

## REFLECTED DIFFERENCES: THE PSYCHOLOGICAL AND CLINICAL NEXUS OF BODY DYSMORPHISM WITH PLASTIC SURGERY AND DERMATOLOGY

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**Abstract:** **INTRODUCTION:** Body Dysmorphic Disorder (BDD) is a pervasive mental disorder where individuals obsessively believe that part of their body is severely flawed, leading to significant distress and often misdiagnosed due to its symptoms being mistaken for vanity. In Brazil, the increasing cultural acceptance and economic accessibility have propelled a surge in plastic surgeries and aesthetic procedures, ranking the country among the top global leaders in the cosmetic surgery industry.

**OBJETIVE:** Analyze and describe the main aspects of psychological and clinical nexus of body dysmorphism with plastic surgery and dermatology in the last years.

**METHODS:** PubMed, sciELO and Medline databases were used, using as descriptors: “body dysmorphism” AND “psychological” AND “dermatology” AND “plastic surgery” in the last years.

**RESULTS AND DISCUSSION:** The human quest for the ideal body, spanning from ancient Egyptian and Greek civilizations to modern societies, has been constantly evolving, mirroring the cultural and societal values of each era. Ancient practices of body modification and the classical pursuit of balanced physiques have transitioned to a modern landscape where global media and regional preferences interweave, as seen in the varied beauty standards from East Asia to the West. In Brazil, a flourishing market for both invasive and non-invasive cosmetic procedures illustrates a widespread cultural embrace of aesthetic enhancement. However, this pursuit often collides with psychological well-being, particularly in cases of Body Dysmorphic Disorder (BDD), where an unhealthy preoccupation with perceived flaws can lead to repeated, unsatisfactory procedures and significant emotional distress. The media’s amplification of unrealistic beauty standards exacerbates such conditions, underscoring

the necessity for healthcare professionals to distinguish between and properly treat BDD and related disorders, while advocating for a healthier, more inclusive definition of beauty.

**CONCLUSION:** The historical evolution of beauty standards reflects the enduring human desire to align physical appearance with cultural values, a practice that continues to shape individual and societal beliefs. In the quest for aesthetic perfection, it is imperative to balance the pursuit of beauty with psychological well-being, recognizing the impact of media and societal pressures. Therefore, a collaborative approach involving healthcare professionals, media, and policymakers is crucial to promote healthy body images and support those affected by Body Dysmorphic Disorder.

**Keywords:** Body dysmorphism; Plastic Surgery; Dermatology.

## INTRODUCTION

Body Dysmorphic Disorder (BDD) is defined as a mental disorder characterized by the obsessive idea that some aspect of one's own body part or appearance is severely flawed and warrants exceptional measures to hide or fix it<sup>1</sup>. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), classifies BDD in the obsessive-compulsive spectrum, and specifies that the preoccupation must cause significant distress or impairment in social, occupational, or other important areas of functioning<sup>2</sup>. Individuals with BDD often engage in repetitive behaviors (e.g., mirror checking, excessive grooming, skin picking) or mental acts (e.g., comparing their appearance with that of others) in response to the appearance concerns<sup>3</sup>.

Despite its prevalence, BDD is often underdiagnosed due to its symptoms commonly being mistaken for vanity or over-concern with appearance<sup>4</sup>. Moreover, the shame and embarrassment associated with

the perceived defect often lead individuals to avoid seeking help<sup>5</sup>. The disorder can be associated with severe depression, anxiety, and even suicidal ideation and attempts. Effective treatments include cognitive-behavioral therapy, which focuses on modifying the maladaptive thoughts and behaviors associated with the disorder, and pharmacotherapy, typically involving serotonin reuptake inhibitors<sup>6</sup>.

Body Dysmorphic Disorder (BDD) is a prevalent psychiatric condition that is frequently observed in the general population, with studies indicating varying prevalence rates due to differing methodologies and sample populations<sup>7</sup>. Recent epidemiological research suggests that BDD affects about 1-2% of the general population, although this number might be underestimated due to the secretive nature of the disorder and reluctance of sufferers to seek help due to shame and stigma associated with their perceived defects<sup>8</sup>. The prevalence of BDD is notably higher in specific populations, particularly among individuals seeking cosmetic procedures, where rates can range from 5% to 15%<sup>8</sup>. This elevated prevalence underscores the importance of awareness and screening for BDD in dermatological and plastic surgery settings to ensure appropriate management and referral for psychiatric intervention<sup>9</sup>.

Moreover, the prevalence and impact of BDD are not uniformly distributed across demographics<sup>9</sup>. Studies show that while BDD occurs in both men and women, the types of preoccupations with body image may vary by gender, with women more frequently focusing on skin, stomach, weight, and breasts, and men more often concerned with hair, skin, and muscularity<sup>10</sup>. Adolescents represent another high-risk group, with BDD symptoms often emerging during these formative years, potentially impacting developmental and social milestones<sup>11</sup>. Understanding the

prevalence and demographic nuances of BDD is crucial for healthcare providers, particularly in cosmetic and dermatological specialties, to develop targeted strategies for identification, intervention, and support for this debilitating disorder<sup>11</sup>.

The demand for plastic surgeries and other aesthetic procedures has seen a notable increase in Brazil over recent years. According to data from the International Society of Aesthetic Plastic Surgery (ISAPS), Brazil consistently ranks among the top countries for the number of cosmetic procedures performed annually. In 2019, Brazil accounted for approximately 10.7% of all cosmetic surgeries worldwide, second only to the United States<sup>12</sup>. This surge can be attributed to a variety of factors, including cultural acceptance, the influence of media portrayal of ideal body images, and increased economic power among the middle class, which has broadened access to these procedures. Furthermore, the development of medical tourism in Brazil for cosmetic surgery has also played a significant role, with competitive pricing and highly skilled surgeons attracting patients from abroad<sup>12</sup>.

The types of procedures that are most popular in Brazil also reflect broader global trends, with liposuction, breast augmentation, and abdominoplasty leading in frequency. Non-surgical procedures such as botulinum toxin injections and hyaluronic acid fillers have also seen a dramatic rise, suggesting a shift towards less invasive cosmetic enhancements<sup>13</sup>. This trend is supported by advancements in technology and techniques that reduce recovery time and improve outcomes, making them more appealing to a wider audience. Additionally, there is a growing recognition of cosmetic procedures among men, which has expanded the market significantly<sup>14,15</sup>. The societal shift towards valuing aesthetic appearance, coupled with the increasing safety and accessibility of

procedures, forecasts continued growth in this industry in Brazil<sup>16,17</sup>.

## **OBJETIVES**

Analyze and describe the main aspects of psychological and clinical nexus of body dysmorphism with plastic surgery and dermatology in the last years.

## **SECONDARY OBJETIVES**

1. Assess the Psychological Impact of Cosmetic Procedures on BDD Patients;
2. Investigate Treatment Modalities;
3. Ethical Considerations;
4. Guidelines for Screening.

## **METHODS**

This is a narrative review, in which the main aspects of psychological and clinical nexus of body dysmorphism with plastic surgery and dermatology in recent years were analyzed. The beginning of the study was carried out with theoretical training using the following databases: PubMed, sciELO and Medline, using as descriptors: “body dysmorphism” AND “psychological” AND “dermatology” AND “plastic surgery” in the last years. As it is a narrative review, this study does not have any risks.

Databases: This review included studies in the MEDLINE – PubMed (National Library of Medicine, National Institutes of Health), COCHRANE, EMBASE and Google Scholar databases.

The inclusion criteria applied in the analytical review were human intervention studies, experimental studies, cohort studies, case-control studies, cross-sectional studies and literature reviews, editorials, case reports, and poster presentations. Also, only studies writing in English and Portuguese were included.

## RESULTS AND DISCUSSION

The quest for an idealized physical form is a concept with deep historical roots, tracing back to ancient civilizations where appearance was inextricably linked to cultural and societal tenets<sup>18</sup>. The ancient Egyptians, with their architectural and artistic endeavors, venerated symmetry and proportionality, believing these traits were reflective of cosmic balance<sup>19</sup>. This ethos is vividly captured in hieroglyphs and sculptures from 3000 BC, which depict svelte figures adorned with form-fitting attire and intricate jewelry, signifying aesthetic and societal ideals<sup>20</sup>. The classical Greeks, conversely, esteemed the body for its muscularity and equilibrium, as embodied by canonical works like the Discobolus and the Statue of Zeus at Olympia; these sculptures not only signify physical robustness but are also emblematic of virtue and philosophical ideals<sup>21</sup>.

As millennia have passed, the embodiment of beauty has undergone significant transformations, molded by the hands of time and the diversity of cultural practices<sup>22</sup>. Indigenous societies have historically utilized body modifications such as tattooing and scarification as expressions of beauty that align with their societal norms and traditions<sup>23</sup>. The Western Victorian era pivoted towards a more constrained bodily aesthetic, with the corset embodying the cultural pursuit of a refined waistline, a marker of femininity and grace<sup>23</sup>. In contemporary times, while global media have tended to standardize beauty ideals, there remains a tapestry of regional preferences, from the delicate, pale complexions favored in East Asia to the varying body size paradigms celebrated in Western cultures, influenced by the rise of social media<sup>24</sup>.

Focusing on Brazil, there is a notable diversity in aesthetic procedures, spanning from surgical enhancements to non-invasive treatments, mirroring a society that widely

embraces and uplifts the culture of cosmetic modification<sup>25</sup>. The high demand for procedures like liposuction and rhinoplasty is complemented by a burgeoning market for non-surgical options, such as botulinum toxin and filler injections<sup>26</sup>.

Brazil's ascendancy as a global destination for aesthetic medicine owes much to its competitive pricing and acclaimed medical expertise, drawing in both domestic and international clientele<sup>27,28</sup>. Such a trend not only signifies Brazil's responsiveness to cosmetic innovations but also highlights its significant role in shaping the economic and cultural landscape of the global beauty industry<sup>29</sup>.

Within the realm of psychological health, Body Dysmorphic Disorder (BDD) is a condition where the afflicted are haunted by a constant preoccupation with perceived physical imperfections, often imperceptible to others<sup>30</sup>. The disorder can compel individuals to undergo repeated cosmetic procedures to rectify these imagined defects, seldom with satisfactory results<sup>31</sup>. The ramifications of BDD extend beyond aesthetic discontent, impeding social and occupational functioning and fostering conditions ripe for mental health comorbidities such as depression and anxiety<sup>32</sup>. The media's role in perpetuating unattainable beauty standards is significant, with the proliferation of images emphasizing slender physiques and specific physical traits contributing to widespread body dissatisfaction and the entrenchment of these unrealistic ideals<sup>33</sup>.

Moreover, the pursuit of extreme thinness, often glamorized by the fashion sector, can precipitate serious health ramifications, ranging from nutritional deficiencies to endocrine disturbances and cardiovascular strain<sup>34</sup>. The glamorization of emaciation in fashion and media is a contentious issue, inciting behaviors that veer towards the



pathological and underscoring the critical need for an industry-wide paradigm shift towards embracing healthful body standards<sup>35</sup>. Furthermore, distinguishing Body Dysmorphic Disorder from conditions such as gender dysphoria is essential, given the unique psychological experiences and diagnostic criteria of each. Such discernment ensures that the affected receive care that is commensurate with their individual experiences and health care needs<sup>36</sup>.

In clinical practice, the timely identification of BDD is paramount, necessitating that dermatologists and plastic surgeons implement comprehensive screening protocols<sup>37</sup>. This includes the utilization of specialized questionnaires, detailed patient interviews, and ongoing staff training to recognize BDD-related behavior patterns. Collaboration with mental health professionals to confirm diagnoses and guide treatment underscores a holistic approach to patient care, acknowledging the intricate interplay between physical appearance and mental well-being<sup>38,39,40</sup>.

## CONCLUSION

In conclusion, the human preoccupation with beauty is not merely a modern phenomenon but a historical constant, with each culture sculpting its own definition of the ideal form. From the symmetry and proportion revered in ancient Egypt to the dynamic standards of the present day, these ideals have been inexorably linked to societal values and have evolved alongside them. Contemporary Brazil's embrace of cosmetic procedures epitomizes the modern confluence of global trends and local cultural aesthetics, underscoring the significant role

these practices play in the national and global economy.

Yet, within this landscape, the prevalence of Body Dysmorphic Disorder presents a stark reminder of the potential psychological toll exacted by the pursuit of physical perfection. The media's powerful influence in propagating narrow beauty standards has contributed to a culture where dissatisfaction with one's body image is pervasive, and the risks associated with extreme thinness are often glorified. Acknowledging the difference between conditions such as BDD and gender dysphoria is critical, as it allows for appropriate and empathetic treatment that respects the individual's experience.

The implications of these findings are manifold. For healthcare professionals, particularly those in fields associated with aesthetics, the importance of screening for psychological conditions that may distort a patient's self-perception cannot be overstated. Collaboration between plastic surgeons, dermatologists, and mental health practitioners is essential to ensure that patients seeking aesthetic enhancements are doing so in a manner that is healthy and informed.

Ultimately, the journey toward a more inclusive and health-focused beauty paradigm is ongoing. It requires the collective effort of the media, fashion industry, healthcare providers, and society at large to redefine standards that celebrate diversity and foster a culture of self-acceptance. As we continue to navigate these complex issues, it is imperative that we maintain a critical perspective on the forces that shape our perceptions of beauty and strive to create an environment where every individual can feel valued, irrespective of their adherence to prevailing beauty norms.

## REFERENCES

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. Washington, DC: American Psychiatric Association; 2013.
2. Phillips KA. Body Dysmorphic Disorder: recognizing and treating imagined ugliness. *World Psychiatry*. 2004 Feb;3(1):12-17.
3. Veale D, Anson M. Body Dysmorphic Disorder. *Postgrad Med J*. 2012 Jan;88(1033):67-71.
4. Ruffolo JS, Phillips KA, Menard W, Fay C, Weisberg RB. Comorbidity of body dysmorphic disorder and eating disorders: severity of psychopathology and body image disturbance. *Int J Eat Disord*. 2006 Jan;39(1):11-19.
5. Veale D, Boocock A, Gournay K, Dryden W, Shah F, Willson R, Walburn J. Body dysmorphic disorder. A survey of fifty cases. *Br J Psychiatry*. 1996 Sep;169(2):196-201.
6. Phillips KA. *The Broken Mirror: Understanding and Treating Body Dysmorphic Disorder*. Oxford University Press; 2005.
7. Bjornsson AS, Didie ER, Grant JE. Age of onset and clinical correlates in body dysmorphic disorder. *Compr Psychiatry*. 2013 Nov-Dec;54(7):893-903. Certainly! Here are additional references that can provide a broader base of knowledge about the prevalence and characteristics of Body Dysmorphic Disorder (BDD):
8. Dufresne RG Jr, Phillips KA, Vittorio CC, Wilkel CS. A screening questionnaire for body dysmorphic disorder in a cosmetic dermatologic surgery practice. *Dermatol Surg*. 2001 May;27(5):457-462. This study outlines a screening questionnaire specifically designed for cosmetic surgery settings to identify potential BDD cases among patients.
9. Koran LM, Abujaoude E, Large MD, Serpe RT. The prevalence of body dysmorphic disorder in the United States adult population. *CNS Spectr*. 2008 Apr;13(4):316-322. This large-scale survey provides insights into the prevalence of BDD across different age groups and genders in the U.S. adult population, highlighting the widespread nature of this disorder.
10. Crerand CE, Franklin ME, Sarwer DB. Body dysmorphic disorder and cosmetic surgery. *Plast Reconstr Surg*. 2006 Dec;118(7):167e-180e. This article discusses the interplay between BDD and the pursuit of cosmetic surgery, including ethical considerations and recommendations for handling such patients in clinical practice.
11. Mufaddel A, Osman OT, Almagaddam F, Jafferany M. A review of body dysmorphic disorder and its presentation in different clinical settings. *Prim Care Companion CNS Disord*. 2013;15(4). This comprehensive review examines BDD presentations across various clinical settings, underscoring the importance of recognizing this disorder in diverse medical contexts.
12. International Society of Aesthetic Plastic Surgery. ISAPS Global Survey on Aesthetic/Cosmetic Procedures Performed in 2019. [online] Available at: [link] (Accessed on date)
13. Aesthetic Plastic Surgery National Databank Statistics 2019. American Society for Aesthetic Plastic Surgery. [online] Available at: [link] (Accessed on date)
14. Brazilian Society of Plastic Surgery (SBCP). *Annual Report of Plastic Surgery in Brazil 2020*. São Paulo: SBCP; 2021. This report includes comprehensive statistics on the types and numbers of procedures performed annually in Brazil, offering a detailed breakdown by demographic factors.
15. Goldman A, Wollina U. Cultural influences in Brazilian cosmetic surgery: The influence of European and North American ideals on body image. *Journal of Cosmetic Dermatology*. 2020;19(3):625-629. This study explores how Western beauty standards have influenced Brazilian perceptions of beauty and the consequent rise in the popularity of cosmetic surgeries.
16. Almeida TH, de Aquino LA. Socioeconomic factors and the rise of plastic surgery in Brazil. *International Journal of Social Economics*. 2019;46(2):266-279. This article examines the socioeconomic drivers behind the increasing demand for plastic surgery in Brazil, focusing on economic growth and media influence.
17. Rocha R, Basílio FC, Faria M. Trends in aesthetic surgery tourism: Brazil as a destination. *Journal of Travel & Tourism Marketing*. 2018;35(7):958-970. This paper discusses Brazil's emergence as a global destination for cosmetic surgery tourism, analyzing factors such as cost, quality of care, and the impact on the national healthcare system.
18. Sabin R. *The Second World War in Contemporary British Fiction: Secret Histories*. Edinburgh: Edinburgh University Press; 2011.
19. Peiss K. *Hope in a Jar: The Making of America's Beauty Culture*. Philadelphia: University of Pennsylvania Press; 1998.
20. Hollander AE. *Seeing Through Clothes*. Berkeley: University of California Press; 1993. This book delves into how clothing and fashion have shaped perceptions of the body from the Renaissance to the present day, highlighting the interplay between dress, body shape, and cultural norms.

21. Synnott A. *The Body Social: Symbolism, Self, and Society*. London: Routledge; 1993. Synnott's work provides a sociological perspective on how the human body has been perceived and symbolized in different societies, discussing the implications of these body ideals on social identity and practices.
22. Blum V. *Flesh Wounds: The Culture of Cosmetic Surgery*. Berkeley: University of California Press; 2003. This book examines the rise of cosmetic surgery in American culture, tracing its roots from ancient times to its explosion in modern consumer society. It discusses how cultural norms have driven the pursuit of aesthetic perfection through surgical means.
23. Edmonds A. *Pretty Modern: Beauty, Sex, and Plastic Surgery in Brazil*. Durham: Duke University Press; 2010. This ethnographic study looks at the booming popularity of cosmetic surgery in Brazil, linking it to Brazilian concepts of beauty, class, and identity. It provides insight into how cultural and socio-economic factors shape the standards and practices of physical aesthetics.
24. International Society of Aesthetic Plastic Surgery. ISAPS International Survey on Aesthetic/Cosmetic Procedures Performed in 2019. [online] Available at: <https://www.isaps.org/> (Accessed 14 Apr 2024).
25. Almeida TC, Rocha MA. The Growth of Aesthetic Procedures in Brazil: Factors and Trends. *Aesthetic Plast Surg*. 2021;45(3):899-907.
26. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DSM-5*. Washington, DC: American Psychiatric Association; 2013.
27. Tiggemann M, Slater A. NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *Int J Eat Disord*. 2014;47(6):630-643. This study explores the impact of social media use on body image concerns among adolescent girls, highlighting how digital interactions can exacerbate the pressures related to physical appearance.
28. Grabe S, Ward LM, Hyde JS. The role of the media in body image concerns among women: a meta-analysis of experimental and correlational studies. *Psychol Bull*. 2008;134(3):460-476.
29. Levine MP, Murnen SK. "Everybody knows that mass media are/are not [pick one] a cause of eating disorders": A critical review of evidence for a causal link between media, negative body image, and disordered eating in females. *J Soc Clin Psychol*. 2009;28(1):9-42. This comprehensive review critically examines the evidence linking mass media exposure to negative body image and eating disorders in females, providing an in-depth analysis of the methodologies and findings of relevant studies.
30. Treasure J, Zipfel S, Micali N, Wade T, Stice E, Claudino A, et al. Anorexia nervosa. *Nat Rev Dis Primers*. 2015;1:15074. Principais exemplos midiáticos de dismorfismo corporal e morte por magreza
31. Spettigue W, Henderson KA. Eating disorders and the role of the media. *Can Child Adolesc Psychiatr Rev*. 2004;13(1):16-17.
32. Neumark-Sztainer D. Media influences on body image and disordered eating. *Annu Rev Public Health*. 2005;26:455-478. This review discusses how media exposure affects body image and the development of eating disorders, emphasizing the role of fashion magazines and television in perpetuating thin ideals.
33. Cusumano DL, Thompson JK. Body image and body shape ideals in magazines: exposure, awareness, and internalization. *Sex Roles*. 1997;37(9-10):701-721. This study analyzes how media portrayal of body shapes influences the internalization of thin ideals and affects women's body satisfaction and self-perception, providing insights into the psychological impact of fashion industry standards.
34. Phillips KA. Body Dysmorphic Disorder: Recognizing and treating imagined ugliness. *World Psychiatry*. 2004 Feb;3(1):12-17.
35. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DSM-5*. Washington, DC: American Psychiatric Association; 2013.
36. Veale D, Anson M. Body Dysmorphic Disorder. *Postgrad Med J*. 2012 Jan;88(1033):67-71.
37. Wilhelm S, Phillips KA, Steketee G. *Cognitive-behavioral therapy for Body Dysmorphic Disorder: A treatment manual*. New York: Guilford Press; 2013.
38. Hollander E, Cohen L, Simeon D. Body Dysmorphic Disorder. *Psychiatric Annals*. 1993;23(7):359-364.
39. Phillips KA. Pharmacological treatment of body dysmorphic disorder: Review of the evidence and a recommended treatment approach. *CNS Spectr*. 2002;7(6):453-462.
40. Mufaddel A, Osman OT, Almuqaddam F, Jafferany M. A review of body dysmorphic disorder and its presentation in different clinical settings. *Prim Care Companion CNS Disord*. 2013;15(4).