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Clinicians as a critical link: Understanding health professionals' beliefs and attitudes toward anorexia nervosa, bulimia nervosa, and binge eating disorder

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Understanding the perspectives of health professionals remains an understudied issue, yet may help bridge research-practice gaps and pinpoint important areas for education, training, and research. This study investigated attitudes toward anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED) among Nordic health professionals specialized within the eating disorder (ED) field. Participants (n = 144) completed a modified ED-version of the Illness Perception Questionnaire which assessed attitudes and beliefs toward perceived symptom controllability, severity, treatment effectiveness, and views on the prognosis of AN, BN, and BED. Personal enjoyment and level of comfort working with AN, BN, and BED were also assessed. The majority agreed or strongly agreed that patients with AN, BN, and BED were *not* responsible for their illness, and viewed the illnesses as psychological rather than medical in etiology. AN was viewed as the most severe and enduring, followed by BN, then BED. Treatment for BN was viewed as being more highly effective than treatments for either AN or BED. Professionals rated significantly *less* enjoyment and *less* confidence working with BED. To conclude, both commonalities and differences in attitudes toward AN, BN and BED were found in terms of perceived symptom controllability, views on severity, treatment effectiveness, and anticipated prognosis. In particular, findings emphasized the need for additional training in the management of BED among Nordic healthcare professionals.

Key words: Eating disorders, health professionals, attitudes, beliefs, eating disorders literacy.

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INTRODUCTION

Eating disorders (EDs) are serious and costly mental disorders that considerably impair physical health and disrupt psychosocial functioning. A prolonged period of untreated symptoms can lead to a more entrenched form of illness, which is more difficult to treat (Treasure, Duarte & Schmidt, 2020). Only a fraction of individuals with an eating disorder (ED) ever seek or receive treatment (Keski-Rahkonen & Mustelin, 2016). One systematic review found that only 23% of community cases with a diagnosable ED had received treatment by a specialist (Hart, Granillo, Jorm & Paxton, 2011). Numerous individual and systemic barriers inhibit seeking and obtaining treatment for EDs, including shame and fears of stigma (Ali, Farrer, Fassnacht, Gulliver, Bauer & Griffiths, 2017), whereas other obstacles may relate to the attitudes and beliefs of practitioners and organizations (Cooper & Bailey-Straebler, 2015; Kazdin, Fitzsimmons-Craft & Wilfley, 2017). An improved understanding of clinician attitudes and beliefs may therefore help improve detection and facilitate early detection, bridge research-practice gaps in the uptake of evidence-based treatments, and promote treatment alliance and adherence (Johns, Taylor, John & Tan, 2019; Thompson-Brenner, Satir, Franko & Herzog, 2012).

To date, the majority of investigations into health professionals' attitudes within the ED field derive from primary care or generalist settings, often conducted with early career professionals, students, or trainees (Johns *et al*., 2019). Collectively, these studies have exposed challenges relating to a lack of training and resources, contributing to feelings of being unequipped and unskilled in the management of EDs (Linville, Brown & O'Neil, 2012; Sim, McAlpine, Grothe, Himes, Cockerill & Clark, 2010; Waller, Micali & James, 2014). General practitioners have been found to hold pessimistic views regarding the chronicity of anorexia nervosa (AN), for instance, ascribing a relatively poor treatment prognosis to the illness (Currin, Waller & Schmidt, 2009). Some studies have documented stigmatizing or unfavorable views toward individuals with ED generally (e.g., being difficult, time-consuming, manipulative) among general practitioners (Reid, Williams & Burr, 2010) and nurses (Ramjan, 2004; Ryan, Malson, Clarke, Anderson & Kohn, 2006; Woodrow, Fox & Hare, 2012). Medical students with little or no experience in treating EDs have attributed these illnesses to self-infliction (Bannatyne & Stapleton, 2017; Walker & Lloyd, 2011). A study of early career physicians found that only 14% reported they enjoy working with EDs (Anderson, Accurso, Kinasz & Le Grange, 2017).

There is some evidence to suggest that specialists are *less* likely to view ED patients as responsible for their condition and hold more favorable attitudes, as compared to non-specialists (Tan,

Doll, Fitzpatrick, Stewart & Hope, 2008; Thompson-Brenner *et al*., 2012). This is encouraging, as specialist care for anorexia nervosa specifically, and EDs generally, is recommended by several evidence-based clinical guidelines for EDs (Hilbert, Hoek & Schmidt, 2017). For example, the National Institute for Health and Care Excellence guidelines in the United Kingdom recommend that first-line services provide an immediate referral to an eating disorder service for management if an ED is suspected after initial assessment (National Institute for Health and Care Excellence (NICE), 2017). The Norwegian national treatment guidelines advise clinicians to quickly start assessment and treatment within the specialist health service to increase the likelihood of rapid symptom control and better prognosis (Helsedirektoratet, 2019).

Existing knowledge of professionals' attitudes toward "newer" eating disorder diagnoses, for instance binge eating disorder (BED), is especially limited. The lack of research is surprising given findings from epidemiological studies showing that BED is more prevalent than AN and bulimia nervosa (BN) combined (Hudson, Hiripi, Pope & Kessler, 2007; Kessler, Berglund, Chiu et al., 2013). Binge eating disorder is characterized by recurrent binge eating and marked distress in the absence of inappropriate compensatory behaviors for weight control (American Psychiatric Association, 2013). Community studies have revealed limited public awareness that BED constitutes a diagnosable eating disorder, and unfortunately, individuals with BED are often subject to personal blame and perceived controllability of their illness (Ebneter & Latner, 2013; Murakami, Essayli & Latner, 2016). Relevant studies involving healthcare professionals have focused almost exclusively upon diagnostic skills and knowledge of, rather than attitudes toward, BED (Reas, 2017). Thus, the extent to which findings from the community may generalize to healthcare professionals is unknown.

The aim of this report was to assess and compare attitudes toward three major ED diagnostic groups among healthcare professionals from the Nordic region who are specialized within eating disorders. To our knowledge, this is the first study worldwide to assess and compare relative attitudes and beliefs toward AN, BN, and BED in a multi-disciplinary sample of professionals working within the ED field.

METHOD

Attendees of the 2018 Nordic Eating Disorders Society meeting in Reykjavik, Iceland as well as affiliated chapter members (i.e., the Danish, Norwegian, Swedish, Icelandic, and Finnish eating disorder societies) were invited by email and word-of-mouth to complete an online survey. The Nordic Eating Disorder Society is a professional forum for healthcare professionals working in the eating disorders field from Sweden, Denmark, Norway, Finland and Iceland. The society holds a biannual meeting and is dedicated to the advancement of knowledge and improvement of treatment for eating disorders. All conference attendees or affiliated ED professionals were eligible for participation; no exclusion criteria were applied. Data were collected using Nettskjema, an online survey platform supported and managed by the University of Oslo. Informed consent was provided by ticking a box, which was required prior to proceeding to the survey items. Participation was anonymous and voluntary and no financial compensation or course credit was provided in exchange for participation. The study received expedited approval by the Departmental Institutional Review Board at the Institute of Psychology, Faculty of Social Sciences, University of Oslo (ref. no. 3485951).

Measurement

A modified ED-version of the revised Illness Perception Questionnaire (IPQ; Anderson *et al*., 2017; Currin *et al*., 2009; Holliday, Wall, Treasure & Weinmann, 2005) was administered. The 10-item self-report questionnaire is rated on a five-point Likert scale from "strongly disagree" to "strongly agree." Based upon stigma research and a measure of cognitive measure of illness perception (Weinman, Petrie, Moss-Morris & Horne, 1996), the modified ED-version of the IPQ has been used previously in the US and UK to examine attitudes towards eating disorders by residents/fellows and primary care physicians (Anderson *et al*., 2017; Currin *et al*., 2009). Items assess perceived symptom controllability, illness chronicity, treatment effectiveness, impairment and prognosis. In this study, participants rated each of the 10 items separately for AN, BN and BED to allow a comparison of attitudes toward the different disorders. Cronbach alphas for the modified ED-version of the IPQ in the present study were 0.69, 0.73, and 0.80, for the AN, BN, and BED items, respectively.

In addition to the modified ED-version of the IPQ, professionals also reported their level of comfort working with respective disorder (i.e., "Which of the main diagnoses (broadly-defined), do you feel most/least confident working with?") and views on difficulty to treat ED compared to other psychiatric diagnoses (i.e., easier to treat, equally easy/difficult to treat, more difficult to treat).

Statistical analyses

Analyses were conducted using IBM SPSS Statistics for Windows, version 23 (IBM Corp., Armonk, NY, USA). Descriptive analyses were performed for the demographic and nominal data. The percent of participants who "strongly agreed" or "agreed" was calculated for each item. An ANOVA was performed to investigate differences in attitudes toward the three diagnostic groups. Post hoc pairwise comparisons were adjusted using a Bonferroni correction. If the Mauchly's test indicated the assumption of sphericity had been violated, then a Greenhouse-Geisser correction was performed. Significance was set at <0.05 and partial eta-squared (η^2p) were interpreted as small 0.01, medium 0.06, and large 0.14 (Cohen, 1988).

RESULTS

A total of 144 healthcare professionals working within the ED field completed the attitude survey items. Of the participants, 36.8% were psychologists, 14.8% nurses, 13.4% medical doctors, 11.3% nutritionists/dieticians, 11.3% social workers, 4.9% physiologists/exercise scientists, and 5.6% other. Over 80% were classified as clinicians, 14% "clinician-researchers" and 5% were primarily researchers. In terms of work experience within the field of ED: 1–3 years (22.5%), 4–6 years (14%), 7–10 years (10.5%), 11–15 years (18.9%), 16–20 years (15.4%), and >20 years (18.2%).

Table 1 illustrates the percentage who "agreed" or "strongly agreed" with the items. The vast majority agreed or strongly agreed that all three disorders (BED, BN, AN) impaired quality of life (88%–99%) and caused difficulties for family and/or friends (75%–99%). A majority also agreed or strongly agreed that BED, BN, and AN are severe and enduring mental illnesses (65%–83%) and viewed the illnesses as "psychological" rather than "medical" (65%–71%). Published findings from the study by Anderson *et al*. (2017), which examined attitudes towards ED among early career

physicians using the same modified ED-version of the IPQ, were provided in Table 1 for reference.

Table 2 displays means (*SD*) of the modified ED-version of the IPQ for AN, BN, and BED. As shown, AN was viewed as a significantly more functionally impairing disorder in terms of quality of life, followed by BN, then BED. Binge eating disorder was rated as a significantly less severe and enduring illness than AN. Individuals with BED, then BN, were judged to be significantly more responsible for their illness than AN, rated to have symptoms that are more common and likely to spontaneously resolve over time. Treatment for BN was viewed as significantly more effective than either AN or BED, and BN was rated as having a significantly less chronic course. Health professionals rated significantly less personal enjoyment working with BED compared to AN or BN.

Lastly, results showed that the majority (56.3%) of participants reported feeling *most* confident working with individuals with AN, while 35.4% felt most confident working with BN, and 7.6% felt most confident working with BED. Conversely, the majority (62.0%) felt *least* confident working with BED, followed by AN (25.2%), and BN (12.7%). Fifty-one percent of professionals perceived EDs are more difficult to treat than other psychiatric diagnoses, while 38.2% perceived EDs as similarly difficult/easy-to-treat, 3.5% reported ED as easier-to-treat, and 7% were unsure.

DISCUSSION

This study assessed and compared attitudes toward, AN, BN, and BED among Nordic healthcare professionals working within the ED field. Over half (52%) of the sample reported 10 or more years working in the field of ED, with three-quarters (77%) reporting at least four years of experience in the field. Findings showed that all three eating disorders were judged to profoundly impair quality of life and cause difficulties for family and/or friends. In particular, AN was viewed as socially impairing. Bulimia nervosa was distinguished by more optimistic clinician views on the effectiveness of treatment, and was viewed as having a less chronic course than either AN or BED. This is in line with findings from Currin *et al*. (2009), who administered the ED-version of the Illness Perception Questionnaire to primary care physicians. In their study, findings for BN vs. AN clustered separately, with AN being judged as a chronic illness with a relatively poorer treatment prognosis. The authors argued that the pessimistic view of the outcome of anorexia nervosa may partly explain stigmatizing attitudes found in prior ED research, as is common for psychological illnesses with a long duration and insidious onset. Our study extends this prior research, and suggests there are important differences between the views of professionals specialized within the field of ED vs. early career professionals. In the Anderson *et al*. (2017) study, only one-third of the sample had received four or more hours of ED-related training within the past 5 years. The majority (81%) of their sample viewed AN and BN as chronic illnesses, with few perceiving treatment as being "highly effective." This stands in stark contrast to our findings, where the vast majority of participants reported several years of experience working with this population, and had considerably more favorable views on treatment effectiveness and prospects for recovery. Additionally, in the Anderson *et al*. (2017) study, 82% judged AN and BN as medical in etiology rather than psychological, and that patients were largely viewed as personally responsible for their illness. In our study, professionals rated AN and BN largely as psychological in etiology, not medical, and patients were overwhelmingly viewed as *not* personally responsible for their illness. These discrepancies point to the urgent need for improved education during medical training, as a lack of knowledge regarding eating disorders has even been suggested to contribute to avoidable deaths (Ayton & Ibrahim, 2018).

Table 1. *Percentage of healthcare professionals working in the ED field who "agreed" or "strongly agreed" with the items (N* = 144)

Item	AN (%)	BN (%)	BED (%)	Residents and fellows (%) (AN+BN)[a]
. . .has major consequences on the patient's quality of life'	99.3	97.3	88.2	93
. . .causes difficulties for a patient's family and friends '	98.6	88.9	75.2	94
. . .severe and enduring mental illness.	82.6	77.8	65.2	70
. . .is psychological rather than medical.	65.3	70.8	66.0	18
. . .I generally enjoy working with this group.	57.0	59.0	26.4	14
. . .treatment is highly effective.	47.9	74.1	47.9	32
. . .is likely to be chronic.	29.9	21.1	27.8	81
. . .patients can do a lot by themselves to control symptoms.	27.3	38.0	28.7	25
. . .individuals are largely responsible for their illness.	4.2	5.6	5.6	74
. . .symptoms are common and will resolve over time by themselves.	2.1	5.6	5.6	N/A

Notes: N/A = not available.
[a]Published data from the Anderson et al. (2017) study was included as a reference for a comparison.

The current study offers new knowledge related to professional attitudes toward BED. Findings indicate that BED was viewed as significantly less severe and enduring as AN, and less impairing on the patient's quality of life, causing fewer difficulties for friends and family than either AN or BN. In contrast to AN in particular, individuals with BED were viewed as significantly more responsible for their illness, with symptoms likely to resolve by themselves. Our sample also rated significantly less enjoyment and less confidence working with BED with a majority (62.0%) reporting they were the "least" confident in working with this group. These findings strongly suggest the need for additional training in the management of BED across the Nordic region to improve both skills and confidence in providing services to this diagnostic group.

Several strengths and limitations deserve discussion. The focus on a multi-disciplinary sample clinicians specialized in the field of ED is unique by extending our knowledge beyond existing studies of frontline providers and trainees. This study also compared attitudes toward BED, which is a more recently recognized eating disorder, to the more well-known diagnoses of AN and BN. To our knowledge, only one prior study has

Table 2. *Comparison of attitudinal items (M, SD) toward AN, BN, and BED among healthcare professionals specialized within the ED field (N* = 144)

Item	AN (*M*, *SD*)	BN (*M*, *SD*)	BED (*M*, *SD*)	*F*	*p*-value	np^2
. . .has major consequences on the patient's quality of life.	4.83 (0.48)[b,c]	4.65 (0.56)[a,c]	4.43 (0.69)[a,b]	25.3	<0.001	0.150
. . .causes difficulties for a patient's family and friends.	4.74 (0.50)[b,c]	4.25 (0.69)[a,c]	4.01 (0.76)[a,b]	62.1	<0.001	0.312
. . .severe and enduring mental illness.	4.05 (0.97)[c]	3.90 (0.91)	3.76 (0.92)[a]	6.01	0.003	0.041
. . .is psychological rather than medical.	3.71 (0.92)	3.87 (0.93)	3.83 (0.90)	3.33	0.04	0.023
. . .I generally enjoy working with this group.	3.64 (0.87)[c]	3.70 (0.72)[c]	3.17 (0.82)[a,b]	21.8	<0.001	0.137
. . .treatment is highly effective.	3.33 (0.97)[b]	3.87 (0.83)[a,c]	3.44 (0.89)[b]	24.2	<0.001	0.149
. . .is likely to be chronic.	2.94 (0.99)[b]	2.73 (0.96)[a,c]	3.01 (0.95)[b]	10.7	<0.001	0.070
. . .patients can do a lot by themselves to control symptoms.	2.90 (0.97)	3.08 (0.97)	2.97 (0.93)	3.53	0.03	0.034
. . .individuals are largely responsible for their illness.	1.63 (0.79)[b,c]	1.80 (0.94)[a,c]	2.01 (0.94)[a,b]	15.4	<0.001	0.100
. . .symptoms are common and will resolve over time by themselves.	1.59 (7.1)[b,c]	1.99 (0.78)[a,c]	2.15 (0.77)[a,b]	39.7	0.001	0.221

Notes: Higher scores indicate stronger agreement. AN = anorexia nervosa[a], BN = bulimia nervosa[b], BED = binge eating diorder[c]. Responses range from "strongly disagree" = 1 to "strongly agree" = 5; Effect sizes were interpreted as small 0.01, medium 0.06, and large 0.14; $p < 0.05$. Different superscript letters indicate statistical significance

investigated all three main diagnostic groups, and the study was conducted in a community sample of adolescents from Ireland (O'Connor, McNamara, O'Hara & McNicholas, 2016). Future investigations should be broadened to include subthreshold manifestations of disordered eating, orthorexia, and other diagnoses such as avoidant-restrictive food intake disorder (American Psychiatric Association, 2013). Another limitation of the current study involves the limited scope of assessment. Detailed demographic data such as age and gender were not assessed to preserve the anonymity of the participants. As such, we were unable to examine gender differences in attitudes, although this would have been enlightening as prior studies have shown that men are more likely to endorse stigmatizing beliefs toward ED than women (McArdle, Meade & Moore, 2016; Simpson & Mazzeo, 2017). Although the attitude items were based upon prior research and have been administered previously in two studies of eating disorders (Anderson *et al*., 2017; Currin *et al*., 2009), the eating disorder modified version of the IPQ itself has not been validated. Future research is warranted to develop assessment tools specific for the ED field to advance our understanding of clinician attitudes, monitor changes over time, and allow for comparisons across settings and samples. Additional studies are also needed to understand the extent to which differential beliefs and attitudes may directly affect referral behavior and clinical decision-making. Lastly, qualitative studies would be beneficial to identify broader themes related to health professionals' attitudes, including priorities and needs, and to lay the groundwork for future research.

In conclusion, this study is consistent with prior research indicating that specialists tend to hold more *favorable* attitudes towards EDs than health professionals with less training or experience (Thompson-Brenner *et al*., 2012). In particular, findings highlight the need for greater education and training in the management of BED. It is our hope that an improved understanding of professionals' beliefs and attitudes may help bridge bench-to-bedside gaps, as prevailing attitudes among professionals may facilitate help-seeking and timely recognition, as well as enable improved access to, and delivery of, effective care for eating disorders.

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