Published in final edited form as:
Prim psychiatry. 2007 December ; 14(12): 58–66.

Suicidality in Body Dysmorphic Disorder

Katharine A. Phillips, MD
Dr. Phillips is professor of psychiatry and human behavior at the Warren Alpert Medical School of Brown University and director of the Body Dysmorphic Disorder and Body Image Program at Butler Hospital in Providence, Rhode Island

Abstract

Suicidal ideation, suicide attempts, and completed suicide appear common in individuals with body dysmorphic disorder (BDD). Available evidence indicates that approximately 80% of individuals with BDD experience lifetime suicidal ideation and 24% to 28% have attempted suicide. Although data on completed suicide are limited and preliminary, the suicide rate appears markedly high. These findings underscore the importance of recognizing and effectively treating BDD. However, BDD is underrecognized in clinical settings even though it is relatively common and often presents to psychiatrists and other mental health practitioners, dermatologists, surgeons, and other physicians. This article reviews available evidence on suicidality in BDD and discusses how to recognize and diagnose this often secret disorder. Efficacious treatments for BDD, ie, serotonin reuptake inhibitors (SRIs) and cognitive-behavioral therapy, are also discussed. Although data are limited, it appears that SRIs often diminish suicidality in these patients. Additional research is greatly needed on suicidality rates, characteristics, correlates, risk factors, treatment, and prevention of suicidality in BDD.

Needs Assessment: Recent evidence indicates that individuals with body dysmorphic disorder (BDD) have high rates of suicidal ideation and behavior. However, BDD often goes undiagnosed in clinical settings, even though it is relatively common. It is important to be aware of the suicide risk for these individuals and to recognize and appropriately treat patients with BDD.

Learning Objectives:

- Familiarize with suicidality rates in individuals with body dysmorphic disorder (BDD)
- Identify other aspects of suicidality (eg, clinical correlates) in BDD.
- Identify clinical features of BDD.
- Identify approaches to diagnosing and effectively treating BDD.

Target Audience: Primary care physicians and psychiatrists.

CME Accreditation Statement: This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Mount Sinai School of

Please direct all correspondence to: Katharine A. Phillips, MD, Butler Hospital, 345 Blackstone Blvd, Providence, RI 02906; Tel: 401-455-6490; Fax: 401-455-6539; E-mail: Katharine_Phillips@Brown.edu.

Disclosure: Dr. Phillips receives research support from the American Foundation for Suicide Prevention, the Food and Drug Administration, Forest, the National Institute of Mental Health, and UCB Pharma; receives publication honoraria or royalties from American Psychiatric Publishing, Cambridge University Press, *Current Psychiatry*, The Free Press/Zachary Schuster Harmsworth, Guilford Publications, Merck, Oxford University Press, and Wrightson Biomedical Publishing; and honoraria from the American Psychiatric Association.

Medicine and MBL Communications, Inc. The Mount Sinai School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation: The Mount Sinai School of Medicine designates this educational activity for a maximum of 3 *AMA PRA Category 1 Credit(s)*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Faculty Disclosure Policy Statement: It is the policy of the Mount Sinai School of Medicine to ensure objectivity, balance, independence, transparency, and scientific rigor in all CME-sponsored educational activities. All faculty participating in the planning or implementation of a sponsored activity are expected to disclose to the audience any relevant financial relationships and to assist in resolving any conflict of interest that may arise from the relationship. Presenters must also make a meaningful disclosure to the audience of their discussions of unlabeled or unapproved drugs or devices. This information will be available as part of the course material.

This activity has been peer-reviewed and approved by Eric Hollander, MD, chair and professor of psychiatry at the Mount Sinai School of Medicine, and Norman Sussman, MD, editor of *Primary Psychiatry*and professor of psychiatry at New York University School of Medicine. Review Date: October 25, 2007.

Dr. Hollander reports no affiliation with or financial interest in any organization that may pose a conflict of interest. Dr. Sussman is a consultant to and on the advisory boards of GlaxoSmithKline and Wyeth; and has received honoraria from AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, and Wyeth.

To receive credit for this activity: Read this article and the two CME-designated accompanying articles, reflect on the information presented, and then complete the CME posttest and evaluation found on page 87. To obtain credits, you should score 70% or better. Early submission of this posttest is encouraged: please submit this posttest by December 1, 2009 to be eligible for credit. Release date: December 1, 2007. Termination date: December 31, 2009. The estimated time to complete all three articles and the posttest is 3 hours.

INTRODUCTION

This article is devoted to the topic of suicidality in body dysmorphic disorder (BDD) because emerging empirical data and clinical experience indicate that individuals with BDD are often suicidal and may be at particularly high risk for completed suicide. Patients with BDD are often highly distressed, feel unacceptable to themselves and others, are often depressed and socially isolated, and have other risk factors for suicidal thinking and behavior. However, BDD often goes unrecognized in clinical settings. It is important to recognize BDD and institute appropriate treatment, which often improves BDD symptoms and may diminish suicidal thinking and behavior.

The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, (*DSM-IV*),[1] defines BDD as a preoccupation with an imagined defect in appearance; if a slight physical anomaly is present, the concern is markedly excessive. The preoccupation must cause clinically significant distress or impairment in social, occupational, or other areas of functioning. The appearance concerns cannot be better accounted for by another mental disorder such as anorexia nervosa. BDD is also referred to as “dysmorphophobia.”

BDD appears to be relatively common. In the largest epidemiologic study, a nationwide survey in Germany (n=2,552), the prevalence of current BDD was 1.7% (95% CI=1.2–2.1%); BDD was somewhat more common in women (1.9%) than in men (1.4%).[2] The prevalence of BDD

has ranged from 0.7% to 1.1% in smaller community studies and from 2.3% to 13% in nonclinical student samples.[3,4] BDD appears relatively common in clinical settings, including inpatient psychiatric settings; among patients with obsessive compulsive disorder (OCD), eating disorders, social anxiety disorder (SAD), and major depressive disorder (MDD; especially atypical depression); and in dermatology and cosmetic surgery settings.[3,4]

However, BDD often goes unrecognized.[5–7] Many patients are too embarrassed and ashamed of their appearance concerns to raise them with a clinician.[3,6] Patients with BDD can be severely disabled and suicidal. Thus, it is important to assess patients for BDD and be alert for clues to its presence.[3,8,9] If the diagnosis is missed or misdiagnosed —or if only comorbid conditions such as depression are treated—BDD symptoms, psychosocial functioning, and suicidality may not improve.[3,8]

Because BDD may be less familiar to clinicians than other mental disorders, this article first briefly discusses some of BDD's clinical features. Empirical evidence on suicidality in BDD is then reviewed. Finally, to manage suicidality, BDD must be detected (which is sometimes challenging), accurately diagnosed, and appropriately treated. This article, therefore, briefly discusses these topics. More comprehensive sources on BDD's diagnosis and treatment are available elsewhere (S Wilhelm, PhD, unpublished data 2007).[3,4,9,10]

CLINICAL FEATURES OF BODY DYSMORPHIC DISORDER

Although individuals with BDD appear normal looking to others, they are preoccupied with distressing and time-consuming thoughts that some aspect of their physical appearance looks flawed or defective.[3,5,11–15] They may worry, for example, that they have very noticeable acne, their skin is too red or terribly scarred, their hair is thinning, their nose is too large or misshapen, their head is too big, or their stomach is huge and protuberant. The appearance concerns can focus on any body area, and preoccupation with multiple body areas is common. The appearance preoccupations are obsessional, occurring on average for 3–8 hours per day.

The beliefs about the perceived appearance defects are usually delusional or characterized by poor insight.[3,16] In other words, most patients are completely or mostly convinced that the disliked body areas look abnormal, ugly, defective, flawed, unattractive, or deformed. Some patients describe themselves as looking like a monster, a severe burn victim, or the "Elephant Man." Two-thirds of patients have ideas or delusions of reference, believing that other people take special notice of the "defect" (eg, stare at it, laugh at it, or recoil in horror because the defect is so ugly).

Nearly all patients perform BDD-related compulsive behaviors, many of which may be observed by other people and can thus be a clue that a person has BDD.[3,5,13–15] The aim of these behaviors is usually to check, fix, hide, or be reassured about the perceived defects. Common behaviors are mirror checking, excessive grooming (eg, compulsive hair styling or hair cutting, shaving, plucking eyebrows or body hair, excessive makeup application), asking other people if they look okay, skin picking, frequent clothes changing, tanning (eg, to cover perceived blemishes or "pale" skin), and compulsive shopping for beauty products and clothes. Most patients attempt to "camouflage" the perceived defects, such as by wearing a baseball cap, sunglasses, bulky clothes that cover their body, or heavy makeup, or by holding their body in certain positions (eg, turning the "bad side" of their face away from other people).

The gender ratio has varied across studies but appears to be in the range of 1:1 to 3:2 (female:male).[3] Comorbidity is common, with MDD, substance use disorders, OCD, and SAD most frequent.[17] Functioning and quality of life are usually very poor. For example, in studies that used the 36-Item Short Form Health Survey, mental health-related quality of life was

markedly poorer than for the general population, and even poorer than for patients with diabetes, a recent myocardial infarction, or clinical depression.[18]

SUICIDALITY IN BODY DYSMORPHIC DISORDER

Suicidal Ideation and Suicide Attempts in Body Dysmorphic Disorder

Over the past century, patients with BDD have been described as being so distressed over their "ugliness" that they thought about, attempted, or committed suicide.[13,19–22] For example, one young woman who obsessed about perceived lines under her eyes said, "I am constantly thinking about them, about my face and how I have changed. Makeup is just a waste of time. Life is not worth living."[19] Like this woman and other patients described in earlier reports, a patient seen by the author of this article was so distressed by her supposedly "large" nose, "ugly" hair, and "small" breasts that she considered suicide. She thought about her perceived appearance flaws "every second of every day," and described these thoughts as "very, very distressing—an obsession. They're so horrible I get suicidal; it is why I overdosed...."

Cross-Sectional/Retrospective Data—Empirical research on suicidality in BDD, while still limited, indicates that suicidal ideation and attempts are common in this disorder. Table 1 summarizes data on suicidal ideation and suicide attempts from cross-sectional studies. Percentages in Table 1 reflect lifetime (ie, past or current) rates, except for the Italian study which reported a current rate; the German study did not specify a period of time during which suicidality occurred. The United States sample of 307 subjects consisted of individuals seeking consultation or treatment in a BDD specialty setting (this sample is an expansion of previously reported samples).[5,23] The other US study (n=200) was more broadly ascertained. Most participants were not seeking or receiving treatment in a BDD specialty setting. [24] The Italian study contained a clinical outpatient sample,[15] and the study from England consisted of clinician referrals and self-referrals in response to media articles on BDD.[11] The German study was a nationwide survey with participants representative of the general population; 42 individuals were diagnosed with BDD.[2] The two US studies found a high rate of lifetime suicidal ideation (81% and 78%) even though the mean age of subjects was only in the early 30s. Comparisons with other groups must be made cautiously because direct comparisons were not made. However, these suicidal ideation rates are higher than reported for any mental disorder in an outpatient study and higher than reported for schizophrenia or MDD.[25–27] Regarding suicidal ideation attributed primarily to BDD, both of the US studies found a high lifetime (current and past) rate, and the Italian study found a high current rate. A possible explanation for the lower rate in the German study is that the time period was not specified (this was also the case for suicide attempts). In addition, in the US studies suicidal ideation included thoughts that life was not worth living, whereas the German study asked a "higher-threshold" question about thoughts of taking one's own life.

Studies have found that 24% to 28% of individuals with BDD have attempted suicide (Table 1). Although here, too, comparisons with other populations should be made cautiously, these suicide attempt rates are an estimated 6–23 times higher than reported for the US population; within the range reported for depressed outpatients; and higher than that which has been reported for generalized anxiety disorder, panic disorder, or agoraphobia.[25,27–32] A small chart-review study of clinic patients in Brazil (n=20) found that only 15% of subjects had a history of suicidal behavior.[33] It is unclear whether the lower percentage in this study reflects numerical instability of the result due to the small sample or other factors.

Taken together, these studies suggest that individuals with BDD have high rates of suicidal ideation and attempts. However, the findings vary to some extent across studies. Differences across studies may be attributable to differences in sample ascertainment. For example, somewhat lower rates might be expected in an epidemiologic sample. In addition, the studies

used different questions to assess suicidality. Higher rates might be expected in the US studies, which asked about lifetime suicidality, whereas the time period covered in the German study was unspecified. Differences may also be attributable to cultural differences or other factors.

Clinical Correlates of Suicidality in Body Dysmorphic Disorder—One of the above studies (n=200)[24] examined clinical correlates of lifetime suicidal ideation and attempts. In univariate analyses, both suicidal ideation and suicide attempts were significantly associated with more severe lifetime BDD, greater current functional impairment, lifetime bipolar disorder, any personality disorder, and borderline personality disorder. A history of suicidal ideation (but not suicide attempts) was additionally associated with comorbid lifetime MDD. A history of suicide attempts (but not ideation) was additionally associated with lifetime posttraumatic stress disorder (PTSD), an eating disorder, a substance use disorder, and delusional BDD beliefs (as opposed to non-delusional BDD beliefs). In logistic regression analyses, which examined which variables were independently associated with suicidality when controlling for other variables, lifetime suicidal ideation was independently predicted by comorbid MDD (odds ratio [OR]=2.77, *P*=.011) and more severe BDD (with each one-point increase on a nine-point BDD severity scale, the odds of suicidal ideation increased by 1.48; *P*=.003). Suicide attempts were independently predicted by PTSD (OR=6.44, *P*=.011), a substance use disorder (OR=3.07, *P*=.011), and more severe BDD (with each one-point increase on a nine-point BDD severity scale, the odds of a suicide attempt increased by 1.59; *P*=.005).

Prospective Data—One of the studies in Table 1 (n=200) prospectively followed 185 subjects for up to 4 years, enabling determination of mean annual suicidality rates.[34] As shown in Table 2,[34] annual suicidality rates were very high. Suicidal ideation was reported by 57.8% of subjects per year (annual weighted mean). This rate is approximately 10–25 times higher than the annual rate in the US population.[29,35] Over prospective follow-up, 35.6% of subjects per year reported suicidal ideation that was attributed primarily to BDD symptoms. Among the entire sample, BDD severity was correlated r=.42 (*P*<.001) with the occurrence of suicidal ideation.

The mean annual suicide attempt rate of 2.6% in this study is an estimated 3–12 times higher than in the US population. [29,35] The medical threat of these attempts (plus those made during the month before intake into the study) was moderate or greater for 56% of the attempts. Suicidal intent was serious, very serious, or extreme for 72% of the attempts.

Suicidality in Body Dysmorphic Disorder Compared to Obsessive-Compulsive Disorder—Three studies that compared clinical characteristics of BDD and OCD examined suicidality (two of the studies included a subset of subjects from the previously noted US studies).[36–38] A significantly higher proportion of BDD subjects than OCD subjects reported suicidal ideation (in two of three studies) as well as suicidal ideation attributed primarily to their disorder (in two of two studies).[37,38] One study assessed lifetime suicide attempts that were attributed primarily to BDD or OCD, finding a higher rate among BDD subjects than OCD subjects (22% versus 8%).[37] One study found a higher lifetime rate of suicide attempts (40%) among subjects with comorbid BDD plus OCD than in those with only BDD or only OCD. This appeared to be accounted for by more severe BDD symptoms in the comorbid group.[38]

Suicide Attempts in Other Patient Samples—Other studies have examined suicide attempts in clinical samples that were not ascertained for BDD. In a study on a general psychiatric inpatient unit (n=122), BDD patients had more suicide attempts than non-BDD patients at a trend level (*P*=.098).[6] A significant difference was not found in an outpatient study, although the sample size was small (n=16 BDD patients), which may have led to type

II error.[7] In an inpatient sample ascertained for anorexia nervosa (n=41), those with comorbid BDD (n=16) had a strikingly high lifetime suicide attempt rate of 63%. Anorexia inpatients with comorbid BDD were three times more likely to have attempted suicide than anorexia inpatients without comorbid BDD (*P*=.009).[39] Among those with comorbid BDD, 69% had considered suicide specifically because of their BDD symptoms.

Suicidality in Youths with Body Dysmorphic Disorder—Suicide is the third leading cause of death among 15- to- 24-year-olds in the US.[40] Thus, suicidality in youths with BDD is important, especially because BDD usually begins during early adolescence.[14,23] In two of the previously mentioned studies, 67% and 81% of youths reported a history of suicidal ideation.[41,42] Reported rates in the community are 15% to 27%.[43,44] In these two BDD studies, 21% and 44% of youths reported a lifetime suicide attempt,[41,42] whereas the estimated lifetime prevalence of attempted suicide among adolescents in the community ranges between 2.2% and 20%.[45,46] One BDD study directly compared adolescents to adults, finding that a higher proportion of adolescents than adults had attempted suicide (44% versus 24%, *P*=.012).[41] This finding was unexpected, given that adolescents had had fewer years over which to have attempted suicide because of their younger age. This finding did not appear to be explained by higher rates of comorbid depression, more severe depressive symptoms, current treatment status, or a cohort effect. It is possible that adolescents' recall of suicide attempts was more accurate than adults' recall. It is also possible that adolescents are at higher risk for suicidality than adults. In a study of adolescents in an inpatient setting,[47] adolescent inpatients with BDD (n=14) scored significantly higher (*P*<.001) than adolescent inpatients without BDD (n=207) on the Suicide Probability Scale.

Completed Suicide in Body Dysmorphic Disorder

Completed suicide has been reported in numerous case reports and series.[3,13,21,48] A retrospective study of suicides known to have occurred over 20 years among patients in two dermatology practices found that most of the patients who committed suicide had acne or BDD.[20]

The above-noted prospective BDD study found a very high rate of completed suicide—an annual weighted mean of 0.35% per year (Table 2).[34] This annual suicide rate, adjusted for age, gender, and geographic region, is approximately 45 times higher than in the US population.[49] That is, the standardized mortality ratio (SMR) for BDD in this study was 45. While SMRs for other populations vary somewhat depending on the study, an SMR of 45 is higher than that for most other mental disorders; the SMR for eating disorders is approximately 23, for MDD approximately 20, and for bipolar disorder approximately 15.[50] Prospective studies of depression and panic disorder, which used methodology very similar to that used in the BDD study, found lower suicide rates than in the BDD study.[30,51]

While these findings suggest that the suicide rate in BDD is markedly high, they should be considered preliminary, especially given the relatively small sample size and short duration of follow up in the prospective BDD study, which limits the stability and precision of the suicide rate. Prospective studies are needed over longer follow-up periods and in other samples.

Two Cases of Completed Suicide

The two cases described here were participants in the previously noted prospective BDD interview study.[24] Both individuals were receiving treatment at the time of their death. The first patient was a 31-year-old single white male who was receiving disability payments due to psychopathology. He had severe BDD (score of 7 on a 7-point severity scale) and BDD was his primary (ie, most problematic) diagnosis. He also met criteria for SAD and was in partial

remission from MDD and alcohol dependence. He had no past hospitalizations or suicide attempts. He committed suicide by hanging.

The second patient, a 54-year-old single white male, was unemployed due to psychopathology. He had severe BDD (score of 7 on a 7-point severity scale) and BDD was his primary diagnosis. He also had MDD and was in partial or full remission from dependence on alcohol and several drugs. He had four past psychiatric hospitalizations, all primarily for BDD. He also had one prior suicide attempt, which he attributed primarily to BDD. He committed suicide by stabbing himself.

Suicide Risk Factors in Individuals with Body Dysmorphic Disorder

Individuals with BDD have many risk factors for suicide. Risk factors include high rates of suicidal ideation, suicide attempts, psychiatric hospitalization, unemployment and disability, being single or divorced, poor social supports, and a history of abuse.[11,14,15,18,23,24,52] Additional risk factors are high comorbidity with MDD, eating disorders, and substance use disorders.[12,17] In addition, individuals with BDD often have poor self-esteem as well as high levels of anxiety, depression, anger/hostility, and impulsivity.[53,54]

From a clinical perspective, it appears that BDD symptoms may fuel suicidal thinking in several ways. BDD symptoms are about the self, as looking ugly, defective, or abnormal, and as being inadequate, unlovable, and unacceptable.[3,11] Negative beliefs about appearance are often firmly held (ie, are delusional) such that patients cannot obtain relief by recognizing that the beliefs are inaccurate or senseless.[17] These negative thoughts and beliefs cause distressing feelings such as depression, anxiety, shame, and low self-esteem.[3] Of possible relevance to BDD, OCD obsessions that contradict important aspects of the self (as BDD obsessions do) are more upsetting than other types of obsessions.[55] The obsessional and intrusive nature of negative BDD-related thoughts further fuel distress. In addition, BDD-related thoughts and distress often lead to social isolation, as many patients feel too self-conscious and ashamed of how they look to be around other people, and many believe that other people reject them, or even mock them, because of how they look.[3,16] It can be postulated that BDD symptoms such as these, in combination with suicide risk factors such as those above, may lead to suicidal thinking and behavior.

SUICIDE IN PATIENTS WHO RECEIVE COSMETIC SURGERY

Six epidemiologic studies have found that women who received cosmetic breast implants have a suicide rate that is approximately twice the expected rate based on estimates in the general population.[56] The largest investigation of this topic additionally found that women who had other types of cosmetic surgery also had an increased suicide rate.[57] In some studies, women with breast implants who committed suicide were more likely to have had psychotherapy and more likely to have lower self-esteem and self-confidence, increased levels of depression, and an increased prevalence of mental illness as measured by psychiatric hospitalization.[57] While reasons for the association between cosmetic surgery and suicide are unclear, one possible explanation is that some of these women may have had BDD, which is characterized by low self-esteem, depression, and a high rate of psychiatric hospitalization.[56,58] In a recent study, breast augmentation/lift was the second most frequent cosmetic surgery received by individuals with BDD.[59] The possible association of BDD with suicide in cosmetic surgery patients warrants further investigation.

HOW TO RECOGNIZE AND DIAGNOSE BODY DYSMORPHIC DISORDER

BDD usually goes undiagnosed in clinical settings.[3,5–7] Patients often conceal their symptoms due to embarrassment, shame, or a worry that they will be misunderstood and considered vain.

[3,6] They may disclose only depression, anxiety, or discomfort in social situations. To diagnose BDD, patients must usually be asked directly about BDD symptoms.[3,4,8]

BDD can be diagnosed by asking questions that mirror the *DSM-IV* diagnostic criteria for BDD. Suggested questions are shown in Table 3.[4] BDD is diagnosed if the person is excessively preoccupied with nonexistent or slight physical flaws (eg, thinks about them for at least 1 hour per day) and the preoccupation causes clinically significant distress or impairment in functioning. The appearance concerns should not be better accounted for by an eating disorder. However, if BDD and eating disorders co-occur, both disorders should be diagnosed. In depressed patients, it should not be assumed that BDD symptoms are irrelevant or simply a symptom of depression. If BDD diagnostic criteria are met, both BDD and depression should be diagnosed. BDD-related compulsive and safety behaviors such as mirror checking, excessive grooming, skin picking, and camouflaging may be clues that a person has BDD.

Patients should not be asked if they are concerned with an "imagined" defect in their appearance, as most have poor insight and do not think they are imagining the flaws they perceive. It is also best not to initially ask if they think they look disfigured or deformed, as words like these may be too extreme for some patients to endorse. Questions should focus specifically on physical appearance rather than bodily functioning, as patients may misinterpret the latter to apply only to physical illness.

TREATMENT OF BODY DYSMORPHIC DISORDER

Treatment of BDD is described in more detail elsewhere (S Wilhelm, PhD, unpublished data, 2007).[3,9,10] Serotonin reuptake inhibitors (SRIs) and cognitive-behavioral therapy (CBT) are currently recommended as first-line treatments, which appear effective for a majority of patients. In contrast, cosmetic treatment, such as surgery and dermatologic treatment, appears to usually be ineffective for BDD.[11,59]

All SRI studies indicate that SRIs are often efficacious for BDD.[3,9,10] These studies consist of a controlled and blinded cross-over study that compared the SRI clomipramine to the non-SRI desipramine (n=29); a placebo-controlled fluoxetine study (n=67)[60]; and open-label trials of fluvoxamine, citalopram, and escitalopram (n=15–30).[10,61] In these studies, 53% to 73% of patients responded to the SRI. The cross-over trial found greater efficacy for clomipramine than desipramine, suggesting that SSRIs may be more efficacious than non-SRIs for BDD. Delusional BDD patients often improve with SRI monotherapy.

Twelve to 14 weeks of SRI treatment appear to often be needed before a response is seen, and relatively high SSRI doses (higher than typically used for depression) often appear to be needed.[3,10] If an SSRI is inadequately effective, augmentation of the SRI with another medication, or switching to another SRI, may be effective.[3,10]

SRIs appear to diminish suicidality in BDD. In the fluoxetine study,[60] 6% of fluoxetine-treated patients worsened on the Hamilton Rating Scale for Depression suicidal ideation item between baseline and endpoint, versus 30% of patients on placebo (P=.001). In the escitalopram study, suicidality significantly decreased.[61]

Available data suggest that CBT is often efficacious for BDD.[3,9,62] In two randomized studies (n=54 and n=19), patients treated with CBT improved significantly more than patients on a waiting list. CBT was efficacious for BDD in several case series (n=5–13). The number of sessions in these reports ranged from twelve 60-minute sessions to sixty 90- minute sessions. CBT for BDD usually includes cognitive restructuring to identify cognitive errors and develop more accurate and helpful BDD-related thoughts and beliefs, as well as advanced cognitive techniques which focus on core beliefs; behavioral experiments to test the accuracy of BDD

beliefs; exposure to avoided situations such as social situations; and response prevention to decrease compulsive behaviors such as mirror checking (S Wilhelm, PhD, unpublished data, 2007).[3,62] Daily CBT homework should be assigned.

CBT components that also appear beneficial include mirror retraining, in which patients learn to see their entire body in a nonjudgmental and "holistic" way (rather than focusing on disliked areas), while refraining from excessive mirror checking; mindfulness skills; habit reversal for skin picking and repetitive hair pulling or plucking; activity scheduling and scheduling pleasant activities for more severely ill, depressed, and inactive patients; and motivational interviewing, which is often needed to engage and keep patients in treatment (S Wilhelm, PhD, unpublished data, 2007).[3]

CONCLUSION

Available data indicate that individuals with BDD have high rates of suicidal ideation and suicide attempts, as well as a markedly high rate of completed suicide. These individuals appear to have many suicide risk factors. However, research on this important topic is limited. There is a pressing need for additional research on all aspects of suicidality in BDD, including rates, characteristics, correlates, risk factors, treatment, and prevention of suicidality.

More specifically, studies are needed that use standard suicidality measures, and research is needed in a variety of samples— both clinical and epidemiologic—across different cultures and age groups. Longer follow-up of individuals with BDD is needed to obtain more precise estimates of the rate of completed suicide. The association between BDD and suicide in cosmetic surgery patients needs to be examined. Additional treatment research is also greatly needed, in keeping with Institute of Medicine[63] and Surgeon General's reports,[64] which highlight the critical need to develop effective treatments for suicidality. More highly suicidal patients have been excluded from all BDD treatment studies to date because of the risks they pose. In this author's clinical experience, SRIs are often effective for suicidal patients and should be prescribed for more highly suicidal patients with BDD. More highly suicidal patients also often benefit from therapy. However, there is a pressing need for research that examines the efficacy of existing BDD treatments for more highly suicidal patients and for research that develops even more effective treatments.

Finally, because BDD often goes undiagnosed in clinical settings, there is a need for better recognition and diagnosis of this disorder. This will enable clinicians to provide appropriate clinical monitoring and treatment of these high-risk patients.

References

1. Diagnostic and Statistical Manual of Mental Disorders. 4. Washington, DC: American Psychiatric Association; 1994.
2. Rief W, Buhlmann U, Wilhelm S, Borkenhagen A, Brähler E. The prevalence of body dysmorphic disorder: a population-based survey. Psychol Med 2006;36(6):877–885. [PubMed: 16515733]
3. Phillips, KA. The Broken Mirror: Understanding and Treating Body Dysmorphic Disorder. Revised and expanded. New York, NY: Oxford University Press; 2005.
4. Phillips KA. The presentation of body dysmorphic disorder in medical settings. Primary Psychiatry 2006;13(7):51–59. [PubMed: 17183412]
5. Phillips KA, McElroy SL, Keck PE Jr, Pope HG Jr, Hudson JI. Body dysmorphic disorder: 30 cases of imagined ugliness. Am J Psychiatry 1993;150(2):302–308. [PubMed: 8422082]
6. Grant JE, Kim SW, Crow SJ. Prevalence and clinical features of body dysmorphic disorder in adolescent and adult psychiatric inpatients. J Clin Psychiatry 2001;62(7):517–522. [PubMed: 11488361]

7. Zimmerman M, Mattia JI. Body dysmorphic disorder in psychiatric outpatients: recognition, prevalence, comorbidity, demographic, and clinical correlates. Compr Psychiatry 1998;39(5):265–270. [PubMed: 9777278]
8. Thompson CM, Durrani AJ. An increasing need for early detection of body dysmorphic disorder by all specialties. J R Soc Med 2007;100(2):61–62. [PubMed: 17277262]
9. National Collaborating Centre for Mental Health. London: British Psychiatric Society and Royal College of Psychiatrists; 2006 [Accessed November 12, 2007]. Core interventions in the treatment of obsessive compulsive disorder and body dysmorphic disorder (a guideline from the National Institute for Health and Clinical Excellence, National Health Service). Available at: www.nice.org.uk/page.aspx?o=289817
10. Phillips KA, Hollander E. Treating body dysmorphic disorder with medication: evidence, misconceptions, and a suggested approach. Body Image: Int J Res. In press
11. Veale D, Boocock A, Gournay K, et al. Body dysmorphic disorder: a survey of fifty cases. Br J Psychiatry 1996;169(2):196–201. [PubMed: 8871796]
12. Hollander E, Cohen L, Simeon D. Body dysmorphic disorder. Psych Ann 1993;23(7):359–364.
13. Phillips KA. Body dysmorphic disorder: the distress of imagined ugliness. Am J Psychiatry 1991;148 (9):1138–1149. [PubMed: 1882990]
14. Phillips KA, Menard W, Fay C, Weisberg R. Demographic characteristics, phenomenology, comorbidity, and family history in 200 individuals with body dysmorphic disorder. Psychosom 2005;46(4):317–325.
15. Perugi G, Giannotti D, Frare F, et al. Prevalence, phenomenology and comorbidity of body dysmorphic disorder (dysmorphophobia) in a clinical population. Int J Clin Pract 1997;1(2):77–82.
16. Phillips KA. Psychosis in body dysmorphic disorder. J Psychiatr Res 2004;38(1):63–72. [PubMed: 14690771]
17. Gunstad J, Phillips KA. Axis I comorbidity in body dysmorphic disorder. Compr Psychiatry 2003;44 (4):270–276. [PubMed: 12923704]
18. Phillips KA, Menard W, Fay C, Pagano ME. Psychosocial functioning and quality of life in body dysmorphic disorder. Compr Psychiatry 2005;46(4):254–260. [PubMed: 16175755]
19. Hay GG. Dysmorphophobia. Br J Psychiatry 1970;116(533):399–406. [PubMed: 5441796]
20. Cotterill JA, Cunliffe WJ. Suicide in dermatological patients. Br J Dermatol 1997;137(2):246–250. [PubMed: 9292074]
21. Yamada M, Kobashi K, Shigemoto T, et al. On dysmorphophobia. Bull Yamaguchi Med Sch 1978;25 (1–2):47–54.
22. Stekel, W. Compulsion and Doubt. Gutheil, EA., translator. New York, NY: Liveright; 1949.
23. Phillips KA, Diaz SF. Gender differences in body dysmorphic disorder. J Nerv Ment Dis 1997;185 (9):570–577. [PubMed: 9307619]
24. Phillips KA, Coles ME, Menard W, Yen S, Fay C, Weisberg RB. Suicidal ideation and suicide attempts in body dysmorphic disorder. J Clin Psychiatry 2005;66(6):717–725. [PubMed: 15960564]
25. Asnis GM, Friedman TA, Sanderson WC, Kaplan ML, van Praag HM, Harkavy-Friedman JM. Suicidal behaviors in adult psychiatric outpatients, I: description and prevalence. Am J Psychiatry 1993;150(1):108–112. [PubMed: 8417551]
26. Radomsky ED, Haas GL, Mann JJ, Sweeney JA. Suicidal behavior in patients with schizophrenia and other psychotic disorders. Am J Psychiatry 1999;156(10):1590–1595. [PubMed: 10518171]
27. Beck AT, Steer RA, Sanderson WC, Skeie TM. Panic disorder and suicidal ideation and behavior: discrepant findings in psychiatric outpatients. Am J Psychiatry 1991;148(9):1195–1199. [PubMed: 1882997]
28. Moscicki, EK.; O'Carroll, P.; Locke, BZ. Alcohol, Drug Abuse, and Mental Health Administration: Report of the Secretary's Task Force on Youth Suicide. Vol 4: Strategies for the Prevention of Youth Suicide (DHHS Publication No [ADM]89–1624). Washington, DC: US Government Printing Office; 1989. Suicidal ideation and attempts: the Epidemiologic Catchment Area Study.
29. Moscicki EK. Identification of suicide risk factors using epidemiologic studies. Psychiatr Clin North Am 1997;20(3):499–517. [PubMed: 9323310]

30. Warshaw MG, Dolan RT, Keller MB. Suicidal behavior in patients with current or past panic disorder: five years of prospective data from the Harvard/Brown Anxiety Research Program. Am J Psychiatry 2000;157(11):1876–1878. [PubMed: 11058491]
31. American Psychiatric Association. Practice guidelines for the assessment and treatment of patients with suicidal behaviors. Am J Psychiatry 2003;160(11 suppl):1–60.
32. Goisman RM, Warshaw MG, Peterson LG, et al. Panic, agoraphobia, and panic disorder with agoraphobia. J Nerv Ment Dis 1994;182(2):72–79. [PubMed: 8308535]
33. Fontanelle LF, Telles LL, Nazar BP, et al. A sociodemographic, phenomenological, and long-term follow-up study of patients with body dysmorphic disorder in Brazil. Int J Psychiatry Med 2006;36 (2):243–259. [PubMed: 17154152]
34. Phillips KA, Menard W. Suicidality in body dysmorphic disorder: a prospective study. Am J Psychiatry 2006;163(7):1280–1282. [PubMed: 16816236]
35. Crosby AE, Cheltenham MP, Sacks JJ. Incidence of suicidal ideation and behavior in the United States, 1994. Suic Life Threat Behav 1999;29(2):131–140.
36. Frare F, Perugi G, Ruffolo G, Toni C. Obsessive-compulsive disorder and body dysmorphic disorder: a comparison of clinical features. Eur Psychiatry 2004;19(5):292–298. [PubMed: 15276662]
37. Phillips KA, Gunderson CG, Mallya G, McElroy SL, Carter W. A comparison study of body dysmorphic disorder and obsessive-compulsive disorder. J Clin Psychiatry 1998;59(11):568–575. [PubMed: 9862601]
38. Phillips KA, Pinto A, Menard W, Eisen JL, Mancebo M, Rasmussen SA. Obsessive-compulsive disorder versus body dysmorphic disorder: a comparison study of two possibly related disorders. Depress Anxiety 2007;24(6):399–409. [PubMed: 17041935]
39. Grant JE, Kim SW, Eckert ED. Body dysmorphic disorder in patients with anorexia nervosa: prevalence, clinical features, and delusionality of body image. Int J Eat Disord 2002;32(3):291–300. [PubMed: 12210643]
40. Cohen, Y.; Spirito, A.; Brown, LK. Suicide and suicidal behavior. In: DiClemente, RJ.; Hansen, WB.; Ponton, LE., editors. Handbook of Adolescent Health Risk Behavior (Issues in Clinical Child Psychology). New York, NY: Springer; 1996. p. 193-224.
41. Phillips KA, Didie ER, Menard W, Pagano ME, Fay C, Weisberg RB. Clinical features of body dysmorphic disorder in adolescents and adults. Psychiatry Res 2006;141(3):305–314. [PubMed: 16499973]
42. Albertini RS, Phillips KA. 33 cases of body dysmorphic disorder in children and adolescents. J Am Acad Child Adolesc Psychiatry 1999;38(4):453–459. [PubMed: 10199118]
43. Ackerman GL. A congressional view of youth suicide. Am Psychol 1993;48(2):183–184. [PubMed: 8442572]
44. Sells, WC.; Blum, RW. Current trends in adolescent health. In: DiClemente, RJ.; Hansen, WB.; Ponton, LE., editors. Handbook of Adolescent Health Risk Behavior (Issues in Clinical Child Psychology). New York, NY: Springer; 1996. p. 5-34.
45. Diekstra RFW. The epidemiology of suicide and parasuicide. Acta Psychiatr Scand 1993;371(suppl): 9–20.
46. Grunbaum JA, Kann L, Kinchen SA, et al. Youth risk behavior surveillance -- United States, 2001. MMWR Surveill Summ 2002;51(4):1–62. [PubMed: 12102329]
47. Dyl J, Kittler J, Phillips KA, Hunt JI. Body dysmorphic disorder and other clinically significant body image concerns in adolescent psychiatric inpatients: prevalence and clinical characteristics. Child Psychiatry Hum Dev 2006;36(4):369–382. [PubMed: 16741679]
48. Cotterill JA. Dermatological non-disease: a common and potentially fatal disturbance of cutaneous body image. Br J Dermatol 1981;104(6):611–619. [PubMed: 7248174]
49. National Center for Injury Prevention and Control. WISQARS Injury Mortality Reports, 1999–2004. [Accessed November 1, 2007]. Available at: http://webappa.cdc.gov/sasweb/ncipc/mortrate10_sy.html
50. Harris EC, Barraclough B. Suicide as an outcome for mental disorders: a meta-analysis. Br J Psychiatry 1997;170:205–228. [PubMed: 9229027]
51. Leon AC, Keller MB, Warshaw MG, et al. Prospective study of fluoxetine treatment and suicidal behavior in affectively ill subjects. Am J Psychiatry 1999;156(2):195–201. [PubMed: 9989554]

52. Didie ER, Tortolani CC, Pope CG, Menard W, Fay C, Phillips KA. Childhood abuse and neglect in body dysmorphic disorder. Child Abuse Negl 2006;30(10):1105–1115. [PubMed: 17005251]

53. Phillips KA, Siniscalchi JM, McElroy SL. Depression, anxiety, anger, and somatic symptoms in patients with body dysmorphic disorder. Psychiatr Q 2004;75(4):309–320. [PubMed: 15563049]

54. Phillips KA, Pinto A, Jain S. Self-esteem in body dysmorphic disorder. Body Image: Int J Res 2004;1 (4):385–390.

55. Rowa K, Purdon C, Summerfeldt LJ, Antony MM. Why are some obsessions more upsetting than others? Behav Res Ther 2005;43(11):1453–1465. [PubMed: 16159588]

56. Sarwer DB, Brown GK, Evans DL. Cosmetic breast augmentation and suicide. Am J Psychiatry 2007;164(7):1006–1013. [PubMed: 17606650]

57. Villeneuve PJ, Holowaty EFJ, Brisson J, et al. Mortality among Canadian women with cosmetic breast implants. Am J Epidemiol 2006;164(4):334–341. [PubMed: 16777929]

58. Didie ER, Phillips KA. Re: mortality among Canadian women with cosmetic breast implants. Am J Epidemiol 2007;165(7):846. [PubMed: 17308331]

59. Crerand CE, Phillips KA, Menard W, Fay C. Nonpsychiatric medical treatment among individuals with body dysmorphic disorder. Psychosomatics 2005;46(6):549–555. [PubMed: 16288134]

60. Phillips KA, Albertini RS, Rasmussen SA. A randomized placebo-controlled trial of fluoxetine in body dysmorphic disorder. Arch Gen Psychiatry 2002;59(4):381–388. [PubMed: 11926939]

61. Phillips KA. An open-label study of escitalopram in body dysmorphic disorder. Int Clin Psychopharmacol 2006;21(3):177–179. [PubMed: 16528140]

62. Neziroglu F, Khemlani-Patel S. A review of cognitive and behavioral treatment for body dysmorphic disorder. CNS Spectr 2002;7(6):464–471. [PubMed: 15107768]

63. Institute of Medicine. Reducing Suicide: A National Imperative. Washington, DC: The National Academies Press; 2002.

64. Mental Health: a report of the Surgeon General. Table of Contents. Available at: www.surgeongeneral.gov/library/mentalhealth/toc.html. Accessed November 1, 2007.

TABLE 1

SUICIDAL IDEATION AND SUICIDE ATTEMPTS IN BDD*

Suicidality Variable	Non-Epidemiologic Samples			Epidemiologic Sample
	US (n=307)	US (n=200)	Italy (n=58)	England (n=50)	Germany (n=42)†
Suicidal ideation	81%	78%	—	—	—
Suicidal ideation due to BDD‡	68%	55%	45%	—	19%
Attempted suicide	24%	28%	—	24%	—
Attempted suicide due to BDD‡	15%	13%	—	—	7%
Number of suicide attempts§	2.1±1.4	3.2±4.1	—	—	—
Number of suicide attempts due to BDD‡,§	1.2±1.4	1.2±3.0	—	—	—

*All percentages reflect lifetime (ie, past or current) rates, except for the Italian study, which reported a current rate; the German study did not specify a period of time during which suicidality occurred.

†42 subjects had BDD; the total sample size was 2,552.

‡BDD was the primary reason, in the subject's view.

§Among suicide attempters.

—Indicates the variable was not assessed

BDD=body dysmorphic disorder; US=United States.

TABLE 2

RATE OF SUICIDAL IDEATION, SUICIDE ATTEMPTS, AND COMPLETED SUICIDES IN 185 INDIVIDUALS WITH BODY DYSMORPHIC DISORDER[34]

Variable	Annual Weighted Mean			Range (years 1–4)	
	Subjects (%)	95% CI		Subjects (%)	
Suicidal ideation	57.8	53.3–62.3		51.1–72.0	
Suicidal ideation attributed to BDD (among entire sample)	35.6	31.2–39.9		31.0–39.8	
Suicide attempt	2.6	1.1–4.0		0.0–3.7	
Suicide attempt attributed to BDD (among entire sample)	1.5	0.4–2.6		0.0–1.9	
Completed suicides	0.3	−0.1–0.8		0.0–0.8	
	Mean	***SD***	***95% CI***	***Mean***	***SD***
Among subjects with a suicide attempt					
Number of total attempts	2.5	2.1	1.4–3.6	1.3–4.8	0.5–3.6
Number of attempts attributed to BDD	2.0	2.9	1.0–3.0	0.8–3.5	0.8–4.5

BDD=Body dysmorphic disorder.

TABLE 3

SUGGESTED QUESTIONS TO ASK PATIENTS TO DIAGNOSE BODY DYSMORPHIC DISORDER[4]

1	"Are you very worried about your appearance in any way?" or, "Are you unhappy with how you look?"
2	If the patient replies affirmatively, proceed as you would with any other illness, asking the patient to tell you about his or her concern, eg, "What don't you like about how you look?" or, "What is your concern?"
3	Ask if there are other body areas they do not like, eg, "Are you unhappy with any other aspects of your appearance? Some people are worried about the appearance of their face, skin, hair, nose, or the shape or size of other body areas. Are these or any other body areas a concern for you?"
4	Next, determine whether the patient is preoccupied with the perceived appearance flaws by asking, "How much time would you estimate that you spend each day thinking about your appearance, if you add up all the time you spend during the entire day?" or, "Do these concerns preoccupy you?" Thinking about the perceived flaws for a total of at least 1 hour per day is consistent with the diagnosis of BDD.
5	Ask "How much distress do these concerns cause you?" After the patient replies, ask more specifically whether the concerns cause anxiety, anxiety around other people, anger, depression, panic, or suicidal thinking.
6	Ask about effects of the appearance preoccupations on the patient's life, eg, "Do these concerns interfere with your life or cause problems for you in any way?" After the patient replies, ask more specifically about effects on:
	a. Work: eg, being late, missing work, poor concentration or productivity, being unemployed or underemployed
	b. School: eg, being late, missing school, poor concentration or productivity, poor grades, dropping out of school, or not pursuing academic goals
	c. Social aspects of one's life: eg, avoiding relationships, not dating, interference with intimacy or sexual functioning, avoiding social situations or events, becoming withdrawn from family or friends
	d. Other types of interference: eg, not caring for children, maintaining a household, paying bills, buying groceries, going shopping, or doing other household tasks
	e. Any other aspect of one's life
7	While BDD behaviors are not required for the diagnosis, most patients perform at least one of them (usually many), so these behaviors may be a clue that a patient has BDD. Ask, "Do you do things to check, try to fix, or hide the body areas you dislike?" Ask specifically about the most common behaviors:
	a. Camouflaging with clothing, sunglasses, hair, or body position
	b. Comparing their appearance with that of other people
	c. Checking the perceived flaws in mirrors or other reflecting surfaces
	d. Excessive grooming, eg, makeup application; face cleansing routines; or hair styling, combing, shaving, or plucking
	e. Seeking reassurance about how they look
	f. Touching the body areas
	g. Frequent clothes changing
	h. Skin picking to remove blemishes or other skin imperfections, or to "even out" one's skin
	i. Tanning
	j. Dieting, excessive exercise, or excessive weightlifting

BDD=body dysmorphic disorder.