

Body Dysmorphic Disorder: A Guide for Therapists and Mental Health Professionals with Dr. Katharine Phillips

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What is Body Dysmorphic Disorder?

Body dysmorphic disorder (BDD) remains one of the most intriguing yet under-acknowledged psychiatric conditions of our time. Characterized by an obsessive focus on perceived physical flaws or defects, often invisible to others, this disorder manifests in ways that can profoundly affect an individual's daily life, self-esteem, and overall well-being. Through an exploration of its origins, symptoms, and prevalent treatments, this article aims to equip mental health professionals with a comprehensive understanding of BDD. We also shed light on the invaluable contributions of renowned experts in the field, most notably Dr. Katharine Phillips, whose pioneering research and clinical practices have transformed the way we approach, diagnose, and treat this complex condition. As the quest for insight and effective interventions continues, understanding BDD becomes pivotal for therapists and clinicians dedicated to holistic patient care.

Prevalence and Severity: Unmasking the Silent Crisis

Current research suggests that 2-3% of the world population suffers from BDD, although many experts think that it is a vastly underreported condition (Enander et al., 2018). In a prevalence study for Nationwide BDD, 60% of those with the disease were found to be female and 40% to be male (Buhlmann et al., 2015; Koran et al., 2008). Some studies show a higher proportion of men having a particular type of BDD called muscle dysmorphia (Pope et al., 2002, *The Adonis Complex* by Dr. Phillips). Muscle dysmorphia is correlated with higher rates of suicidal thinking, substance abuse, increased compulsion to lift weights, and increased anabolic steroid, growth hormone, and thyroid medication usage (Pope et al., 2002, *The Adonis Complex* by Dr. Phillips).

The prevalence of BDD is much higher in cosmetic treatment settings. Three fourths of people with BDD have sought cosmetic procedures, and two thirds have received at least one procedure. One study (n=200) showed that procedures are not helpful for BDD patients, with less than 5% of subjects showing improvement in symptoms after cosmetic procedures (Crerand et al., 2005; Phillips et al., 2001). A survey of 265 cosmetic surgeons showed that they

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often miss/fail to recognize people with BDD (Sarwar 2002). 40% of the surgeons who worked on patients with BDD said they were threatened by these patients legally and/or physically (Crerand et al., 2005). Skin appearance is the leading cause of concern among people with BDD, even more so than surgical concerns. 40% have had dermatological treatment and 20-40% have had cosmetic surgery (Phillips et al., 2001).

Many cases remain undiagnosed or misdiagnosed due to limited awareness or misinterpretation of the symptoms. Clinicians often mistake BDD for narcissism or vanity. Additionally, BDD is often comorbid with depression, anxiety, and substance abuse disorders, which can mask some of the patients' underlying symptoms (Bjornsson, Didie, Phillips, 2010). Sometimes, a patient's depression is rooted in the idea that they look so "monstrous" or "ugly" that they cannot function or would be unwelcome in social settings, but patients often have difficulty admitting this to providers as it is a major source of shame and embarrassment for them.

Moreover, patients with BDD often have little insight on their condition, believing that their issues are entirely cosmetic, and they have trouble accepting that a mental healthcare professional will be able to help them. BDD has a strong positive correlation with hospitalization and suicidal ideation (Angelakis et al., 2016; Bjornsson, Didie, Phillips, 2010). Recognizing the prevalence and depth of this disorder is paramount not only for early intervention, but for mapping out holistic, patient-centric paths to recovery.

Risk Factors

There are studies that suggest that BDD is 40-50% genetically determined (López-Solà et al., 2014; Enander et al., 2018). Generally, 8% of those with BDD identify at least one family member with diagnosed BDD (Bienvenu et al, 2000). A study involving twins found genetic factors to account for 44% of patient's dysmorphia with environmental factors contributing to the remaining percentage (Monzani et al., 2012). A preliminary gene study found associations between genes and BDD. In *GABA_A-γ2*, the A allele occurs frequently in people with BDD and in *5-HTTLPR*, the s/s genotype occurs frequently in people with BDD. Of note, despite the significance in association of these genetic findings in those with BDD, these findings did not survive subsequent corrections testing (Phillips et al., 2015).

While there are not many studies showing the association of social media and BDD directly, a few studies exist that suggest associations between social media use and negative body image perception. A recent systematic review showed that "social media engagement or exposure to image-related content was associated with higher body dissatisfaction, dieting/restricting food, overeating, and choosing healthy foods" (Rounsefell et al., 2020). More robust studies are needed to examine the association between social media and BDD prevalence. Other factors associated with BDD include history of being teased (Buhlmann et al., 2007), abuse and neglect (Didie et al., 2006), and low parental bonding especially among adolescent females (Heshmati et al., 2023).

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Recognition and Diagnosis

As mentioned before, BDD frequently remains underdiagnosed or misdiagnosed, due in part to its overlapping symptoms with conditions such as obsessive-compulsive disorder (OCD) and major depressive disorder. It is crucial for clinicians to be adept at distinguishing BDD from other disorders. This begins with a comprehensive understanding of its core symptom: a preoccupation with perceived defects or flaws in physical appearance which others often find minor or non-observable. People with BDD may exhibit behaviors such as spending at least an hour a day, averaging as much as 3-8 hours per day, thinking about how they look and obsessing over the perceived flaws. BDD causes a significant amount of distress and interferes with everyday functioning (Bjornsson, Didie, Phillips, 2010).

Furthermore, recognizing associated behaviors—such as repetitive mirror checking or excessive grooming—can also provide diagnostic clarity (Bjornsson, Didie, Phillips, 2010). Properly identifying BDD is not merely an academic exercise; it directly impacts treatment outcomes. Prompt and accurate diagnosis ensures individuals receive appropriate, evidence-based care, improving both prognosis and quality of life.

While imaging studies are not indicated in diagnosing BDD, fMRI brain studies on people with BDD show that these patients are very tuned into detail and have difficulty with holistic visual processing (Feusner, Yaryura-Tobias, Saxena, 2008). In this podcast Dr. Phillips states that the “brains [of people with BDD] are good at seeing detail, but not at seeing the big picture (mentioned at time 35:37 in podcast). Similar visual processing is seen in patients with anorexia nervosa, but they are more severe in BDD (Feusner, Yaryura-Tobias, Saxena, 2008).

Screening and Proactive Identification

The nature of BDD means that many suffer silently, being reticent about their fears and perceptions, primarily due to feelings of shame and embarrassment.

Therapists should actively probe for signs of BDD. A simple yet effective screening question can be: "Are you excessively worried about how you look?"

Specific screening tools include:

1. Body Dysmorphic Disorder Questionnaire (BDDQ): This is a self reporting screening tool with seven items exploring people's concern and preoccupation about/with their appearance and how much these concerns cause distress in their daily lives. One study found this tool's sensitivity to be 89.6% and specificity to be 81.4% (Lekakis et al., 2016).
2. Body Image Disturbance Questionnaire (BIDQ): This is similar to a BDDQ in that it also has seven items, but rather than having yes or no questions like the former, this tool

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utilizes continuous response scaling. Though this has strong psychometric value, it is limited in its screening for BDD compared to BDDQ (Cash et al., 2004).

Signs and Symptomatic Behaviors

- Camouflaging: Many individuals with BDD employ techniques to hide perceived defects, such as wearing hair over their eyes or using excessive makeup (Bjornsson, Didie, Phillips, 2010).
- Behavioral clues: Extended durations in the bathroom, frequent mirror-checking, or extreme reactions to photographs can be indicative of BDD (Bjornsson, Didie, Phillips, 2010).
- Social patterns: Avoidant behaviors, such as refraining from social events or wearing concealing clothing even in inappropriate weather, can be red flags (Bjornsson, Didie, Phillips, 2010).

Differentiating BDD from Other Disorders

- Social anxiety disorder: While both conditions involve social avoidance, the reasons differ. BDD sufferers avoid social situations due to perceived physical flaws (Bjornsson, Didie, Phillips, 2010).
- Skin picking and other disorders: Activities like skin-picking might signal BDD if the intent is to "fix" perceived skin flaws. It's essential to determine the underlying motivation behind such behaviors (Bjornsson, Didie, Phillips, 2010).
- OCD: BDD and OCD are classified in the same category in DSM-5. They are similar in that there are distressing intrusive thoughts that trigger compulsive behaviors. The content of OCD thoughts, however, are different (i.e. worried the house will burn down if they don't check the stove 30 times, so they check the stove 30 times). BDD thought content and compulsive behaviors are about appearance. Additionally, people with OCD have more insight into their illness than those with BDD (Bjornsson, Didie, Phillips, 2010).

Comorbidities

BDD can occur with other mental disorders, however, BDD tends to be most commonly associated with severe depression and suicidality. Therefore therapists should always assess suicidality when working with patients with BDD. 80% of patients with BDD have had suicidal ideations at some point in their life. 25% have attempted suicide (Bjornsson, Didie, Phillips, 2010). Substance use disorder (SUD) has a high association with BDD, as there is self-medication involved in reducing distress that is associated with thoughts. In one study (n=176), 48.9% of the subjects had SUD, and 68% of those subjects stated that BDD preceded and even contributed to their SUD. Suicide attempts were found to be higher among subjects

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with BDD and SUD than those with just BDD (Grant et al., 2005). Personality disorders, especially avoidant personality disorder, are commonly associated with BDD. On personality scales such as NEO-PI-R, BDD tends to score high on neuroticism, low on extroversion, low on agreeableness, and low on conscientiousness (Phillips and McElroy, 2000). Because there are no longitudinal studies that exist in high-risk groups, it is hard to tell whether these traits cause BDD, or if these traits result from BDD, or if they co-occur with BDD.

Treatment Approaches:

Cognitive Behavioral Therapy (CBT) remains a cornerstone in treating BDD, though the methods are highly dependent on the disorder and should be tailored to each specific patient. For BDD, it focuses on (Bjornsson, Didie, Phillips, 2010):

- Ritual prevention: Helping patients develop psychological tools to stop repetitive behavior (mirror checking, skin picking, etc).
- Exposure therapy: Patients who have difficulty socializing and going outside may need help recognizing and confronting their anxieties.
- Body image work: Daily exercises to help the patient develop a bigger, more holistic self-image, rather than focusing on specific imperfections.
- Expanding the patient's sense of self-worth beyond physical appearance.

Pharmaceutical Interventions: Selective serotonin reuptake inhibitors (SSRIs) serve as a first-line medical treatment. For BDD, these often need to be prescribed in higher doses than would be typical for treatment of depression or anxiety. Adolescents and patients with poor tolerance should begin at low doses that are gradually increased until symptoms improve (Phillips and Hollander, 2008).

- Recommended Dosing (Phillips and Hollander, 2008):
 - Fluoxetine: Dosing ranges from 40 mg to 80 mg.
 - Escitalopram: Starting dose is usually 5-10 mg, which can be titrated up to 20 mg or 30 mg. Average dosing tends to be around 40 mg.
 - Citalopram: Dosing ranges from 30 mg to 100 mg.
 - Fluoxetine: Average dosing is 80 mg. However, dosing can go up to 120 mg.
 - Sertraline: Average dosing is around 250 mg, but it can increase to 400 mg. A study showed increased efficacy in treating OCD with 400 mg of sertraline, especially if 200 mg sertraline was ineffective (Ninan et al., 2006).
 - Fluvoxamine: Dosing ranges between 250 and 350 mg
 - Paroxetine: Dosing range around 40-65 mg per day
- If SSRIs do not work, then another medication should be added to optimize or augment SSRI. If symptoms are not that severe, add buspirone (30-80 mg per day) (Phillips and Hollander, 2008). N-Acetylcysteine (glutamate modulator) can

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also be used in addition to SSRI in refractory obsessive-compulsive and related disorders (OCDRD) (Parli et al., 2023).

- Clomipramine is also used in refractory BDD treatment, and its dosing is not to exceed 250 mg per day. If it is added with an SSRI then dosing can start at 25 to 50 mg (Phillips and Hollander, 2008).
- People with severe symptoms (i.e. severe co-occurring depression, suicidality, aggressive behavior) may need a second generation antipsychotic (Phillips and Hollander, 2008).
- For mild cases of BDD, patients can choose between CBT and pharmaceutical interventions. For severe cases, especially those with suicidal ideation and hospitalizations, both treatments are recommended (Phillips and Hollander, 2008).

Addressing the desire for cosmetic procedures: Practice guidelines listed in the American Academy of Otolaryngology state that cosmetic procedures are highly contraindicated with BDD (Ishii et al., 2017). Studies show that plastic surgery only improves symptoms about 5% of the time, while 95% of patients experience no change or worsening of their symptoms (Crerand et al., 2005; Phillips et al., 2001). However, it is crucial to address any desire for cosmetic treatments. Therapists should help patients weigh the pros and cons and, where possible, delay such decisions until after undergoing recommended treatments like CBT or SSRI therapy.

The Importance of Continued Practice: Remission and Relapse

Relapse rate after discontinued medication is largely understudied. One study explored relapse rate after a six month treatment regimen of escitalopram, and found that continued use of the medication shows significant benefit as compared to placebo (Phillips, 2016), although six month treatment regimens are not typical for the average BDD patient. Phillips recommends that patients actively and continually practice therapeutic skills and strategies even after the end of formal CBT. Similar to how a musician or athlete needs regular practice to maintain their skills, BDD sufferers should consistently implement their psychological tools for dealing with obsessive thoughts. In milder cases, pharmaceutical interventions may eventually be discontinued, but it is recommended as a lifelong treatment for severe/suicidal cases (Phillips and Hollander, 2008).

Valuable Resources for Therapists

CBT can be difficult to implement without a structured format and guidelines. Two manuals which have been tested in research studies include:

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Cognitive-Behavioral Therapy for Body Dysmorphic Disorder: A Treatment Manual, by Sabine Wilhelm, Katharine A. Phillips, and Gail Steketee.

Body Dysmorphic Disorder: A Treatment Manual, by David Veal and Fugen Neziroglu.

Conclusion

Body dysmorphic disorder presents a unique challenge for mental health professionals due to its multifaceted nature and the profound suffering it causes. It is vital that therapists remain proactive in identifying and treating BDD, ensuring they are equipped with the latest knowledge and techniques. By doing so, we can offer a lifeline to those silently battling this debilitating condition and help them navigate their way to a healthier self-perception and brighter future.

About Dr. Katharine Phillips:

Dr. Katharine Phillips stands as a beacon of expertise and innovation in the realm of psychiatry, specifically in understanding BDD. She is an alumna of Dartmouth College and Dartmouth Medical School and is the current Professor of Psychiatry and the DeWitt Wallace Senior Scholar at Weill Cornell Medicine. Her remarkable contributions to the field of psychiatry range from defining the intricate facets of BDD to pioneering treatments, both pharmacological and therapeutic. With over 350 scientific publications and eleven authored or edited books to her name, she has been a touchstone for professionals seeking knowledge on BDD and other psychiatric disorders.

References:

Angelakis, I., Gooding, P. A., & Panagioti, M. (2016). Suicidality in body dysmorphic disorder (BDD): A systematic review with meta-analysis. *Clinical psychology review, 49*, 55–66.

<https://doi.org/10.1016/j.cpr.2016.08.002>

Bienvenu, O. J., Samuels, J. F., Riddle, M. A., Hoehn-Saric, R., Liang, K. Y., Cullen, B. A., Grados, M. A., & Nestadt, G. (2000). The relationship of obsessive-compulsive disorder to possible spectrum disorders: results from a family study. *Biological psychiatry, 48*(4), 287–293.

[https://doi.org/10.1016/s0006-3223\(00\)00831-3](https://doi.org/10.1016/s0006-3223(00)00831-3)

Bjornsson, A. S., Didie, E. R., & Phillips, K. A. (2010). Body dysmorphic disorder. *Dialogues in clinical neuroscience, 12*(2), 221–232. <https://doi.org/10.31887/DCNS.2010.12.2/abjornsson>

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Buhlmann, U., Glaesmer, H., Mewes, R., Fama, J. M., Wilhelm, S., Brähler, E., & Rief, W. (2015). Updates on the prevalence of body dysmorphic disorder: A population-based survey. *FOCUS*, 13(2), 252–257. <https://doi.org/10.1176/appi.focus.130217>

Buhlmann U, Cook LM, Fama JM, Wilhelm S. (2007). Perceived teasing experiences in body dysmorphic disorder. *Body Image*, 4(4), 381-385. <https://doi.org/10.1016/j.bodyim.2007.06.004>

Cash, T. F., Phillips, K. A., Santos, M. T., & Hrabosky, J. I. (2004). *Body Image Disturbance Questionnaire (BIDQ)* [Database record]. APA PsycTests. <https://doi.org/10.1037/t20989-000>

Crerand, C. E., Phillips, K. A., Menard, W., & Fay, C. (2005). Nonpsychiatric medical treatment of body dysmorphic disorder. *Psychosomatics*, 46(6), 549–555. <https://doi.org/10.1176/appi.psy.46.6.549>

Didie, E. R., Tortolani, C. C., Pope, C. G., Menard, W., Fay, C., & Phillips, K. A. (2006). Childhood abuse and neglect in body dysmorphic disorder. *Child abuse & neglect*, 30(10), 1105–1115. <https://doi.org/10.1016/j.chiabu.2006.03.007>

Enander, J., Ivanov, V. Z., Mataix-Cols, D., Kuja-Halkola, R., Ljótsson, B., Lundström, S., Pérez-Vigil, A., Monzani, B., Lichtenstein, P., & Rück, C. (2018). Prevalence and heritability of body dysmorphic symptoms in adolescents and young adults: a population-based nationwide twin study. *Psychological medicine*, 48(16), 2740–2747. <https://doi.org/10.1017/S0033291718000375>

Feusner, J. D., Yaryura-Tobias, J., & Saxena, S. (2008). The pathophysiology of body dysmorphic disorder. *Body image*, 5(1), 3–12. <https://doi.org/10.1016/j.bodyim.2007.11.002>

Grant, J. E., Menard, W., Pagano, M. E., Fay, C., & Phillips, K. A. (2005). Substance use disorders in individuals with body dysmorphic disorder. *The Journal of clinical psychiatry*, 66(3), 309–405. <https://doi.org/10.4088/jcp.v66n0306>

Heshmati, R., Pellerone, M., Esfandi, M. R. N., Yeganeh, N., & Jafari, E. (2023). Interpersonal Attachment Styles and Body Dysmorphic Symptoms in Adolescent Girls: The Mediating Role of Body Image. *Clinical neuropsychiatry*, 20(2), 141–150. <https://doi.org/10.36131/cnfioritieditore20230206>

Ishii, L. E., Tollefson, T. T., Basura, G. J., Rosenfeld, R. M., Abramson, P. J., Chaiet, S. R., Davis, K. S., Doghramji, K., Farrow, E. H., Finestone, S. A., Ishman, S. L., Murphy, R. X., Jr, Park, J. G., Setzen, M., Strike, D. J., Walsh, S. A., Warner, J. P., & Nnacheta, L. C. (2017). Clinical Practice Guideline: Improving Nasal Form and Function after Rhinoplasty. *Otolaryngology--head and neck surgery : official journal of American Academy of*

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Otolaryngology-Head and Neck Surgery, 156(2_suppl), S1–S30.

<https://doi.org/10.1177/0194599816683153>

Koran, L. M., Abujaoude, E., Large, M. D., & Serpe, R. T. (2008). The prevalence of body dysmorphic disorder in the United States adult population. *CNS spectrums*, 13(4), 316–322.

<https://doi.org/10.1017/s1092852900016436>

Lekakis, G., Picavet, V. A., Gabriëls, L., Grietens, J., & Hellings, P. W. (2016). Body Dysmorphic Disorder in aesthetic rhinoplasty: Validating a new screening tool. *The Laryngoscope*, 126(8), 1739–1745.

<https://doi.org/10.1002/lary.25963>

López-Solà, C., Fontenelle, L. F., Alonso, P., Cuadras, D., Foley, D. L., Pantelis, C., Pujol, J., Yücel, M., Cardoner, N., Soriano-Mas, C., Menchón, J. M., & Harrison, B. J. (2014). Prevalence and heritability of obsessive-compulsive spectrum and anxiety disorder symptoms: A survey of the Australian Twin Registry. *American journal of medical genetics. Part B, Neuropsychiatric genetics : the official publication of the International Society of Psychiatric Genetics*, 165B(4), 314–325.

<https://doi.org/10.1002/ajmg.b.32233>

Monzani, B., Rijdsdijk, F., Anson, M., Iervolino, A. C., Cherkas, L., Spector, T., & Mataix-Cols, D. (2012). A twin study of body dysmorphic concerns. *Psychological medicine*, 42(9), 1949–1955.

<https://doi.org/10.1017/S0033291711002741>

Ninan, P. T., Koran, L. M., Kiev, A., Davidson, J. R., Rasmussen, S. A., Zajecka, J. M., Robinson, D. G., Crits-Christoph, P., Mandel, F. S., & Austin, C. (2006). High-dose sertraline strategy for nonresponders to acute treatment for obsessive-compulsive disorder: a multicenter double-blind trial. *The Journal of clinical psychiatry*, 67(1), 15–22.

<https://doi.org/10.4088/jcp.v67n0103>

Parli, G. M., Gales, M. A., & Gales, B. J. (2023). "N-Acetylcysteine for Obsessive-Compulsive and Related Disorders in Children and Adolescents: A Review". *The Annals of pharmacotherapy*, 57(7), 847–854.

<https://doi.org/10.1177/10600280221138092>

Phillips, K. A., Keshaviah, A., Dougherty, D. D., Stout, R. L., Menard, W., & Wilhelm, S. (2016). Pharmacotherapy Relapse Prevention in Body Dysmorphic Disorder: A Double-Blind, Placebo-Controlled Trial. *The American journal of psychiatry*, 173(9), 887–895.

<https://doi.org/10.1176/appi.ajp.2016.15091243>

Phillips KA, Zai G, King NA, Menard W, Kennedy JL, Richter MA. (2015). A preliminary candidate gene study in body dysmorphic disorder. *Journal of Obsessive-Compulsive and Related Disorders*, 6, 72-76. <https://doi.org/10.1016/j.jocrd.2015.06.004>

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Phillips, K. A., & Hollander, E. (2008). Treating body dysmorphic disorder with medication: evidence, misconceptions, and a suggested approach. *Body image*, 5(1), 13–27.

<https://doi.org/10.1016/j.bodyim.2007.12.003>

Phillips, K. A., Grant, J., Siniscalchi, J., & Albertini, R. S. (2001). Surgical and nonpsychiatric medical treatment of patients with body dysmorphic disorder. *Psychosomatics*, 42(6), 504–510.

<https://doi.org/10.1176/appi.psy.42.6.504>

Phillips, K. A., & McElroy, S. L. (2000). Personality disorders and traits in patients with body dysmorphic disorder. *Comprehensive psychiatry*, 41(4), 229–236.

<https://doi.org/10.1053/comp.2000.7429>

Pope, H. G., Phillips, K. A., & Olivardia, R. (2002). *The Adonis complex: How to identify, treat, and prevent body obsession in men and boys*. Simon & Schuster.

Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2020). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & dietetics: the journal of the Dietitians Association of Australia*, 77(1), 19–40. <https://doi.org/10.1111/1747-0080.12581>

Sarwer D. B. (2002). Awareness and identification of body dysmorphic disorder by aesthetic surgeons: results of a survey of american society for aesthetic plastic surgery members.

Aesthetic surgery journal, 22(6), 531–535. <https://doi.org/10.1067/maj.2002.129451>