, Forrest et al. [15] recently found American adolescent females with a lifetime history of an ED were significantly more likely to have sought treatment than adolescent males in an epidemiological study of 281 participants. This supports another recent study by Bohrer et al. [16], conducted in a nationally representative US sample of adults with an ED, which also found males to be significantly less likely to seek treatment.

In an earlier report from an Australian general population sample of people 15 years or older, we also found that males with EDs were less likely to access treatment (general mental health and antidepressant medication) compared to females with EDs [17]. These differences remained significant when controlling for demographic variables, HRQoL, and illness severity. However, this study did not identify help-seeking for an ED specifically, and it is possible the respondents may not have regarded themselves as having an ED, either independently of or in addition to another mental health problem.

Other factors reported to be associated with help-seeking for an ED include self-identification with an ED [18], weight/shape overvaluation [19], older age [16], higher body mass index (BMI) [15, 20], and a higher level of functional (role) impairment [21, 22]. Furthermore, Forrest et al. [15] found that the type of ED affected help-seeking; people with putatively more severe EDs (i.e., AN or BN), and more severe specific ED related impairment, were more likely to seek help than those with BED.

With the notable exception of the recent studies [15, 16] that included males, most studies have involved younger people and women. Relationships are complex and help-seeking is likely multi-determined. For example, overvaluation does not simply reflect concern with being overweight but is strongly associated with eating-related psychopathology and psychological functioning [23–25]. Furthermore, significantly higher levels of role impairment have been found in males and females with high levels of ED behaviours and overvaluation compared to those reporting these behaviours in the absence of overvaluation [26].

Aims

Thus, this study was designed with two main objectives: first, to investigate the impact of gender on clinical features and on lifetime help-seeking for an ED in men and women with an ED (assessed at interview) and second, to investigate the impact of gender on help-seeking for an ED in people with a current ED, controlling for other putative determinants such as, age, BMI, overvaluation of shape and weight and functional impairment (days out of role). It was hypothesised that males would have a lower rate of help-seeking for an ED compared to females and that this effect would remain after controlling for other putative determinants of help-seeking.

Method

Study design

In 2005, under the auspices of the South Australian Health Commission, a large, cross-sectional, single-stage, general population survey was conducted in the South Australian population. The questions for the present study were embedded in a larger survey assessing a range of health-related and demographic questions. An independent survey research firm, Harrison Research, conducted face-to-face personal interviews. The study was approved by the South Australian Department of Health Human Research Ethics Committee and all participants gave consent.

Sample selection and interview procedure

The survey included both metropolitan and rural households selected at random from the 2001 Australian Bureau of Statistics (ABS) Census data. Samples were selected from both metropolitan and rural areas. For the metropolitan sample 386 “collectors’ districts” (chosen according to their probability of selection proportional to size) were selected from ABS data and for the country samples, all towns of 10,000 or more in population size and a selection of towns of at least 1000 people were surveyed. Within each collector’s district, a starting point was randomly selected. From this starting point, using a predetermined process based on a “skip” pattern of every fourth household, 10 dwellings were chosen. Only one interview was conducted per dwelling, and where more than one resident was aged over 15 years, the respondent was the person, whose birthday was last. The sample was a non-replacement sample, and up to six separate visits were made to interview the person chosen to take part. Following the completion of the interviews, 10% of each interviewer’s work was selected at random for quality appraisal, i.e., checking that the people were interviewed as reported. Attitudes and beliefs concerning ED behaviours were assessed in the final section of the survey utilising one of three vignettes describing fictional persons suffering from an ED. These three vignettes were presented at random and were followed by a series of questions concerning the problem described. Full details of the survey can be found in the previous papers [27, 28].

Measures and materials

ED features assessment

For the purpose of this study, participants were coded as having a full-syndrome ED according to previously published criteria, i.e., they reported weight/shape overvaluation at level of four or more as well as one or more of the following behaviours: at least weekly episodes of binge eating, purging and/or strict dieting/fasting and/or were underweight [27, 29]. Binge eating was described by the interviewers to participants according to the DSM-5 [30] definition. Purging was described as having "used laxatives, diuretics (water tablets), or made yourself sick, to control your shape or weight". Strict dieting was described as "going on a very strict diet" or "eating hardly anything at all for a time", for the purpose of weight or shape control. Current regular use of these behaviours was defined as the behaviour having occurred at least weekly over the 3 months prior to the interview. Overvaluation was assessed by the question: "Has your weight and/or your shape influenced how you think about (judge) yourself as a person?" and recorded as present if at a moderate or higher level. Body mass index (BMI; kg/m^2) was calculated from self-reported weight and height measurements.

ED help-seeking behaviour was assessed by the follow-up question: "Have you ever spoken/sought advice from a professional person (e.g., a counsellor, a psychologist, a doctor, a dietician), specifically in relation to a problem with your eating such as eating too much in one go, feeling that your eating is out of control, being preoccupied with what you can eat or when you can eat, or with burning up calories, or other problems like this?" 'Days-out-of-role' was assessed with the question "During the past 4 weeks (0–28 days), on how many days, if any were you unable to complete your work, study or, household responsibilities because of any problem with your (physical or emotional) health?".

Statistical analyses

Data were weighted to be representative of the general population by the inverse of the individual's probability of selection and by the response rate in metropolitan and country regions. SPSS version 22 and a significance level of 0.05 were employed for all tests. Chi square tests with Fisher exact test correction for small samples were used to compare help-seeking between males and females. A multivariate binary logistic regression was conducted to assess gender as an unadjusted predictor for help-seeking, and adjusting for age, BMI, overvaluation of weight/shape, and days out of role.

Results

From the 4827 selected households, 3047 individuals (response rate 63.1%) were interviewed; of whom 1553 (51%) were women. The mean age was 45.14 (SD 18.79), mean BMI was 26.03 (SD 5.32), and the majority (77.5%) were Australian born, married (54.1%), and had a trade or higher qualification (52.2%). Other demographic and ED features of participants have been reported previously [27, 31].

In this sample, 148 individuals had a full-syndrome ED, i.e., high levels of overvaluation plus a regular ED behaviour. These comprised 54 people with EDNOS, 70 with BED and 24 with BN. Of the EDNOS group, 5 were AN type, i.e., people were underweight, BMI $\leq$ 17.5 and had overvaluation. Of the 24 with BN, 6 were purging type [27]. When data were weighted there were 164 with cases with full- syndrome ED. Comparative features of the participants with an ED are shown in Table 1. Males with an ED were younger and had lower levels of overvaluation and purging compared to females.

Help-seeking for an ED in men and women

In the total sample, 8.47% ($n = 258$) of participants had ever sought treatment for an ED, and males ($n = 97$, 37.6%) were less likely to do so than females ($n = 161$, 62.4%), [$\chi^2(1) = 14.75$, $p < 0.001$]. However, of the 164 participants who had a full-syndrome ED (males: 27% of total ED cases; females: 35% of total ED cases), males were not significantly less likely than females to have ever sought help for an ED problem [$\chi^2(1) = 1.00$, $p = 0.317$].

In multivariate analyses, only a higher BMI emerged as a significant predictor of help-seeking (Table 2). When taking all factors into account, gender, age, overvaluation and days out of role were not associated with a greater or lesser likelihood to seek treatment for an ED.

Discussion

This study aimed to investigate gender differences in clinical features and help-seeking for an ED. The study improved on the previous methodological limitations using a representative population-based sample and controlling for other potentially confounding factors, in particular those related to symptom severity and impairment. Few clinical differences were found between men and women with an ED, with the exceptions that men were less likely to use purging behaviours and on average had lower weight/shape overvaluation. While univariate analysis confirmed that in the total sample

Table 1 Comparative demographic and clinical features of males and females with an ED

	Mean (SD) *n*		*t*	*P*
	Males	Females		
Age	31.51 (12.74) 66	36.64 (14.34) 98	−2.344	0.020
BMI	27.61 (6.84) 54	28.49 (7.14) 91	−0.729	0.467
	Median (IQR) *n*		*Z*	*P*
	Males	Females		
Education	5(3–7) 66	4(3–7) 98	−0.320	0.746
Days out of role	0.00 (0.00–4.14) 66	0.00 (0.00–4) 98	−0.709	0.478
Binge eating	3(1–4) 66	3(1–4) 98	−0.812	0.417
Overvaluation	4 (4–5) 66	5 (4–6) 98	−2.355	0.019
	N (%)		χ^2, *df* = 1	*P*
	Males	Females		
Purging	1 (5.55%)	17 (94.44%)	10.117	< 0.001
Strict dieting	34 (43.03%)	45 (56.93%)	0.495	0.526

Table 2 Predictors of help-seeking in people who had an ED

	B	Odds ratio	95% CI	*P*
Model 1 (unadjusted)				
Gender	−0.259	0.772	0.392; 1.518	0.453
Model 2 (adjusted)				
Gender	−0.810	0.445	0.167; 1.188	0.106
Age	−0.005	0.995	0.959;1.031	0.773
BMI	0.151	1.163	1.087; 1.244	< 0.001
Weight/shape overvaluation	0	1	–	–
Days out of role	0.007	1.007	0.936; 1.085	0.845

of study participants, women more frequently sought treatment for an ED, gender did not influence help-seeking in the sample of people with a full-syndrome ED was conducted.

The univariate finding that males in general were less likely to seek treatment for an ED is perhaps not surprising given the lower prevalence of EDs in males [1]. However, the finding that males with a current full-syndrome ED are as likely as females to have sought help for their ED is relatively novel. These findings, supported by the multivariate analysis controlling for age, overvaluation of weight/shape, days out of role and BMI, suggest that when men experience debilitating symptoms of an ED they, like women, are more likely to seek treatment.

While the current findings are supported by some previous studies [32–34], they are at odds with others [15–17]. These in part may be explained by methodological differences. For instance, in our previous study, we examined seeking treatment for any mental health problem and found that women with an ED were more likely than men with an ED to do so, even when controlling for severity and demographic variables [17]. Thus, the explanatory factor here might be the reason for treatment-seeking, with the current study examining treatment for an ED specifically; perhaps, men with an ED are as likely as women to seek treatment for this specific problem, but remain less likely to seek help for other general mental health problems. Another potentially important point of difference with the previous studies by Bohrer [16] and Forrest [15] is the higher proportion of participants with AN and BN in their studies relative to ours. Consistent with the population distribution of EDs [35], our sample largely consisted of participants with either BED or EDNOS, and no participants were identified with AN [27]. Thus diagnostic group may moderate the effect of gender on help-seeking, which, while difficult to examine in a community sample, would be an important consideration in future research. Other differences with these previous studies include sample size, age range, and the assessment of lifetime versus current EDs [15, 16].

Similar to others [14, 20, 36], we found that a higher BMI predicted ED treatment-seeking, which speaks to the reliability of this effect. This finding might be explained by the tendency for people with EDs to seek help for weight loss more often than for their ED symptoms [37], which may have been interpreted as help-seeking for an ED by participants in this study. Other studies have found that people in larger bodies also have a higher frequency of ED symptoms [38] and risk factors [39], which may also increase the likelihood of help-seeking. Contrary to the previous studies (e.g., Forrest et al. [15]), participants in the current study with greater overvaluation of weight/shape and functional impairment were not more likely to seek treatment when factoring in other potential predictors such as BMI. This might be

explained by the very low rates of treatment-seeking in general for an ED [37], which suggests that having a disabling ED is not sufficient in and of itself to prompt help-seeking.

Clinical implications

This study found similar levels of symptoms (such as binge eating and strict dieting) and functional impairment in males and females who had an ED and similarly low levels of help-seeking. Hence, the findings support calls for greater attention to males with ED in both clinical and research settings [8]. As higher BMI was associated with help-seeking, health professionals involved in the clinical management of obesity should also be alert to people having co-morbid problems with an ED and unmet need for treatment for the latter.

Strengths and limitations

A strength of the study is that the sample was representative of the general population of individuals aged 15 years and older. A limitation is that the survey was conducted a decade ago and there may have been population-level changes in the occurrence and/or correlates of ED features, including help-seeking, since this time. In addition, while help-seeking was assessed over the lifetime only current (3-month) ED features were assessed.

Conclusion

Males in Australia with an ED were clinically similar to females and no less likely than females to have ever sought help for an ED. A higher BMI was the only variable associated with help-seeking for an ED in multivariate analysis. Clinicians may need to be more responsive to the needs of atypical ED presentations, men with ED and/or higher body weight in particular.

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Compliance with ethical standards

Conflict of interest Professor Hay receives sessional fees and lecture fees from the Australian Medical Council, Therapeutic Guidelines publication, and New South Wales Institute of Psychiatry and royalties from Hogrefe and Huber, McGraw Hill Education, and Blackwell Scientific Publications, and she has received research grants from the NHMRC and ARC. She is Deputy Chair of the National Eating Disorders Collaboration Steering Committee in Australia (2012) and Member of the ICD-11 Working Group for Eating Disorders (2012) and was Chair Clinical Practice. Guidelines Project Working Group (Eating Disorders) of RANZCP (2012–2015). She has prepared a report under contract for Shire Pharmaceuticals (July 2017).

Ethics approval The data from interviews with participants were collected in accordance with the ethical standards of the Harrison Research Firm. The full survey was approved by the South Australian Department of Health Ethics Committee. All participants in the study provided verbal informed consent. This was obtained from parents or guardians when the respondent was aged 15–17 years.

Informed consent Informed consent was obtained from all individual participants included in the study.

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