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Is Anorexia Nervosa a Subtype of Body Dysmorphic Disorder? Probably Not, but Read On …

Jon E. Grant, JD, MD and **Katharine A. Phillips, MD**
From Department of Psychiatry and Human Behavior, Brown Medical School; Butler Hospital, Providence, RI.

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Is body dysmorphic disorder (BDD) related to eating disorders? Or is it related to obsessive-compulsive disorder (OCD), or perhaps to social phobia? What about the other somatoform disorders with which BDD is classified? BDD's relationship to OCD has received the most attention, with available data suggesting that it is related to OCD while also differing from that disorder in some important ways.[1] BDD's relationship to eating disorders—anorexia nervosa, in particular—has scarcely been discussed, despite these disorders' shared core feature of disturbed body image.

People with anorexia nervosa have an intense fear of gaining weight or appearing overweight even when they are normal weight or underweight. People with BDD are also preoccupied with their appearance, thinking that they look abnormal, ugly, or deformed, when in fact they look normal. If we consider body image disturbance to be the fundamental problem in anorexia[2]—admittedly a controversial issue[3,4]—might the diagnosis of BDD be appropriate for patients with anorexia?

AN OVERLOOKED RELATIONSHIP

The relationship between BDD and anorexia nervosa has been largely overlooked. The psychiatric literature has tended to focus on the obsessions and repetitive behaviors of BDD (such as mirror checking and grooming) and has debated its relationship to OCD.[1,5] To a lesser extent, BDD has also been linked nosologically to social phobia and to major depressive disorder.[6] Even though patients with anorexia and BDD share severe body image concerns, little has been written about these disorders' relationship to one another and their possible overlap.[6–8] The literature on eating disorders has hinted at a link with BDD by finding that many patients with anorexia have appearance concerns other than weight and body shape,[9–11] but there has been little examination of their relationship.

To look at this question, we can begin with these disorders' similarities. Both disorders' diagnostic criteria include disturbance of body image (BDD is defined as a distressing or impairing preoccupation with an imagined or slight defect in appearance). Many patients with anorexia are preoccupied with nonweight aspects of appearance, such as the size of the stomach or thighs, or even body areas such as the skin or nose.[9–11] Conversely, some BDD patients are preoccupied with body weight and body shape.[12] Both disorders involve intrusive thoughts

Reprint requests: Jon Grant, Butler Hospital, 345 Blackstone Blvd., Providence, RI 02906. Email: jon_grant@brown.edu.
Editor: Katharine A. Phillips, MD

about appearance, dissatisfaction with appearance, and an overemphasis on appearance in the evaluation of self-worth.[6,8]

Both BDD and anorexia may also involve appearance-related ritualistic or repetitive behaviors (e.g., mirror checking and body measuring), and some BDD patients diet or excessively exercise.[6,12] Furthermore, people with anorexia or BDD may avoid places, activities, and ways of dressing that provoke self-consciousness about how they look.[7,8] In addition, in both disorders a quest to improve appearance drives attempts to change the body's appearance—for example, through weight control in anorexia and excessive grooming or cosmetic surgery in BDD. Although most patients with anorexia may be easily differentiated from patients with more classic BDD (e.g., a male with balding concerns), some patients seem to be in a diagnostic gray zone between these disorders, as the following case illustrates.

CASE EXAMPLE

> Susan, a 17-year-old student, presented with excessive appearance concerns, believing she was fat and ugly. In particular, she obsessed for 6–8 hours a day that her waist and arms were too big and fat. Susan was of normal weight and had a normal body mass index. She occasionally restricted her food intake but never dropped below a normal weight. She exercised for about two hours a day but did not purge or use laxatives. Her menstrual periods were normal. Susan was often late for school because she spent so much time in front of the mirror, examining her body and changing her clothes, trying to find a slimming outfit. She also asked her mother at least ten times a day if she looked okay. She did not date, and she usually spent her time alone because she hated how she looked.

What is Susan's diagnosis? She has some features of an eating disorder. She believes she is fat when she is not; she sometimes restricts her food intake; and she exercises excessively. She may therefore appear to have an eating disorder. She does not, however, meet criteria for anorexia nervosa or bulimia. Susan might be given a diagnosis of eating disorder not otherwise specified (NOS), but she also has features of BDD. She is preoccupied with the appearance of her waist and arms; while she worries to some degree about her overall weight, her main concern is that these specific body areas are too big and fat. She also performs classic BDD behaviors, such as mirror checking, clothes changing, and reassurance seeking. As required for the diagnosis of BDD, her preoccupation causes clinically significant distress and impairment in functioning (e.g., being several hours late for school and avoiding social situations).

It is unclear which DSM-IV diagnosis is most accurate. DSM-IV allows the diagnosis of BDD only if "the preoccupation is not better accounted for by another mental disorder—e.g., dissatisfaction with body shape and size in anorexia nervosa."[13] Although Susan does not meet criteria for anorexia, she could be considered to have an eating disorder NOS; it is unclear whether the diagnosis of BDD is permissible or appropriate in such cases. BDD would be an equally plausible diagnosis. Because diagnosis largely dictates treatment, and because effective treatment of an eating disorder may differ substantially from treatment for BDD,[14,15] this lack of diagnostic clarity is troublesome.

A DIAGNOSTIC DILEMMA

A classic case of BDD (for example, concerns about nose size without body shape/weight concerns) can easily be differentiated from anorexia nervosa based on DSM criteria. Cases such as Susan's, however—with weight concerns that do not clearly meet criteria for an eating disorder—are much less clear diagnostically. Have previous studies of BDD, which tended to exclude patients who have only—or primarily—weight concerns,[16] been too narrow in their

conceptualization of BDD? Some BDD studies, in contrast, have included patients with primarily weight and shape concerns.[8,17] Should patients with primarily weight concerns, but with no eating disorder diagnosis, be diagnosed with BDD?

Given that body image disturbance is an important aspect of anorexia—maybe even its core feature[2]—then perhaps anorexia is a form of BDD. But such a view is inconsistent with current diagnostic standards. As previously noted, DSM-IV has a hierarchy that does not allow BDD to be diagnosed if the appearance concerns are better accounted for by weight concerns that meet criteria for anorexia (or perhaps another eating disorder, although this is unclear); an additional diagnosis of BDD is allowed only in anorexia patients who also have irrational appearance concerns unrelated to body shape and size (e.g., focusing on the skin, hair, or nose). Is this DSM-IV hierarchy correct, or is it arbitrary and perhaps wrong? If we look at previous editions of DSM, we see other hierarchies that no longer apply. For instance, under DSM-III[18] it was more difficult than it currently is to diagnose OCD, social phobia, or generalized anxiety disorder in the presence of major depression; it was thought that the obsessions or anxiety could be a manifestation of depression (and in that respect could be hierarchically related to one another). This situation has changed as we have learned more about those disorders. Will DSM's anorexia/BDD hierarchy change as well? In the future, might a preoccupation with, and distorted view of, one's weight accompanied by abnormal eating behavior be considered a form of BDD?

Ultimately, to answer this question (or any question about the relationship of psychiatric disorders to one another), we need to understand their etiology and pathophysiology.[19] This understanding would clarify the diagnostic boundaries between anorexia and BDD, confirm Susan's diagnosis, and tell us whether the DSM-IV hierarchy is right or wrong. Despite many advances, the diagnosis and classification of psychiatric disorders is still at a relatively early stage, identifying syndromes rather than etiologically distinct diseases. To make an analogy to a medical condition, chest pain due to atherosclerotic vascular disease would be described at the syndromal level as angina, but at the pathophysiologic level as myocardial ischemia, and at the pathoetiologic level as coronary artery atherosclerosis. Thus, we must still rely on clues —such as similarities and differences in clinical features, family history, or treatment response —to make our best guess as to whether disorders are closely related, the same, or distinct. The need to attend to such clues is critical in the case of BDD since research on its pathophysiology is just beginning.

Using some of these imperfect clues, we can see that while anorexia and BDD have similarities (as noted above), as well as a hazy area of overlap, they also appear to have some important differences, making it unlikely that anorexia is simply a form of BDD. For example, 90% of patients with anorexia are female, versus only 50 to 60% of patients with BDD.[12,20] The two disorders also have somewhat different comorbidity patterns.[21,22] In a controlled family study of OCD, BDD was more common in first-degree relatives of OCD probands than control probands, whereas the eating disorders were not;[23] this finding suggests that BDD, but not the eating disorders, can be considered part of a familial OCD spectrum. Importantly, BDD and anorexia seem to respond differently to treatment. Unlike patients with anorexia,[15] a majority of patients with BDD improve with serotonin reuptake inhibitors[14,16]—and some, very robustly. Preliminary data indicate that BDD also often responds well to cognitive-behavioral therapy,[17,24] which has generally been less effective for anorexia.[25]

Studies directly comparing patients with BDD and anorexia would provide very useful information about their similarities and differences. To our knowledge, only one such study has been done.[8] That study, which examined just a few variables in 45 patients with anorexia or bulimia nervosa, 51 patients with BDD, and 50 nonclinical controls, found that the eating-disorder and BDD groups had equally severe body image disturbance and negative self-esteem.

However, the subjects with eating disorders had more widespread psychopathology, whereas the subjects with BDD reported more negative self-evaluation due to appearance and more avoidance of activities due to self-consciousness about appearance.[8]

THE IMPORTANCE OF RECOGNIZING COMORBID BDD AND ANOREXIA

BDD and anorexia nervosa thus appear to have some differences, including differences in treatment response. For this reason, we would reject the view that anorexia is simply a form of BDD. DSM's hierarchy may, in fact, be reasonable. Nonetheless, one wonders whether this hierarchy might potentially lead some clinicians to miss BDD: once weight concerns are identified, the clinician might not probe further for other body image concerns or otherwise determine whether the additional diagnosis of BDD is appropriate. Studies examining the rate of BDD (nonweight, clinically significant preoccupations) in patients with anorexia have found that 25 to 39% of such patients also have BDD.[9,26] In one study of women ascertained for anorexia who also had BDD (n = 16), no patient had been previously diagnosed with BDD, even though 81% of them (n = 13) felt that their BDD preoccupations were their "biggest" or a "major" problem.[9] A number of factors probably contribute to BDD's underdiagnosis, including the shame and embarrassment that patients with BDD often feel—which makes them reluctant to reveal their symptoms.[6,27]

It is important to recognize BDD in patients with anorexia because, based on the available evidence, women with both disorders are more severely ill than those with anorexia but not BDD.[9] In the only study of this question, 16 patients with both disorders were compared to 25 women with anorexia alone. Those who had anorexia plus BDD had significantly poorer functioning, had been psychiatrically hospitalized more often (6.3 vs. 3.8 times), and had three times the rate of suicide attempts (63% vs. 20%).[9]

CONCLUSIONS

Despite their similarities, BDD and anorexia nervosa have some important differences. They should be differentiated clinically, primarily because they seem to respond differently to treatment. Nonetheless, these disorders overlap in intriguing ways, and in some cases are hard to differentiate. When BDD and anorexia co-occur, it's important to diagnose both of them because women with both disorders are, it appears, more severely ill than those with anorexia alone. We still know very little about the relationship between these disorders, or about whether DSM's hierarchy is correct or not. Clearly, we have much to learn about the understudied and intriguing relationship between these disorders of disturbed body image.

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