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The clinical features of EDNOS: Relationship to mood, health status and general functioning

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ABSTRACT

Study purpose: Eating disorder not otherwise specified (EDNOS) remains poorly evaluated in terms of eating disorder features and relationship to mood, health status and general functioning. This study investigated the clinical profiles of a sample of EDNOS patients, and how they compared to patients with anorexia nervosa (AN) and bulimia nervosa (BN).
Method: The sample consisted of 178 patients. All completed the Eating Disorder Examination, Beck Depression Inventory, Work and Social Adjustment Scale and Sf-36. ANOVAs were conducted to explore group differences.
Results: No differences were found for depression. No differences were found between BN and EDNOS on measures of health status and general functioning. AN patients reported greater role limitations due to physical health and experienced greater physical pain compared with BN or EDNOS patients, and reported poorer social functioning, lower vitality and higher functional impairment compared with EDNOS patients.
Conclusion: EDNOS patients are generally no less clinically impaired than those with BN. However AN patients may be more impaired in some aspects of general functioning compared with BN or EDNOS patients.

1. Introduction

It has become increasingly well established that EDNOS is the DSM-IV diagnosis most commonly seen in routine clinical practice (Button, Benson, Nollett & Palmer, 2005; Fairburn, Cooper, Bohn, O'connor, Doll & Palmer, 2007; Turner & Bryant-Waugh, 2004) and there is growing evidence to suggest that this group of patients are no less severe than those presenting with full DSM-IV diagnoses. For example Crow, Agras, Halmi, Mitchell, and Kraemer (2002) found that patients presenting with full and partial AN did not differ in relation to aspects of eating disorder psychopathology, such as degree of dietary restraint or hunger, or general psychopathology, such as the presence of a personality disorder. Studies have also found that a proportion of EDNOS patients present with the core cognitive psychopathology but fail to fulfil the frequency of behavioural symptoms or the weight criteria necessary for a full clinical diagnosis of BN or AN (Martin, Williamson, & Thaw, 2000; Ricca et al., 2001; Turner & Bryant-Waugh, 2004). However these studies are limited by small and unrepresentative patient samples. For example the study by Turner and Bryant-Waugh (2004) did not include BED patients. In a recent multi-site study exploring the severity and status of EDNOS, Fairburn et al. (2007) found that EDNOS patients presented with long standing eating problems that were characteristic of AN and BN, and comparable in severity to that seen in BN. They also presented with similarly high levels of general psychiatric symptoms as those presenting with BN. Whilst this study benefited from recruiting via two eating disorder clinics in the UK, patients with a BMI below 16 or above 40 were not included thereby limiting the representative nature of the sample and the potential for making comparisons with patients presenting with AN.

The limitations of previous studies coupled with a growing interest in conceptualising eating disorders in relation to distress and impairment (Wilfley, Bishop, Wilson, & Agras, 2007) highlights an on-going need for systematic descriptions of the wide range of eating disorder presentation seen in routine clinical practice. Such descriptions need to be based on robust, standardised measures and would benefit from assessing both eating disorder psychopathology and wider aspects of co-morbidity, including mood, health status and general functioning. The present study had two aims. The first was to describe the clinical profile of a group of EDNOS patients in relation to

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eating disorder features, mood, health status and general functioning. The second was to assess the relative severity of EDNOS by comparing this group with those presenting with a full diagnosis of AN ore BN.

2. Methods

2.1. Participants

The sample consisted of 178 patients assessed at a regional adult Eating Disorders Service in the UK between May 2004 and December 2005. Data collection was integrated into the service assessment process.

2.2. Assessment

All patients completed the following measures:

2.2.1. The Eating Disorder Examination (EDE, version 15; Cooper & Fairburn, 1987)

The EDE generates frequency and severity ratings for key behavioural and attitudinal aspects of eating disorders. Ratings consist of frequency scores (0–6), severity scores (0–6) and frequency of behaviour scores. The EDE was used to assess current diagnostic status.

2.2.2. The Medical Outcome Survey Short-Form, (SF-36, Ware & Sherbourne, 1992)

The SF-36 is a widely used self-report measure of physical and emotional health. It contains 36 items measuring the following 8 health dimensions: *physical functioning, social functioning, role limitations due to poor physical health, bodily pain, general mental health, general health perception, role limitations due to poor emotional health, vitality* and an *overall rating of health*. Items are scored such that a higher score indicates better health status.

2.2.3. The Work and Social Adjustment Scale (WSAS, Marks, 1986)

The WSAS is a brief self-report questionnaire that aims to measure functional impairment attributed to a defined problem. In the current study the defined problem was described as 'eating difficulties' and the wording on the questionnaire amended accordingly. The measure has 5 questions that aim to assess the extent to which the identified problem impairs an individual's ability to engage in a range of work and social tasks. These include home management tasks (e.g., cooking and paying bills), social leisure activities with other people (e.g., going to parties or pubs) and private leisure activities (e.g., reading or going for a walk alone).

2.2.4. Beck Depression Inventory (BDI-II, Beck, Steer & Brown, 1996)

This is a 21-item questionnaire that provides a global score of depressive symptomatology. Each item is rated on a 4-point Likert scale, with higher scores indicating a more severe level of depression.

2.3. Data analysis

Multivariate analysis of variance tests (MANOVA) were conducted to explore differences across DSM-IV diagnoses. Where necessary follow-up one way ANOVAs were conducted to identify which dependent variables were significantly different. Post hoc Bonferonni tests were conducted to identify the direction of difference and to minimise the likelihood of a Type I error.

3. Results

3.1. The sample

One hundred and ninety one participants submitted completed questionnaires. According to current DSM-IV diagnostic criteria, 14 (7%) had a current diagnosis of AN, 66 (35%) had BN and 98 (51%) had EDNOS. Thirteen (7%) did not meet the criteria for a clinical eating disorder diagnosis at the time of assessment and were excluded from subsequent analysis. These patients presented with depression or physical health problems, such as irritable bowel syndrome. The study population therefore consisted of 178 participants.

3.2. Clinical characteristics

The clinical characteristics of the 3 diagnostic groups are shown in Table 1. There was no significant difference across diagnoses for age ($\chi^2 = 1.84$, $df = 2$, $p = 0.398$), previous treatment ($\chi^2 = 1.25$, $df = 2$, exact $p = 0.540$) or reported history of a previous episode of an eating disorder ($\chi^2 = 1.82$, $df = 2$, exact $p = 0.427$). The majority of patients with EDNOS were white, single and in their twenties. More than 50% reported a history of an eating disorder and just under half had previously sought treatment. These findings were not statistically different from those reported by patients with AN or BN. Twenty six (26.5%) missed one of the criteria for a full diagnosis of AN, 20 (20.4%) presented with symptoms suggestive of purging disorder, 19 (19.4%) missed one of the diagnostic criteria for a full diagnosis of BN, 13 (13.3%) presented with sub-clinical BN, 11 (11.2%) missed two of the criteria for a full diagnosis of AN, 7 (7.1%) presented with BED and 2 (2.1%) appeared to present with low body weight and low levels of cognitive psychopathology.

Comparisons were made between the EDNOS patients and those presenting with AB or BN (see Table 1). There was a significant effect of diagnosis on the combined dependent variable eating disorder features ($F_{(18,\ 334)} = 7.4$, $p < 0.0000$; Wilks' Lambda = .51; partial eta squared = .28). Patients with AN reported significantly higher levels of dietary restraint and exercise, and had a significantly lower BMI compared to those with BN or EDNOS. Furthermore, those with BN reported significantly higher levels of objective binge eating and self-induced vomiting compared to those presenting with AN or EDNOS. Whilst these differences might be expected given that these features are currently key diagnostic variables, the groups did not differ significantly in relation to cognitive psychopathology. Patients with EDNOS reported significant levels of concern related to eating, weight and shape, and reported levels of dietary restraint that were consistent with those presenting with BN.

In relation to mood, health status and general functioning, there was a significant effect of diagnosis on the combined dependent variable general functioning ($F_{(18,\ 292)} = 0.772$, $p < 0.004$; Wilks' Lambda = .7; partial eta squared = .12). Patients with AN reported significantly greater role limitations due to physical health and experienced significantly greater physical pain compared to those with BN or EDNOS. They also reported significantly poorer social functioning, significantly lower levels of vitality and a significantly greater degree of functional impairment caused by their eating disorder compared to patients with EDNOS. No significant differences were found across the groups for level of depression ($F_{(2,\ 175)} = 2.7$, $p < 0.06$) and no differences were found between patients with BN and EDNOS on measures of health status and general functioning.

4. Discussion

There remains a lack of adequate published clinical descriptions of patients with EDNOS. This study aimed to address this gap in the literature through describing the key features of a sample of EDNOS patients recruited via a community eating disorder service in the UK. In