Chapter 12
Body Dysmorphic Disorder in Females

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12.1 Introduction

Body dysmorphic disorder (BDD) is primarily a psychiatric disease presenting to dermatologists with a primary complaint of defect in appearance. It was previously known as dysmorphophobia, dermatological hypochondria or dermatological non-disease, but these terms are considered best not used, as these do not accurately reflect the condition.

There is characteristic preoccupation with a real or imagined external defect, with concern being out of proportion to the defect, if any. This preoccupation, though trivial to an onlooker, may consume entire waking hours and affect quality of life of the patient [1].

12.2 History

This condition was initially documented by Enrico Morselli in 1891 as dysmorphophobia (Greek Dysmorphia—ugliness) [2]. Later many other documentations were made, including the famous "Wolf man" of Sigmund Freud [3]. It was varyingly described as obsession, hypochondria, somatoform disorder and hypochondriacal psychosis [2].

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12.3 Current Status

The Diagnostic and Statistical Manual of Mental Disorders, DSM-V of 2013, categorizes BDD as an obsessive-compulsive spectrum disorder [4].

12.4 Epidemiology

Though there is lack of comprehensive data from many countries, the global prevalence is estimated to be 0.7–2.4% with a higher prevalence of 4.9–36% in dermatology patients [5]. It is disproportionately more in those with comorbid psychiatric problems (8–37%) [6] with an almost equal gender distribution [7], though concerns and comorbidities differ [8]. Younger patients (<50 years) have more associated morbidity [5].

12.5 Aetiopathogenesis

Pathogenesis involves a complex interplay of biologic, psychosocial, cultural and genetic factors. The key processes include impaired frontostriatal and temporoparietooccipital pathways, impaired visual processing by orbitofrontal cortex, abnormality in caudate nucleus and decrease in the neurotransmitter serotonin. Genetic predilection, psychosocial factors like childhood adverse events, personality traits, and gender and culture roles also are implicated [9].

12.6 Clinical Features

BDD has been described variously as “obsession with perfection” [10], and a condition which is “rich in symptoms, but poor in signs” [11].

Characteristic features are as follows [12].

1. Preoccupation with a minor or perceived body defect.
2. Complaints mostly related to face, breast, hair, body weight and shape.
3. Spends too much time contemplating the condition and elaborate and repetitive remedial strategies like prolonged grooming, excessive make-up, concealing, dressing up, mirror checking.
4. This preoccupation affects psychosocial well-being and quality of life.

DSM-V criteria for BDD is given in Table 12.1 [4].

Table 12.1 DSM-V criteria for BDD

DSM-V criteria for body dysmorphic disorder
(A) Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others
(B) At some point during the course of the disorder, the individual has performed repetitive behaviours (e.g. mirror checking, excessive grooming, skin picking, reassurance seeking) or mental acts (e.g. comparing his or her appearance with that of others) in response to the appearance concerns
(C) The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning
(D) The appearance preoccupation is not better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder

In addition to these, the level of insight (absent to good) and presence of muscle dysmorphophobia (exclusive to men) should also be counted

12.7 Areas of Concern in Females

Though any body part may be subject to scrutiny, those that are major components in body imagery are most affected, the common areas of concern being skin, hair, acne, nose shape and size, facial wrinkles, facial and body hair, breast size. Complaints pertaining to face include shape of nose and teeth, flushing, redness, greasiness, dilated veins, pores, facial hair, acne, pigmentation and scarring. Scalp hair loss and burning sensation is also a common complaint [11].

Some have concerns regarding to only one body part, some have concerns with multiple parts and in some, concerns keep on shifting from one area of focus to another [13]. The thoughts are invariably repetitive, bothersome and time-consuming, collectively lasting for up to 3 to 8 h per day [14].

Thoughts lead to repetitive time-consuming and uncontrollable behaviour like mirror checking, camouflaging, dressing up to hide the “defect”, skin picking or comparing the body parts to others’. Mirror gazing occurs in up to 80% cases, and the sessions may be much prolonged than normal [15]. Skin picking was seen in upto 27% in a series of cases [16]. This is particularly harmful in that it may lead to scars and pigmentation, thereby actually inducing deformity where there was none. BDD patients also indulge in repetitive and excessive make up, grooming, hiding defects with clothes, glasses or caps, hair styling and using concealers.

Repeated reassurance seeking from family and friends is also characteristically seen.

Compared to men, women are more preoccupied with breast and legs, and indulge more in camouflaging and mirror checking. They suffer more from anxiety, panic and bulimia [8].

Most women have pervasive shame, guilt and loss of hope, and do not easily share it with doctors. They request repeated cosmetic or surgical procedures in the hope that the appearance will improve. Eventually they avoid social interaction, isolate themselves and fail in relationships.

In recent years, compulsive "selfie" image clicking and posting on social media is also found to be an increasing trend in patients with BDD. Such women have negative self-image and low self-esteem [17].

There is impairment in various spheres of life like psychosocial functioning, education and occupation, and interpersonal relationships and quality of life decreases. Advanced cases become isolated and housebound [14]. Extreme cases indulge in self-mutilating behaviour in a self-attempt to correct the defect [18].

Up to 30% with BDD have poor insight. If insight is absent, delusions may set in. The patients are quite convinced that others are scrutinizing, discussing or mocking their "defects". Such cases are more resistant to treatment and develop more morbidity [1]. Those with good insight may realise that their defect appears more ugly to them than to others, but still cannot help obsessing about it [19].

Types of BDD

(a) With insight versus without insight (delusional).
(b) BDD by proxy: here a patient is concerned about the appearance of another closely associated person, for example, a wife concerned about a husband's baldness, a mother concerned that her unborn foetus has body defects [20], a mother concerned about child's ugliness [21].
(c) Familial BDD, wherein the patient imposes the delusional idea upon one or more family members [22].
(d) Folie a deux, wherein both partners suffer from BDD.

12.8 Differential Diagnosis

Other conditions that can be mistaken for BDD include:

Obsessive-compulsive disorder, eating disorders, skin picking, trichotillomania, major depressive disorder, anxiety disorder and hypochondriasis.

Those with concerns about actual physical defects too should not be labelled as BDD [13]. The main point in differentiation is the time spent obsessing about the condition and history of compensatory behaviour like mirror gazing and camouflaging.

BDD may have associated social anxiety and depression, which has to be differentiated from primary anxiety and depression.

Olfactory reference syndrome, wherein the patient has a fixed belief that she has foul body odour, is not considered a part of BDD [4].

12.9 Comorbidities

BDD is often associated with anxiety, depression, social avoidance, OCD, eating disorders and substance abuse [23, 24]. This may be a chance association, or due to the shared aetiology and pathogenic mechanisms. Depression is tenfold and anxiety

is fourfold seen in BDD patients than in non BDD subsets, especially if concerns are related to the face [5].

The life time association with BDD for depression is 75%, and for OCD it is 32%. Social phobia can occur in 37–39% of BDD sufferers, irrespective of the BDD attribute [25]. There is an overlap between BDD and eating disorders in the form of preoccupation with a distorted body image. Upto 12% patients with severe eating disorders have BDD [26], and 30–50% have a lifetime prevalence of substance abuse [27].

12.10 Adverse Effects/Complications

These include direct or indirect consequences like the following [11].

- Repeated doctor shopping.
- Unnecessary, multiple cosmetic and surgical procedures leading to drain of finance, family conflict.
- Extreme isolation, severe social phobia.
- Acts of self-mutilation in severe BDD.
- Suicidal tendency (24%).

Complications for the treating dermatologist: violence against treating doctor and multiple lawsuits are much more common. A survey among aesthetic surgeons revealed that with nearly 2% were physically threatened and 29% faced lawsuits by irate BDD sufferers [28].

12.11 Prognosis

BDD is a psychologically debilitating condition with chronic course and poor prognosis, with high rates of suicide. It typically starts in adolescence or early adulthood, though the patient may present to the doctor much later, and has chronic course with average duration of illness being more than 16 years [29]. Bad prognostic factors include younger age of onset, severe symptoms, longer duration of symptoms and associated psychiatric comorbidities [10].

12.12 Diagnosis of BDD

Diagnosis of BDD is essentially by clinical suspicion and correlation.

Multiple scales have been used to evaluate BDD, as it is essential to exclude BDD before performing cosmetologic and plastic surgical procedures. There are dermatologic and cosmetologic versions, as well as self-administered questionnaires [13,

Table 12.2 The Body Dysmorphic Disorder Questionnaire (BDDQ)

(1) Are you worried about how you look? if yes, please list the body areas you don't like If no, you are done with the questionnaire
(2) Is your main concern with how you look that you aren't thin enough or that you might get too fat? Yes/No
(3) How has this problem with how you look affected your life? Has it often upset you a lot? Yes/No • Has it often gotten in the way of doing things with friends, dating, your relationships with people, or your social activities? Yes/No –If yes: Describe how • Has it caused you any problems with school, work, or other activities? Yes/No –If yes: What are they? • Are there things you avoid because of how you look? Yes/No –If yes: What are they?
(4) On an average day, how much time do you usually spend thinking about how you look? (a) Less than 1 h a day. (b) 1–3 h a day. (c) More than 3 h a day

Patient is likely to have BDD if Question 1: Yes to both parts, Question 3: Yes to any of the questions, Question 4: Answers b or cQuestion 2: Yes can indicate either BDD or Eating disorder, and patient has to be further evaluated

Modified from: Phillips, K.A., Atala, K.D., Pope, H.G., 1995. Diagnostic instruments for body dysmorphic disorder. New Research Program and Abstracts, American Psychiatric Association 148th annual meeting. Miami: American Psychiatric Association

30]. A simple self-administered questionnaire which can be filled online, with automatic calculation of scores is available at Body Dysmorphic Disorder Foundation website. If the score is less than 30, out of total 72, the possibility of BDD is negligible [31]. The Body Dysmorphic Disorder Questionnaire (BDDQ) which is 100% sensitive and 89–94% specific is easy to use by the dermatologists [32] (Table 12.2).

12.13 Management of BDD

The main aim of treatment is to reduce dysfunctional thoughts, prevent unnecessary procedures and surgeries, treat associated psychiatric comorbidities and improve psychosocial functioning.

It is essential to categorise the type of BDD, whether predominantly obsessive-compulsive or delusional in nature to plan the most suitable approach. Depending upon the severity of the condition, it can be managed either with non-pharmacological measures alone or combined with psychotropics. It is imperative for all patients to be referred to a mental health professional as it can sometimes co-exist with psychiatric comorbidities which have to be tackled along with BDD.

12.13.1 Non-pharmacological Management

Cognitive-behaviour therapy (CBT) is an evidence based non-pharmacological treatment of BDD [33]. Our actions are usually governed by our thoughts. The principle of CBT is to identify and work on the disturbing thoughts to bring about changes in the behaviour patterns. The key therapeutic strategy of CBT used in BDD is Exposure and Response Prevention E/RP, others being motivational interviewing, psychoeducation, cognitive restructuring and mirror retraining/attention training [34–37].

CBT is the standard treatment for BDD. It is usually administered weekly on an individual basis, over 18 to 22 weeks. As a first step the therapist/clinician should do a thorough assessment of the patients with respect to their concerns, feelings, behaviour as well as the distress experienced. Subtle clues such as scars or excoriations on the face or use of heavy make-up to "hide" the defects should be noted. The therapist should screen for delusions of reference (e.g. "I feel all are staring at me when I go out"), panic attack (e.g. "I feel dizzy and think I am passing out when somebody looks at me"), depression, suicidal ideations, substance abuse, social phobia and also history of frequent cosmetic treatments.

12.13.2 Motivational Interviewing (MI) [38]

It is an effective counselling method which enhances motivation of the patient by resolving ambivalence. Ambivalence is the state where patient has contradictory feelings, that is, she wants to change her thoughts/actions but simultaneously not wanting to.

The four guiding principles of MI are represented by the acronym RULE where R = Resist the righting reflex, U = Understand the patient's own motivation, L = Listen with empathy, E = Empower the patient.

12.13.2.1 Resist the Righting Reflex

The health professionals usually have a tendency to be judgemental and advise the patients as to what is right and wrong. This can be viewed as criticism by patients with further strengthening of their thoughts and behaviours. By avoiding this attitude, the patient's motivation to change can be understood.

12.13.2.2 Understanding the Patient's Own Motivation

It is better to understand the patient's perspective and reasons for wanting to change and also the difficulties faced in this regard.

12.13.2.3 Listen with Empathy

Listening with concern forms the key. Rule of the thumb in MI is giving equal time for listening as well as talking.

12.13.2.4 Empower the Patient

The doctor needs to empower his patients to actively take part in treatment choices by openly discussing about their ideas to bring about the desired change.

12.14 Psychoeducation

Before initiating treatment, it is essential to provide psychoeducation to the patient on BDD. Psychoeducation is an evidence-based therapeutic intervention for the patient and family members or care-givers where they are given information about BDD, specifically how to distinguish BDD from normal appearance and body image concerns, role of perception regarding body image, outline of the cycle of BDD with emphasis on various behaviours that maintain distress [39]. Providing information aids in empowerment of patients and treatment compliance.

12.15 Exposure and Response Prevention (E/RP) [40]

The main principles of this treatment is to expose the client to the feared situation in a graded fashion until he/she becomes habituated to it with the assumption that gradually the aversion reduces and tolerance develops. It means encouraging the client to go out in public places and mingle with others without trying to hide the perceived flaws. Response prevention entails not giving in to behaviour such as gazing into the mirror, asking for reassurances from friends and family, consulting dermatologists and aestheticians for "correcting" the "flaws".

E/RP therapy starts with a detailed interview with the client to discuss their thoughts, feelings and behaviours related to their BDD. The treatment is conducted in four phases. In the first phase consisting of three weeks, the patient is given a self-rating scale to complete and is also told to self monitor [41] both the thoughts as well as BDD related behaviour. The self-reported diary [40] consists of 5 items

which the client rates once daily on a scale of 1 to 8: (1) rate the amount of time you had obsessions related to your appearance during the day; (2) rate the amount of distress you experienced due to the obsessions; (3) rate the amount of time you spent on compulsions during the day; (4) rate your ability to control the compulsions; (5) rate your degree of avoidance due to appearance concerns during the day. A daily mean score is calculated. Every week these self-report diaries are checked by the therapist and at the end of three weeks, a self-rating scale is filled. The common self-rating scales used in practice include the body dysmorphic disorder modification of the Yale–Brown obsessive-compulsive inventory scale [42], the Sheehan disability scale [43] and The MADRS-S [44, 45].

The second phase is over three weeks and the client meets the therapist twice weekly to reflect upon her thoughts and behaviours, while the therapist continues to motivate the patient to maintain the diary. In the third phase over seven weeks, E/RP is introduced with exposure in the initial weeks and response prevention strategies in the last few weeks. Exposure consists of carrying out the feared and dreaded activities such as going to crowded places such as malls, restaurants and parks without hiding the face in clothing or using make-up. Response prevention strategies consist of avoiding the use of make-up, avoiding looking into mirrors, reducing hours spent on reading about cosmetic products and cosmetic surgeries and also not seeking reassurance from family members about appearance. Fourth phase is the renewed self-monitoring phase consisting of three weeks where client continues to maintain the diary without any sessions with the therapist.

12.16 Cognitive strategies [46]

These include identifying maladaptive thoughts, assessing them and creating different thoughts. The therapist helps client to recognise their thoughts, for example, “The scars on my face make me look very ugly”. They may also harbour cognitive errors such as “My colleagues always stare at my face and think how bad I look”. After the client learns to identify them, the therapist works with the client to assess the soundness of the thoughts as well as their usefulness. For example, the client has to ask herself, “Has anyone ever told me that I look ugly because of my scars?” or “What is the evidence that others are looking at me and judging my looks?” Once the client learns to identify the thoughts and appearance related beliefs, the deeper core thoughts will be addressed. For example, in a client who believes his nose is big and crooked, the therapist will repeatedly question him, “What would it mean if people noticed your nose as big?” until the client expressed his core belief as, “If people noticed that my nose was big, they would not like me and this would mean that I am unlovable.” [3] By constantly working with the client, the therapist makes her understand her self-worth and make her realize that her skills and achievements are more important than the appearance.

12.17 Mirror Retraining and Attention Training

In BDD clients check out their image in the mirror to focus only on their perceived defect. In mirror retraining the client is trained to look at the mirror in a holistic manner. One learns to observe and describe the parts of the body in a non-judgemental manner without thinking as ugly, bad etc. In attention training, instead of focussing on their external 'flaws' and thinking how they will appear to others, they are trained to redirect their attention externally to the activity at hand and their environment. This enables them to enjoy their activities and interpersonal relations.

Based on case series, open studies and controlled studies, CBT is the first choice among psychotherapies recommended for clients with BDD [47]. In a first controlled study on group therapy in BDD, 54 clients were randomized to receive either CBT or to a waiting list. The former group showed significant reduction in the symptoms after 8 two hour sessions [48]. In a randomized controlled trial of 94 patients to either therapist-guided internet based CBT programme or an online supportive therapy, found the former therapy superior to the latter [49]. An open 12-week trial of smart-phone delivered CBT showed improvement in symptom severity, insight, functional status and quality of life in 90% of subjects [50].

A proportion of clients with BDD either do not respond to psychological measures are suffer from relapses. In such persons a visual training programme is under investigation based on visual perception abnormalities reported to be a key feature in BDD [51].

12.18 Medical Management (Pharmacotherapy) of BDD

As BDD is classified under the new Obsessive-Compulsive and related disorders, just as OCD, it is treated with Selective serotonin reuptake inhibitors (SSRIs). As in OCD, doses higher than that needed for depression have to be used, sometimes double or triple the antidepressant dose [52]. It is essential to use the highest tolerated dose for at least 3–4 months before switching to alternative treatments.

SSRIs such as citalopram, escitalopram, fluoxetine, fluvoxamine and tricyclic antidepressant clomipramine have been found useful. Among them escitalopram and fluoxetine have been the best studied and well tolerated drugs in BDD. In a 12-week open-label trial of citalopram in 15 subjects with BDD, responders constituted 73% and the drug was well tolerated in a dose of 20–40 mg/day [53]. In an open-label study of escitalopram, 10–30 mg/day in 100 patients of BDD, response was seen in 58% of cases. The 58 responders were then subjected to a randomised double blind study and a significant improvement was observed at the end of 6 months [54]. In a double-blind placebo controlled study of 67 patients with BDD treated with fluoxetine 20–80 mg per day, significant improvement was seen in 53 patients at week 8, continuing at weeks 10 and 12 [55]. In an open clinical trial of

fluvoxamine (100–300 mg/day) in 15 patients, 10 markedly improved at week 10 [56]. A double-blind crossover trial of clomipramine versus desipramine (selective norepinephrine reuptake inhibitor) found the former to be more effective than the latter and also useful in delusional patients [57].

12.18.1 SSRI Augmentation Therapies

When SSRIs alone show suboptimal response, or in cases with suicidal ideations, depressive features or delusions, additional treatments such as CBT or other psychotropics may be added to augment the effect. Adding an anxiolytic such as buspirone a 5HTA1 antagonist may help [58]. Addition of an atypical antipsychotic aripiprazole 10 mg/day has helped a case of BDD resistant to fluvoxamine alone [59]. Olanzapine 5 mg added to paroxetine 40 mg/day has greatly benefitted a female with severe BDD [60].

Pharmacotherapeutic guidelines in BDD [61]

1. Recognise and diagnose BDD: The diagnosis is usually missed in clinical practice. When patient is unusually concerned about minor or non-existent flaws, BDD has to be suspected. Simple questioning or use of standard questionnaires aids in the diagnosis.
2. Providing psychoeducation: It helps to educate the patient about the nature of the condition, measures to tackle it, complications if it is left untreated and the general course of the condition. Proper knowledge assists the patient to choose suitable treatment.
3. Begin treatment with an SSRI even in delusional patients.
4. Use maximum SSRI dose recommended or tolerated unless a lower dose works, for example, up to 80 mg of fluoxetine may be tried.
5. Continue the SSRI for at least a year.
6. Gradually taper the SSRI and do not stop abruptly.
7. If one SSRI fails try another.
8. Consider augmentation therapies.
9. Consider benzodiazepines in agitated or anxious patients.
10. Although medications are always needed for severely ill, severely depressed and highly suicidal patients, CBT can be tried as adjuvant treatment in all cases of BDD.

The role of oxytocin in the treatment needs to be investigated based on recent data [62]. Neurostimulation is another promising area for study [63]. Electroconvulsive therapy may be helpful in patients with BDD and depressive features [64].

12.18.2 Therapeutic Prognosis

Although BDD is a chronic disorder, it does respond to evidence-based treatments. A response rate of 50–80% has been observed with pharmacotherapy [65]. The BDD scoring instruments help in assessing the effect of treatment. Relapses can be prevented by long-term therapy.

Key Points

- BDD is an intrusive and obsessive primary psychiatric condition, mostly seen in young adults.
- Although not uncommon, it is frequently missed in clinical settings.
- Detailed history and questionnaires help in diagnosis.
- Associated psychiatric co-morbidities should be sought and treated.
- The severity of BDD is proportionate to the loss of insight which may vary from minimal to complete.
- Severe BDD can disrupt the patient's life in all spheres including psychosocial and occupational.
- Unwarranted cosmetic surgeries need to be avoided.
- In many a case, treatment is difficult, especially so in delusional patients who are unwilling to approach mental health professionals.
- CBT and SSRIs are standard treatment modalities.
- Dermatologists, aestheticians and plastic surgeons need to be especially careful in identifying and dealing with BDD patients as they are prone to physical violence or indulge in legal lawsuits.
- A BDD patient should be delicately handled by empathizing with them, firm refusal in offering unnecessary cosmetic and aesthetic procedures, and directing to a mental health expert.
- In patients with insight as well as in patient's family members, awareness of the disease may lead to acceptance of the diagnosis and better compliance with treatment.

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