

The Mirror Lies: Unravelling the Psychopathology of Body Dysmorphic Disorder

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Abstract: Body Dysmorphic Disorder (BDD) is a serious and underdiagnosed mental illness that is typified by an obsession with one or more perceived physical flaws or defects that are invisible to others or seem minor. This obsession causes serious distress and impairs functioning in social, professional, and other crucial areas of life. This review aims to improve knowledge and understanding across medical specialties by synthesizing the most recent data on the etiology, diagnosis, comorbidities, clinical characteristics, epidemiology, and evidence-based therapy of BDD. BDD is a quite frequent disorder that is more common in cosmetic, dermatological, and psychiatric settings than schizophrenia or anorexia nervosa, according to community studies. If untreated, it usually begins in adolescence and progresses in a chronic manner. Genetic susceptibilities, neurobiological variables, and environmental stressors, including childhood abuse and bullying, are all part of the complicated etiology. Significantly increased risk of suicide is linked to BDD, which is highly comorbid with major depressive illness, substance use disorders, social anxiety, and obsessive-compulsive disorder. Due to patients' lack of awareness and reluctance to reveal symptoms, diagnosis is frequently difficult; nevertheless, certain screening instruments and structured clinical interviews can help. Cognitive-Behavioral Therapy (CBT) specifically designed for BDD and high-dose Selective Serotonin Reuptake Inhibitors (SSRIs) are first-line treatments that have been shown to be effective in lowering the intensity of symptoms. People with BDD often seek cosmetic operations; however, they are largely useless and can exacerbate symptoms. Suicidality and comorbidity are prevalent in BDD, a crippling condition. Access to evidence-based treatments, enhanced screening, and raised awareness are essential. Clarifying the neurobiological causes of BDD and creating more potent preventative and intervention techniques should be the main goals of future studies.

INTRODUCTION

The DSM-IV psychiatric disease known as body dysmorphic disorder (BDD) is typified by an upsetting or debilitating obsession with one or more perceived or minor physical flaws. [1,2] BDD is distinguished from typical body image issues by its chronic duration and intensity. [3] The disorder is more prevalent than schizophrenia or anorexia nervosa, with a prevalence of roughly 2% in the general population. [4,5] Point prevalences in the general population range from 0.7% to 2.4%, according to epidemiologic studies. [4, 6–8] Individuals with BDD may spend several hours daily fixating on these perceived flaws, leading to substantial distress and impairment across multiple domains, including social, educational, and occupational functioning. [9] Such individuals are highly convinced of the validity of their claim, which causes significant distress and impairment in social and occupational functioning. [3] These people are so certain that their assertion is true that it significantly impairs their ability to operate in social and professional contexts and causes them great anguish. Increasing awareness of BDD is necessary in all specialties since it results in significant pain and functional impairment. [10] Major depressive disorder (MDD), obsessive-compulsive disorder (OCD), social phobia, and anorexia nervosa are linked to BDD. [5] In particular, sadness, social anxiety, and obsessive-compulsive disorder (OCD) frequently co-occur with BDD. The comorbidity of eating disorders and BDD is common [11–13], and both illnesses should be diagnosed. [14, 15] These consist of (but are not limited to) rituals and compulsions, low mood, low self-esteem, feelings of personal guilt and worthlessness, suicidal thoughts, and anxiety over being negatively judged. [5] BDD is linked to a threefold higher risk of mortality from intentional self-harm and suicide. [16] Despite being a significant psychiatric issue, the syndrome is less prevalent and typically only manifests to mental health professionals when depression, house boundness, or risk for suicide is present. [17] Since BDD usually has a chronic course if left untreated, it is especially troubling that BDD is frequently misunderstood, misdiagnosed, or underdiagnosed due to physicians' ignorance of the disorder and how to treat it. [19] BDD is frequently disregarded in clinical and public health settings, despite its

severity and ubiquity. [19] Because of the many parallels between OCD and BDD, OCD-related disorders are included in both the DSM-5 and the ICD-11 under the BDD category. [15, 20, 21] In 1987, the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM III-R), was revised to include the diagnosis of "body dysmorphic disorder." "In 2018, the eleventh revision of the International Classification of Diseases (ICD-11) added BDD as a distinct diagnostic entity. [20] Information about the neurocognitive impairments and underlying neurobiology of BDD is starting to surface; however, it is still extremely early. [22-26] There is still much to be determined about the brain and molecular mechanisms underlying BDD. [27, 28] BDD sufferers engage in time-consuming actions to either hide or enhance their "defect" or to constantly scrutinise it. For instance, excessive grooming, which can be harmful, and looking in the mirror to compare one's own looks to those of others are examples. Skin-picking, reassurance-seeking, dieting, wearing clothing or makeup to cover up the "defect," and seeking dermatological or cosmetic surgery are all prevalent, especially when it comes to the skin. [13] Although they are frequently less impaired than those with body dysmorphic disorder, patients with "real disfigurements" may be seen as more deserving of care. [21, 29]. Although the illness is readily trivialized and stigmatized, clinicians should not mistake it for body dissatisfaction, which is widespread but does not significantly disrupt life or cause significant distress. [17]

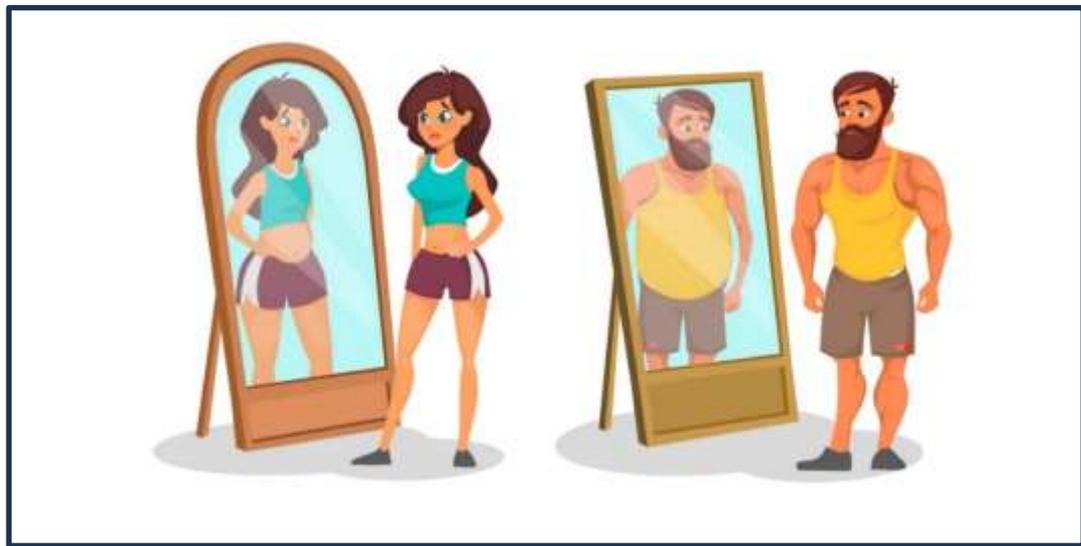


Fig. 1: Visual Representation of Body Dysmorphic Disorder

Epidemiology

BDD seems to be a somewhat widespread condition. [4,6-8] According to these investigations, BDD appears to be more prevalent than conditions like anorexia nervosa or schizophrenia. [30] Higher prevalence rates ranging from 2 to 13% have been found in studies conducted on nonclinical adult student samples. [31–35]. According to studies, almost two-thirds of people experience the onset of BDD before the age of 18 [36]. Although it is uncommon (0.1%) among children under the age of twelve, the prevalence of BDD rises significantly during adolescence (1.9%). Teenage girls (3.4%) are more likely than teenage boys (0.4%) to suffer from BDD. [37] A meta-analysis revealed that the weighted prevalence of BDD was 11% in dermatological clinics, 13% in general cosmetic surgery settings, and 7% in inpatient psychiatric clinics. These clinical settings have the highest prevalence of BDD. [38] 4.8% of adolescents who were admitted to the hospital had BDD, according to research. [25]. The incidence of BDD in other regions of the world is not well understood because the majority of prevalence studies to far have been carried out in high-income nations. [38]. The professional clinical consensus is that BDD is likely to continue a chronic course if treatment is not received, although we are not aware of any long-term data on the disorder's natural course from untreated patients. [18]

Etiology And Risk Factors BDD is believed to emerge from a complicated interaction between environmental stresses and genetic vulnerability. [39, 40] According to twin studies of people who self-report symptoms, the heritability of body dysmorphic concerns is between 37% and 49%. These results need confirmation from genomic research and extended family pedigrees of people with a clinical diagnosis of BDD. The precise genetic variations that might be responsible for BDD symptoms are still unknown because there have been no genome-wide association studies of BDD diagnoses or symptoms carried out yet. [41] The latter is particularly

important since people who are genetically predisposed to BDD may also be more susceptible to a number of negative life events (e.g., gene–environment correlations). [42] The risk of developing dysmorphic concerns does not appear to be influenced by environmental characteristics that twins raised in the same household share, such as the socioeconomic level of their parents. [41] Since BDD first manifests in adolescence, research must focus especially on risk variables that exist before the onset. For instance, youngsters are frequently teased about their appearance, but very few of them go on to have BDD. In order to develop therapies for those at risk, one goal of future study is to identify the elements (or combination of factors) that predict the persistence of high self-consciousness in the future. The maintenance of symptoms is emphasized in a cognitive behavioral model that has been developed. [43, 44] A distorted mental image is said to be activated by an external depiction of the person's appearance, such as gazing into a mirror, to start the cycle. [45] Numerous proposed risk variables are still purely conjectural [43, 44]. There is currently little information on the risk factors for BDD development. Differentiating risk factors that are unique to BDD from those that predispose people to other diseases is the goal of the study agenda. A number of risk factors are postulated to contribute to the emergence of BDD. [43]

Among these are

- A genetic propensity.
- A disposition that may be partially inherited, such as shyness, perfectionism, or anxiety.
- Childhood adversity, which might include non-specific issues including sexual abuse, bad peer connections, social isolation, lack of family support, or bullying or taunting about one's ability or attractiveness.
- A history of physical or dermatological stigmata (such as acne) that were resolved during adolescence. [44, 46, 47]

Table 1. Summary of risk and associated factors in selected studies

Factor related to BDD Development	No. of Studies Investigating This Factor	No. of Studies with Significant Differences Between Patients with BDD and Healthy Controls	No. of Studies with No Significant Differences Between Patients with BDD and Healthy Controls	Remarks
Demographic factors Gender	5	1	4	Overall, there is no significant association between gender and BDD, $P = .28$
Age	10	6	4	3 studies found that BDD patients are younger than controls, while 3 studies found that BDD patients are older than controls Overall, there is no significant association between age and BDD, $P = .86$
Marital status	6	1	5	1 study found that BDD patients are more likely to be unmarried Pooled RR 0.67; 95% CI: 0.51-0.88; $I^2 = 0\%$; $P = 0.004$
Education	3	2	1	1 study found that BDD patients have higher education levels, while another study found that BDD patients have lower education levels Pooled RR cannot be obtained due to conflicting results
BMI	2	2	0	1 study found that BDD patients have a higher BMI, while another found that BDD patients are either underweight or obese
Race	6	2	4	1 study found that BDD patients are more likely to be non-Caucasians, while another study found that BDD patients are more likely to be Hispanics or Latinos

Past adverse experiences Appearance- and competency-related teasing	2	2	0	Both studies found that BDD patients are more likely to have experienced appearance- and competency-related teasing
Physical and sexual abuse	4	3	1	3 studies found a higher frequency of physical and sexual abuse among BDD patients.
Cognitive factors Stronger implicit associations between attractiveness and positive attributes or competence	3	3	0	3 studies found that BDD patients tend to associate attractiveness with positive attributes or competence
Lower self-esteem	3	3	0	3 studies found that BDD patients are more likely to have lower self-esteem.
Higher aesthetic sensitivity	1	1	0	1 study found that BDD patients are more sensitive to aesthetics.
Comorbid psychiatric conditions	14	13	1	13 studies revealed higher frequency of psychiatric comorbidities among BDD patients Pooled mean difference in Beck Depression Inventory score: 16.33; 95% CI: 14.30-18.36; $I^2 = 52\%$; $P \leq .01$
Cosmetic Procedures	3	2	1	2 studies found that BDD patients are more likely to seek cosmetic procedures as part of their safety behaviors.
Specific to muscle dysmorphia (MD)	1	1	0	1 study found that MD patients are more likely to conform to masculine norms.
Higher conformity to masculine norms.	1	1	0	1 study found that MD patients are more likely to have poor to violent relationships with their mother.
Poor or violent relationships with their mother	1	1	0	1 study found that MD patients are more likely to have witnessed violence between their parents
Witnessed violence between their parents.				

Comorbidity

The majority of BDD patients in clinical settings have comorbidities, which further lower their quality of life. Common comorbidities of BDD in adult clinical samples include major depressive disorder, eating disorders, OCD, anxiety disorders (including social anxiety disorder), and substance use or dependence disorders. 13, 27, and 48 Research has documented comparable comorbidity patterns in pediatric and teenage clinical samples. [47, 48] Because neurodevelopmental diseases like autism and attention-deficit/hyperactivity disorder are likely infrequently formally evaluated in adult facilities, they are diagnosed more frequently in young persons with BDD than in adults with BDD. [37, 49, 50] BDD frequently coexists with other mental illnesses. Major depressive disorder was the most prevalent comorbid disorder in the two biggest phenomenological studies of people diagnosed with BDD (n=293 and n=200), which evaluated all participants using the Structured Clinical Interview for DSM. [51] The lifetime prevalence of BDD was approximately

75% in both groups. [30,52] substance use disorders (30% to 48.9%), OCD (32% to 33%), and social phobia (37% to 39%) were the other most prevalent lifetime comorbid disorders. [30, 52, 53]

DIAGNOSIS, SCREENING, AND PREVENTION

1.1 Diagnostic Criteria-

The obsession with one or more perceived bodily flaws or defects that are invisible to others is the first fundamental feature of BDD. Even while there may be little imperfections, the level of obsession is obviously out of proportion (for instance, fretting excessively because of a pimple or a small scar). Although any body part can be the subject of obsession, people with BDD typically have severe concerns about a number of parts of their appearance, most frequently their facial characteristics. An overall sense of being unsightly, deformed, or ugly may be the focus of some people's obsession rather than a particular trait. Repetitive activities (like camouflaging or mirror checking) or mental acts (like comparing with others) carried out in reaction to appearance-related obsessions constitute the disorder's second essential feature. [27, 48, 49, 39, 54] The DSM-5 and ICD-11 use a continuum from good to absent to characterize the degree of insight, or how much a person feels their BDD beliefs are real. [15, 21] While the majority of persons with BDD are ambivalent or even convinced that their ideas about their looks are accurate (poor or absent insight), other individuals with BDD quickly realize that their views are definitely or probably not true (excellent insight). Muscle dysmorphia can also be specified as a component of the BDD diagnosis in the DSM-5. The perception that the body build is too tiny or not muscular enough is the main focus of the appearance concern in this group of BDD patients with muscle dysmorphia, who are primarily men. [21, 54] Significant suffering and impairment are caused by the disease; individuals with BDD may spend hours a day dwelling on their appearance, engage in few social contacts and relationships, or experience social isolation and, in some cases, house boundness. [49, 39] If the symptoms are better described by an eating disorder (DSM-5) [21], another medical disease, or the effects of a substance or medicine on the central nervous system (ICD-11), then the diagnosis of BDD should be ruled out. [15]

1.2 Differential diagnoses-

Most of the time, self-consciousness over one's looks does not lead to impairment. These legitimate concerns are especially prevalent throughout specific life stages, such as adolescence [54], and they should not be confused with borderline personality disorder. It's important to distinguish BDD from other mental illnesses. Eating disorders and other obsessive-compulsive and associated disorders are the most frequently used differential diagnosis for BDD. Crucially, a person may have BDD and all of these diseases at the same time. [36, 37] Despite having a clinical presentation similar to BDD, including avoidance, impairment, and certain repetitive behaviors (like camouflaging), people who present with actual, observable flaws, like burn scars or facial disfigurement, will not meet the criteria for BDD because they do not tend to have repetitive checking behaviors because they are not uncertain about their appearance. These patients can still get assistance, though, and their feelings and daily functioning can be improved. With a stronger psychosocial focus, the treatment will typically resemble that provided for people with BDD.

1.3 Diagnosis-

People may be reluctant to report their symptoms for a variety of reasons, including lack of understanding, a desire for treatments other than mental health interventions (such as cosmetic surgeries), or feelings of shame or embarrassment. This is an important consideration when diagnosing BDD. Screening tools like the Body Image Questionnaire (also called the Cosmetic Procedure Screening Questionnaire (COPS) or the Body Dysmorphic Disorder Questionnaire (BDDQ) and the screening question in the Structured Clinical Interview for DSM-5 Disorders (SCID-5): "Since the last month, have you been extremely worried about the way one or more parts of your body look or your physical appearance?" would be useful as well. To determine whether diagnostic criteria are satisfied, a more thorough, guided evaluation should come after using these screening instruments.

Numerous tools can measure the severity of symptoms, aid in the diagnostic process, and monitor symptom improvement over time. This diagnosis approach can be guided by the few semi-structured clinical interviews that are available and explicitly address BDD. These interviews include the Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders (DIAMOND) and the Body Dysmorphic Disorder Diagnostic Module (BDD Module). The Yale-Brown Obsessive-Compulsive Scale adapted for BDD (BDD-YBOCS) and its adolescent version (BDD-YBOCS-A) are used in clinical studies and specialized services to gauge the severity of BDD symptoms. Both tools have strong psychometric qualities and have been validated. To use these clinician-

rated scales, a certain amount of training is required. Generally, treatment response is shown by a decrease of 30% or more on the BDD-YBOCS or BDD-YBOCS-A dimension. A full physical examination with a third party (such as their general practitioner) might help inform the diagnosis if the region of concern is hidden or difficult to identify (genital problems, for example). Suicidality, self-harm, and unnecessary or dangerous cosmetic operations should all be evaluated as part of the evaluation process.

1.4 Prevention

There are presently no effective strategies to prevent symptoms of BDD. Researchers are still in the early stages of their study, although some risk factors for BDD have been proposed (e.g., childhood trauma and bullying; see Risk factors section) and may be altered.

Treatment

Although it is outside the purview of this article to evaluate all of the existing treatments for BDD, the most effective approaches to date involve psychological and/or pharmaceutical interventions. Although cognitive behavioral therapy has also been shown to have moderate therapeutic success, selective serotonin reuptake inhibitors are currently advised as the preferred medicine for BDD. [54] Cognitive-behavioral therapy (CBT) and serotonin reuptake inhibitors (SRIs) are currently regarded as the first-line therapies for body dysmorphic disorder [55- 57].

2.1 Pharmacotherapy-

According to every study conducted to far, SRIs are frequently effective in treating body dysmorphic disorder [55, 57]. Double-blind parallel-group research with 67 participants found that fluoxetine was substantially more effective than a placebo [58]. Randomized, blinded crossover research with 29 participants found that clomipramine, a tricyclic antidepressant with SRI characteristics, was substantially more effective than desipramine [59]. With SRI monotherapy, patients with delusional body dysmorphic disorder had an equal chance of improving as those with the disorder's nondelusional variety [58, 59, 60–62]. SRI-responding patients have more control over their repeated behaviors and obsessions, and they spend less time worrying about how they look. Another SRI might work if the first one doesn't. Although it hasn't been well studied, supplementing SRIs with other substances could be beneficial. According to clinical observations and studies, it may be beneficial to supplement an SRI with buspirone, clomipramine, an atypical antipsychotic, bupropion, or venlafaxine for 6–12 weeks (after SRI monotherapy has been optimized). Longer-term SRI medication is sometimes required because relapse seems to be common after stopping an effective SRI. Since suicides have been known to happen after stopping SRIs, lifelong SRI treatment is advised for patients who seem to be at high risk for suicide [55–57]. The antipsychotic pimozide did not outperform a placebo in enhancing the effects of fluoxetine in a small randomized, double-blind research (N=29) [63].

2.2 Cognitive-Behavioral Therapy-

Early research on cognitive behavioral therapy for body dysmorphic disorder has had positive results [55–57]. In order to lessen avoidance (of social situations, for example) and ritualistic behaviors (like mirror checking), the majority of studies have involved both behavioral and cognitive techniques, primarily involving exposure and response prevention. Research on both group and individual treatment has repeatedly shown positive results with CBT. In a randomized group treatment study, 54 women with body dysmorphic disorder were randomized to either a waiting list or eight 2-hour group cognitive behavioral therapy sessions. Patients on the waiting list experienced significantly less improvement in symptoms, depression, and self-esteem than those in the CBT group [64]. In a different trial, group cognitive behavioral therapy administered in 12 weekly 90-minute sessions significantly improved the symptoms of body dysmorphic disorder in 13 people [65]. Patients who got 12 weekly 1-hour CBT sessions showed significantly greater improvement than those placed on a waiting list in a randomized study of individual CBT (N=19) [66]. Twelve of the 17 patients in a case series who had 20 daily 90-minute sessions for a month saw a 50% or more decrease in the intensity of their symptoms [67]. Symptoms improved dramatically and remained stable at 6-month follow-up after six weeks of intense treatment that included thirty 90-minute sessions of exposure and response prevention (without cognitive therapy) [68].

Role of Cosmetic Procedure

For their perceived physical shortcomings, the majority of people with BDD seek out (71% to 76%) and obtain (64% to 66%) cosmetic treatment (such as surgery, dermatology, or dentistry). However, it seems that overall BDD symptoms are rarely improved by such treatment. Retrospectively, participants in a study of 200 BDD sufferers stated that just 3.6% of all therapies led to an overall

improvement in BDD. [69] Therefore, it's critical that BDD patients and their mental health professionals understand that non-mental health treatments don't seem to be very effective in treating BDD symptoms. [1] The vast majority (82.6%) said that following cosmetic surgery, their BDD symptoms were either the same or worse. After half of the procedures, the majority of the patients in the study claimed that their BDD symptoms, including obsession, had spread to another part of their bodies. According to studies, BDD affects 5% to 15% of patients at cosmetic surgery clinics. Patients with BDD were more likely to think that getting cosmetic surgery will drastically alter their lives (e.g., help them find a new career or spouse). Surgery may not always be contraindicated by a BDD diagnosis alone; other considerations, such as an unrealistic psychosocial outcome, may be more significant. [70]. Individuals with body dysmorphic disorder may seek cosmetic surgery or procedures in the hopes of improving the look of one or more perceived defects. [13,71] In general, satisfaction with a cosmetic procedure is unexpected and improbable when body dysmorphic disorder is present. [72] However, it is typically doubtful that cosmetic operations will change body dysmorphic disorder symptoms. In part because the diagnosis of body dysmorphic disorder may be overlooked, potentially leading to legal action, recurrent surgery is inappropriate and frequently causes dissatisfaction with the cosmetic practitioner. [73] It is more crucial to attempt to refer your patient for a mental health evaluation rather than sending them to another dermatologist or cosmetic surgeon for a second opinion. A history of body dysmorphic disorder is a warning sign rather than a reason not to have a cosmetic treatment. [74]

Impact of Social Media

Teenagers' perceptions of their bodies are influenced differently by various media types. Knowing these distinctions is essential to creating focused interventions to address issues with body image and encourage teenagers to have a more positive self-image.

3.1 Television and Movies—

Television and films frequently feature characters with idealized body types, which gives viewers irrational expectations. Teenagers may experience body dissatisfaction as a result of comparing themselves to these idealized depictions. The idea that physical attractiveness is linked to happiness, success, and popularity is regularly reinforced by the narrative. If people believe that their worth is based on their appearance, they may begin to behave in ways that attempt to achieve these unachievable body standards.

3.2 Advertisements-

These advertisements reinforce limited notions of beauty, and the images are further exaggerated by digital manipulation programs like Photoshop. Advertisements equate appearance to self-worth and achievement, which can lead to body dissatisfaction. Teens who are exposed to these kinds of images may have feelings of inadequacy, which can result in negative self-perception and behaviours associated with body dysmorphic disorder (BDD).

3.3 Social Media-

Users are able to upload meticulously manipulated and idealized photos of themselves on platforms such as Instagram, TikTok, and Snapchat. [75] Teens frequently contrast these false images with their actual appearance, which can cause them to feel more self-conscious about their appearance, have lower self-esteem, and be dissatisfied with their bodies. [76] Teenagers' desire for validation is fuelled by the culture of likes and comments, and negative body image sentiments might deepen when they don't receive encouraging feedback. [77] By causing behaviors like frequent posting, photo manipulation, and approval-seeking, this pressure can exacerbate body dysmorphic disorder (BDD) by raising feelings of self-consciousness and discontent.

3.4 The Role of Media Literacy in Combating BDD-

Teenagers who possess media literacy are more equipped to evaluate and challenge the exaggerated ideals of body that are frequently promoted by the media. [75] Teens are better prepared to confront damaging messages and cultivate a more positive self-image when they learn to identify the biases, editing methods, and commercial motivations behind media representations. [78] Teenagers who participate in media literacy programs learn to distinguish between reality and distorted media representations, which lowers their chance of developing body dysmorphic disorder (BDD) and body dissatisfaction. [79]

3.5 Strategies for Media Producers to Promote Healthier Body Image-

In order to subvert the limited ideals of beauty that are frequently propagated in the media, media producers and content providers have an obligation to present a diverse array of genuine body types. A more inclusive and positive perception of body image can be

promoted by the media by showcasing a variety of body types, sizes, and looks. Adopting ethical marketing strategies

that steer clear of damaging stereotypes and objectification is also crucial. [75]

Challenges in Management

According to clinical standards, BDD should be managed according to the degree of functional impairment (Fig. 3), with more intense and specialized treatment being provided for more severe presentations. [54] International agreement on the recommended therapies for BDD, which include SSRIs and CBT specifically designed for BDD, is in line with the body of research. [54,80] Reducing discomfort and impairment, improving body image, and improving patients' quality of life are the main objectives of BDD treatment. Because most BDD patients have little or no awareness and see their issues as physical rather than psychological, it can be difficult to engage them in mental health care. Therefore, engaging with an alternate (psychological) view of the problem must be a primary priority early in treatment. In order to boost patient participation, motivational interviewing techniques are frequently employed at the beginning of therapy. Many people with BDD seek out cosmetic operations, both surgical and non-surgical; they are not advised, as results are usually unpredictable or subpar for the majority of cosmetic procedures. [81] An essential part of managing BDD is doing thorough and frequent risk assessments. [82]

4.1 Psychotherapy-

CBT's fundamental elements include cognitive restructuring (such as reevaluating inflated beliefs about the significance of appearance), exposure to response prevention and behavioral experiments, psychoeducation and formulation, participation in an alternative understanding of the issue, and relapse prevention. A major component of treatment is exposure with response prevention [54, 80], which entails avoiding repetitive behaviors associated with BDD, such as camouflaging or checking perceived flaws, while simultaneously facing feared or avoided situations (such as bright lights or social situations). [83, 84]. When compared to credible controls, or alternative psychological treatments, and waitlists, or no treatment, ten randomized controlled studies (RCTs) have demonstrated that cognitive behavioral therapy (CBT) is effective for BDD. Crucially, CBT has also been linked to benefits in a number of secondary outcomes, including wisdom, depression symptoms, and life quality. [85] Research indicates that the majority of BDD sufferers need at least 11 sessions to see a significant improvement with cognitive behavioral therapy. [86] Although cognitive behavioral therapy (CBT) is effective, most people with BDD do not use it. [87] In order to tackle this, research have shown that digitalized cognitive behavioral therapy (CBT) is effective for mild-to-moderate BDD. [88].

4.2 Pharmacotherapy-

SSRIs are the first-line pharmaceutical treatment for BDD. These include fluoxetine, sertraline, and escitalopram. In two RCTs, fluoxetine and clomipramine (a tricyclic antidepressant) were found to be more effective than placebo and desipramine, respectively, in treating people with BDD [54, 80, 89, 90]. SSRIs are also linked to significant gains in secondary outcomes, such as quality of life, psychosocial functioning, insight, and depressive symptoms. [91] According to guidelines, BDD, like OCD, typically necessitates comparatively large dosages of clomipramine or SSRIs. [92] A minimum of 12–16 weeks should be allotted for an adequate SSRI trial, with at least 4 weeks spent at the highest permitted and allowable dosage. [80] SSRIs may have greater results and reduce the chance of recurrence if taken for longer periods of time. [91]

4.3 When treatment does not work—

While the majority of BDD sufferers benefit from appropriate CBT and/or SSRI drug treatments, some patients continue to have symptoms. [93] Clinical recommendations [54, 80] for psychotherapy suggest that more intensive and specialized CBT be administered to people who have not responded to an initial course of CBT designed for BDD. When it comes to medication, the standard clinical procedure is to start by increasing the SSRI dosage as tolerated to the highest amount advised for OCD. [94]

CONCLUSION

The crippling obsession with perceived physical defects is the hallmark of Body Dysmorphic Disorder (BDD), a severe, long-lasting, and underdiagnosed mental illness. It starts in adolescence, is more common than previously believed, and is linked to substantial functional impairment in the social, professional, and academic spheres. BDD has a complicated etiology that results from a complex interaction between environmental stressors such as childhood maltreatment and taunting, neurobiological variables, and genetic vulnerabilities. The common lack of understanding among BDD sufferers, who frequently view their issues as physical rather than psychological, is a significant management difficulty. High rates of misdiagnosis and underdiagnosis result from this, as does the

widespread but usually pointless pursuit of cosmetic operations, which infrequently reduce or even worsen BDD symptoms. Together with a markedly increased risk of suicide, the strong comorbidity with major depressive illness, substance use, social anxiety, and obsessive-compulsive disorder highlights the urgent need for early detection and management. First-line therapies for BDD include high-dose selective serotonin reuptake inhibitors (SSRIs) and cognitive-behavioral therapy (CBT), which is evidence-based. Both approaches have demonstrated efficacy in lowering fundamental symptoms, boosting quality of life, and increasing insight. To enable proper referrals to mental health services, future initiatives must concentrate on raising awareness of BDD in all medical specialties, but especially in dermatology and cosmetic surgery. Clarifying the underlying neurobiology of BDD, creating efficient preventative and early intervention plans, and improving treatment alternatives for those who do not respond to first-line therapies all require more research. In the end, lowering the substantial burden of this debilitating illness requires a multidisciplinary strategy that combines accessible, evidence-based therapy with raised public and professional awareness.

ABBREVIATIONS:

- AN: Anorexia Nervosa
- BDD: Body Dysmorphic Disorder
- BDDQ: Body Dysmorphic Disorder Questionnaire
- BDD-YBOCS: Yale-Brown Obsessive-Compulsive Scale adapted for Body Dysmorphic Disorder
- BDD-YBOCS-A: Yale-Brown Obsessive-Compulsive Scale adapted for Body Dysmorphic Disorder, Adolescent version
- BMI: Body Mass Index
- CBT: Cognitive-Behavioral Therapy
- CI: Confidence Interval
- COPS: Cosmetic Procedure Screening Questionnaire
- DIAMOND: Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders
- DSM: Diagnostic and Statistical Manual of Mental Disorders
- DSM-III-R: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised
- DSM-5: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
- ICD-11: International Classification of Diseases, 11th Revision
- MD: Muscle Dysmorphia
- MDD: Major Depressive Disorder
- OCD: Obsessive-Compulsive Disorder
- PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses
- RCT: Randomized Controlled Trial
- RR: Relative Risk
- SCID-5: Structured Clinical Interview for DSM-5 Disorders
- SRI: Serotonin Reuptake Inhibitor
- SSRI: Selective Serotonin Reuptake Inhibitor

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