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Body Dysmorphic Disorder Among Aesthetic Medicine Patients – A Literature Review

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ABSTRACT

Introduction: Body Dysmorphic Disorder (BDD) is a psychiatric disorder characterised by an

excessive focus on perceived flaws in one's appearance. It leads to a strong psychological

distress, social withdrawal, and unnecessary aesthetic procedures. The rise of aesthetic

medicine in the 21st century has made BDD an important clinical and ethical issue for

practitioners.

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Aim of the study: This study aims to present the prevalence of BDD, its characteristics,

diagnostic difficulties, and treatment. We also discuss ethical challenges associated with

aesthetic medicine procedures and clinical management recommendations for aesthetic

medicine practitioners.

Materials and methods: A search of the literature review was performed using PubMed,

Google Scholar, Scopus, and other databases. We focused primarily on studies published

between 2017 and 2025. The following keywords and their combinations were used: "Body

Dysmorphic Disorder", "Aesthetic Medicine", "Cosmetic Procedures", "Psychiatry",

"Screening", "Ethics".

Brief description of state of knowledge: BDD is more common in aesthetic medicine patients

than in the general population and is influenced by social media and culture. Patients with BDD

present alterations in the function and structure of the central nervous system. There are a few

screening tools easy to use in the everyday practice of an aesthetician. Treatment includes

pharmacotherapy and psychotherapy.

Summary: BDD poses many clinical and ethical challenges. Cosmetic interventions alone

rarely address underlying psychological distress long-term. Both cognitive-behavioural therapy

and pharmacotherapy are useful tools in the treatment of BDD. Integrating screening and

patient-centred approaches has the potential to improve safety, satisfaction, and long-term well-

being in patients with this disorder.

Keywords: Body Dysmorphic Disorders, Psychiatry, Ethics, Aesthetics

Abbreviations: ACT - Acceptance and Commitment Therapy; BDD - Body Dysmorphic

Disorder; BDDQ - Body Dysmorphic Disorder Questionnaire; CBT - Cognitive Behavioral

Therapy; DCQ - Dysmorphic Concern Questionnaire; DSM-5 - the Fifth Edition of the

Diagnostic and Statistical Manual of Mental Disorders 5; MINI - Mini International

Neuropsychiatric Interview; SSRIa -Selective Serotonin Reuptake Inhibitors; SCID-5 -

Structured Clinical Interview for DSM-5

3

1. Introduction

The global growth of aesthetic medicine is linked to an increased societal focus on physical appearance [1]. There are many reasons why patients seek cosmetic procedures, such as a need for acceptance by society or a will to improve one's self-esteem [2]. Body Dysmorphic Disorder (BDD) is a mental disorder characterised by a disproportionate preoccupation with perceived flaws in appearance, which are often non-existent. Patients with BDD suffer from significant psychological distress and frequently seek cosmetic procedures, even though such interventions do not permanently resolve their underlying psychological issues. They are often unsatisfied with the results [3]. This review aims to present BDD prevalence, clinical features, diagnostic strategies, and ethical considerations in aesthetic medicine.

2. Methods

A literature review was conducted using databases including PubMed, Scopus, Web of Science and Google Scholar. The following keywords and their combinations were used: "body dysmorphic disorder," "aesthetic medicine," "cosmetic procedures," "plastic surgery," and "psychiatry. We prioritised studies in English, published between 2017 and 2025. We also included a few older publications. Inclusion criteria were peer-reviewed original research, systematic reviews, and meta-analyses addressing BDD prevalence, clinical characteristics, or screening in aesthetic medicine. Exclusion criteria included case reports and non-peer-reviewed sources. A total of 45 studies were included and synthesised into thematic sections.

3. Definition and Clinical Features of BDD

According to the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5), BDD is classified as an obsessive-compulsive-related disorder. It is characterised by preoccupation with perceived physical defects, characteristic repetitive behaviours, like

excessive grooming or camouflaging with make-up [4,5,6], impairment in interpersonal, social and occupational functioning, and significant psychological distress [7,8]. People suffering from BDD often have poor insight into the irrationality of their beliefs [9]. According to DSM-5, to be diagnosed with BDD, a patient has to meet all four major diagnostic criteria:

- 1) An exaggerated perception of a defect in appearance;
- 2) Performance of repetitive appearance-related behaviours, such as persistent mirror checking or camouflaging with make-up;
- 3) Significant psychological distress or impairment in functioning caused by the disorder;
- 4) Symptoms are not better explained by a different disorder [10].

BDD often coexists with other mental disorders. Comorbidities commonly include major depressive disorder, anxiety disorders, obsessive-compulsive disorder, and personality disorders [11,12]. Due to the strong psychological distress related to perceived defects in appearance, patients with this condition often undergo multiple cosmetic procedures. What is more, they are unsatisfied with the results more commonly than patients without this condition [13,14]. Aesthetic medicine interventions may bring patients with BDD short-term satisfaction, but they often keep worrying or start focusing on other things they do not like about themselves [15].

4. Neurobiological aspects of BDD

Research regarding neuroimaging findings in BDD patients provide important insight into the neurological grounds of cognitive difficulties observed in this population. Structural studies using diffusion tensor imaging demonstrate that those individuals exhibit altered white matter microstructure, particularly within the fibre tracts connecting visual, limbic, and prefrontal regions, which are responsible for integrating perceptual, emotional, and executive information. These abnormalities include disruptions in fractional anisotropy and mean diffusivity, reflecting reduced neural pathway integrity. Such alterations may contribute to the decision-making problems, planning and organisational difficulties, and impairments in attention and memory that are frequently reported in BDD. Disturbed connectivity within frontostriatal and interhemispheric pathways likely hinders top-down modulation of intrusive appearance-related thoughts and compulsive behaviours. Additionally, these structural deviations interact with

neurochemical dysfunctions, including serotonergic and oxytocinergic pathways, which further affect emotional regulation and social cognition [16].

5. Epidemiology

Prevalence and clinical features of the disorder vary depending on the population studied. The best evidence of lifetime prevalence in the general population is approximately 1% [17]. The evidence suggests that it has increased after the Coronavirus disease 2019 pandemic to 20.8% [18]. There are many factors influencing BDD expression, such as social media exposure and traumatising events in childhood [19,20].

Modern social influences, such as social media exposure, play a significant role in shaping fake body image. Platforms such as Instagram, TikTok, Pinterest, and Snapchat promote idealised, filtered versions of beauty, reinforcing unrealistic standards and triggering dysmorphic concerns. This leads to a deterioration of self-esteem regarding one's appearance [20]. A cross-sectional study conducted by Buhlmann et al. in 2021 confirmed a strong correlation between daily social media use and increased severity of BDD symptoms among young adults [21].

What is more, cultural and geographic factors can influence the manifestation of BDD. There is a connection between the geographical region and the prevalence of BDD. The highest prevalence of BDD was found in Latin America compared to other world regions. [22]. In Table 1. we present prevalence rates of BDD in the general population, dermatology patients, cosmetic surgery patients, and non-surgical aesthetic medicine patients.

Table 1. Prevalence of Body Dysmorphic Disorder [3]

Group	Prevalence (%)
General population	0.7-2.4%
Patients pursuing aesthetic procedures provided by dermatology professionals	10.15%
Patients pursuing aesthetic procedures provided by plastic surgery professionals	estimated 18,6% (95% CI: [15.1%, 22.4%])

6. Differences and similarities between women and men in BDD

Although affected men and women share many core features of the disorder, research show important gender-specific patterns. For instance, in a large clinical sample, men were more likely to be preoccupied with their genitals, body build, and thinning hair, whereas women more commonly focused on their skin quality, weight, breasts, legs, and facial hair [23]. Moreover, women engaged more frequently in camouflaging behaviours like makeup, but also mirror checking, skin picking, and had higher rates of eating disorder comorbidity [23]. In patients with dermatological conditions, a greater proportion of women were screened positively for BDD than men, as measured by the Dysmorphic Concern Questionnaire (DCQ). [24]. What is more, women with BDD, regardless of dermatological conditions, reported more severe distress related to the disorder behaviours and poorer insight [25].

7. Treatment of BDD

The management of BDD involves psychological and pharmacological interventions. Treatment aims to improve the overall functioning of the patient and reduce the stress associated with perceived appearance imperfections [26]. Treatment options include psychotherapy and pharmacotherapy.

7.1 Psychotherapy

Cognitive Behavioural Therapy (CBT) is considered the first-line treatment for BDD [27]. CBT targets patients' symptoms that are related to body image, such as mirror checking, appearance comparisons, or self-criticism. Other types of psychotherapy can also be beneficial in the treatment of BDD, such as psychodynamic therapy or Acceptance and Commitment Therapy (ACT). They can complement CBT therapy [28,29].

7.2 Pharmacotherapy

The primary pharmacological treatment for BDD is Selective Serotonin Reuptake Inhibitors (SSRIs) [27]. The evidence suggests that relatively high doses of SSRIs are needed in BDD. The following daily SSRI for adults were considered minimally adequate for an adult: fluvoxamine 150 mg, fluoxetine 40 mg, paroxetine 40 mg, sertraline 150 mg, clomipramine 150 mg, citalopram 40 mg, and escitalopram 20 mg. Ten weeks was considered a minimally adequate SSRIs therapy duration [27].

7.3 Combination Therapy

Combining CBT and SSRIs is commonly used in clinical practice and is supported by some evidence of effectiveness (e.g., effectiveness studies), and experts highlight the benefits of this approach. [30]. This approach targets not only the cognitive distortions, but also neurochemical imbalances in BDD. Collaboration between different specialties (such as primary care, dermatology, cosmetic surgery, and psychiatry) is also required for better treatment results.[31].

7.4 Role of Cosmetic Interventions

Cosmetic procedures are not recommended as a treatment for BDD. While some patients may experience temporary relief in psychological distress following an intervention, these procedures rarely alleviate BDD symptoms long-term. Because BDD is connected with a constant need for cosmetic procedures, it can also contribute to repeated requests for further treatments and chronic dissatisfaction [32]. A professional consultation involving both psychiatrists and psychologists is recommended to properly qualify a patient with suspected BDD for any aesthetic procedure [3].

8. Characteristics of Aesthetic Medicine Patients with BDD

Patients with BDD seeking aesthetic interventions display characteristic clinical traits such as high levels of perfectionism and self-criticism [33,34], difficulty accepting minor or normative imperfections [35], and persistent dissatisfaction despite prior cosmetic procedures [32]. Identifying these behavioural cues allowed clinicians to prevent unnecessary procedures and refer BDD patients for a psychiatric assessment before any invasive intervention was undertaken [15]. From a clinical standpoint, it is important to note that patients with BDD rarely present with evident symptoms of the disorder. They typically associate their distress with actually having a "cosmetic problem" rather than with an actual mental health problem. Consequently, aesthetic physicians often become the first point of contact regarding BDD treatment for these patients [36].

The most common preoccupations focus on the skin (eg, scarring, acne, color), hair (eg, going bald, excessive facial or body hair), or nose (eg, size or shape), but any body part can may be perceived as problematic [37]

Clinicians report a higher risk for lack of satisfaction and emotional distress in these patients compared to the general population [15,21]. When faced with refusal, individuals with BDD often consult multiple practitioners until one agrees to perform the desired procedure. Even when the outcome is objectively good, patients may still be unsatisfied [8,39]. This pattern

contributes to chronic distress, repeated treatments, and, occasionally, aggressive or litigious behaviour toward practitioners [13].

9. Diagnostic and Screening Tools

9.1 Common Screening Instruments

Early identification is essential for patients' safety and clinical protection. Validated screening instruments can make it easier for aesthetic practitioners to recognise early symptoms before proceeding with treatment [8]. Standardised assessment tools include: Body Dysmorphic Disorder Questionnaire (BDDQ), Dysmorphic Concern Questionnaire (DCQ), Structured Clinical Interview for DSM-5 (SCID-5) and Mini International Neuropsychiatric Interview (MINI)

.

BDDQ is a short, self-report screening tool based on DSM criteria. It is highly sensitive and specific in identifying BDD and can be easily incorporated into patient intake forms. DCQ measures concern about appearance flaws and related distress and is useful for distinguishing between body image dissatisfaction and clinical BDD. There is also SCID-5, which is a comprehensive diagnostic tool administered by clinicians and confirms diagnosis and evaluates comorbid psychiatric conditions. MINI is a brief structured interview for identifying BDD comorbid with anxiety or depression. We presented a comparison of the mentioned tools in Table 2.

Table 2. Common Screening Instruments useful for BDD [39-42]

Tool	Туре	Purpose	Practicality in Aesthetic Clinics
Body Dysmorphic Disorder Questionnaire	Self-report	Initial screening	High
Dysmorphic Concern Questionnaire	Self-report	Quantifies concern level	Moderate
Structured Clinical Interview for DSM-5	Clinical Interview	Diagnostic information	Low (expertise required)
Mini International Neuropsychiatric Interview	Clinical Interview	Identifies comorbidities	Moderate

Routine use of these tools in aesthetic clinics can prevent unfavourable interventions and help to guide patients with BDD to mental health specialists [21,32].

9.2 Integration in Clinical Practice

Routine psychological screening for BDD may be performed to avoid unnecessary interventions. The evidence suggests that using validated questionnaires such as BDDQ or DCQ during the first visit and followed by a psychiatric consultation may be beneficial [15]. Modern technological solutions can also be useful. For example, mobile applications and online questionnaires can measure self-assessment, allowing clinicians to spot patients at high risk of BDD more easily [20].

10. Ethical and Clinical Considerations

Aesthetic physicians have to balance patient autonomy with ethical responsibility [12,20]. Clinicians are ethically justified when they refuse treatment in patients with the suspicion of BDD [7,15]. Informed consent for aesthetic medicine procedures should discuss psychological factors and realistic outcomes, including complications [43]. Validated screening tools are recommended to set the BDD diagnosis and ease ethical decision-making. When BDD is suspected, it is advised that the aesthetic practitioners consult a patient's case with a mental-health specialist, such as a psychologist or psychiatrist, before performing a cosmetic procedure [14]. Multidisciplinary collaboration can reduce psychological harm, improve patients' outcomes, and help clinicians manage the legal and ethical risks associated with treating high-risk patients [11]. Training programs in aesthetic medicine increasingly emphasise the importance of recognising body image disorders and applying ethical guidelines to protect patients and practitioners [20].

11. Conclusions

BDD is prevalent among patients seeking aesthetic procedures and poses significant clinical and ethical challenges. Failure to recognise BDD can lead to unnecessary cosmetic interventions, which are rarely effective in alleviating psychological distress. Effective management of BDD relies on evidence-based treatments such as cognitive-behavioural therapy and SSRIs. Collaboration between aesthetic practitioners, psychiatrists, and psychologists enhances patient safety, reduces clinical and legal risk, and improves long-term outcomes. Overall, integrating structured assessment, ethical decision-making, and mental-health care into aesthetic practice is essential for ensuring responsible, specific treatment and safeguarding both patients and clinicians from avoidable harm.

Disclosure

Author's Contribution:

Conceptualisation - Julia Surowaniec and Katarzyna Karaś

methodology - Katarzyna Karaś

software - Dawid Nowicki

check - Małgorzata Muszyńska, Dawid Nowicki and Julia Surowaniec

formal analysis - Sylwia Mroszczyk

investigation - Katarzyna Karaś

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data curation - Małgorzata Muszyńska

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writing - review and editing - Katarzyna Karaś

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