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ORIGINAL ARTICLE

Body Dysmorphic Disorder: An integrative approach

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Abstract

Introduction: Body dysmorphic disorder (BDD) is a psychiatric disorder that consists an exaggerated concern about any defect, minimal or even nonexistent, in physical appearance. Objectives: To describe the treatments available for body dysmorphic disorder, the clinical and epidemiological characteristics of condition and the impact on the life of individuals affected by the disease. Methods: An integrative review was conducted using PubMed as the database for the past 5 years. Results: We evaluated 28 articles on the subject, with emphasis on a synthesis of the most recent knowledge and of greater scientific consistency. Conclusion: BDD is a serious disease with a high risk of suicide and a great impact on the quality of life of affected individuals. The mainstay of treatment is the use of serotonin receptor inhibitors in association with cognitive behavioral therapy. There are still few studies on the subject and new treatments are being studied.

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INTRODUCTION

The cult of the body is a normative aspect of everyday life. At the same time, there is the idea that the body can be modified through plastic surgery, cosmetology, diet and spartan exercise.

The term dysmorphophobia originates from the Greek word "dysmorphia" which refers to the condition of "being ugly". The Italian psychiatrist Enrico Morselli, in 1891², wrote about Body Dysmorphic Disorder (BDD): "Dysmorphophobia, in fact, leads the individual to be truly unhappy (...) suddenly overtaken by the fear that some deformity might have developed in his body without his noticing it (...) He constantly looks at himself in the mirror, examines the smallest defects or measures their proportions, and only after a certain period of time, convinced that this did not happen, he is able to free himself from the state of pain and anguish that the attack placed him (...). The attack does not end very quickly, and can reach a very painful intensity".

BDD usually begins in adolescence, has a chronic course³, with harmful physical and psychiatric consequences⁴. The distorted perception can be totally false – imaginary – or it can consist of subtle changes in appearance , resulting in an exaggerated reaction and causing significant impairments in personal, family, social and professional functioning. Such concerns are often associated with fear of rejection, low self-esteem, shame, feelings of worthlessness or unlovability⁵.

The defects are usually concentrated in the head and face. However, any part of the body can be a focus of concern, and it can even affect multiple areas simultaneously. The complaint may also present itself vaguely as a feeling of generalized ugliness⁵. In women, it can be associated with eating disorders, while in men, concern about the genitals and muscle dysmorphia is common, generating the false idea of having a very small or insufficiently muscular body structure³.

The search for the perfect body has popularized plastic surgeries, especially among adolescents who are in the process of building their self-image². Data from the Brazilian Society of Plastic Surgery show that the number of plastic surgeries performed in adolescents between 14 and 18 years old increased from 37,740 procedures in 2008 to 91,100 in 2012, which corresponds to an increase of 141%⁶. The prevalence of BDD among patients undergoing aesthetic surgical procedures reaches 13.2 % and surgical results are generally not achieved, leading to excessive procedures in an attempt to correct the defects noted⁷.

Although BDD has been described for over 100 years, evidence suggests that the condition is underdiagnosed and neglected¹. The estimated prevalence of BDD in the population is 1 to 2%, it affects men and women in the same proportion³, and may reach higher percentages according to the subgroups: outpatient psychiatric follow-up patients 5.8% and hospital patients 7.4%; general aesthetic surgery 13.2%; rhinoplasty 20.1%; orthognathic surgery 11.2%; cosmetic orthodontics

5.2%; dermatology 11.3% and cosmetic dermatology 9.2%¹.

In view of these data and aware of the negative impact that BDD produces, especially in adolescence, a period marked by physical and psychological changes, this work aims at knowledge about this disease, being of fundamental importance in the careful evaluation of adolescents who show signs and symptoms of the same. and in the proper conduction and treatment of these, reducing the already known impacts of morbidity and mortality.

METHODOLOGY AND RESULTS

This is a qualitative documentary study based on a bibliographic review in the PubMed database. This methodology was chosen because it is a m is a whole of scientific research of a subjective character that aims to understand the behavior of a certain target group, currently occupying a prominent place among studies that involve human beings and their social relations in different environments⁸.

The following descriptors were used based on the MeSH terms "Medical Subject Heading", from the US National Library of Medicine, and the DeCS "Descriptors in Health Sciences", from BIREME: "Body Dysmorfic Disorder" and "Treatment". Articles in Portuguese, English and Spanish were selected, published between June 1, 2015 and June 1, 2019, related to body dysmorphic disorder and its treatment, of a methodological, quantitative or qualitative nature. with emphasis on reviews. After reading the titles and abstracts, the articles that met the selection criteria were submitted to a complete reading. Articles published outside the pre - established period and language, not freely available, without available abstract, clinical case reports or those referring to animal studies were excluded.

We found 265 articles published in the pre - established period . Of these, 220 did not meet the inclusion criteria, 3 were excluded (1 due to free availability and 2 published in German), leaving 42 articles. Of the remainder, 15 articles containing similar information were excluded, leaving 27 articles (Figure 1).

DISCUSSION

BDD was introduced in the Diagnostic and Statistical Manual of Mental Disorders (DSM) III in 1980 (APA, 1980) as "dysmorphophobia" or excessive preoccupation with appearance and categorized as atypical somatoform disorder. In 2013, in the DSM-V, it was categorized in the chapter of "Obsessive-Compulsive and Related Disorders" including the presence of repetitive behaviors or mental acts in response to concern with appearance as a mandatory criterion. It is defined according to the following criteria:

 (A) Concern about a perceived defect or flaw(s) related to physical appearance that is unobservable or appears small to others;

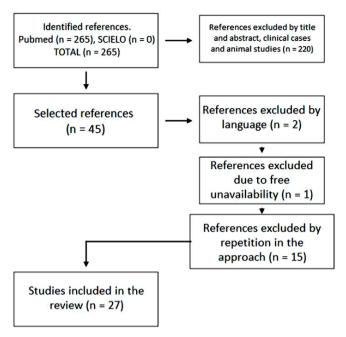


Figure 1. Flowchart - results.

- (B) Experiencing, during the course of the disorder, repetitive behaviors such as looking in the mirror, asking for approval about their appearance, or comparing themselves to others;
- (C) Present clinically significant distress such as depressed mood, anxiety and shame, or impairment in social, occupational or other important areas of functioning, including: school, relationships, family:
- (D) Appearance concerns are not restricted to concerns about body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder⁹.

As seen in the diagnostic criteria mentioned above, common behaviors in the disease are: comparing one's own appearance with that of others; repeatedly checking for perceived defects in mirrors or examining them directly; avoid mirrors or exaggerate their use; camouflage yourself with makeup and clothes; questioning people about perceived flaws; practicing exercises, seeking aesthetic procedures, excessive hygiene and tanning and, finally, social isolation². Many of these patients tend to avoid social situations, family events, school or work¹⁰.

The most common areas of focus include the nose, skin and hair. However, some patients may also focus on other areas of the body. Muscle dysmorphia is a specific type of BDD in which the individual is concerned that their body does not have enough muscles³.

Individuals with DCD tend to think more about their appearance when compared to individuals without the disease. These patients spend between three and eight hours a day on this repetition of ideas¹¹. They present repetitive and

time-consuming rituals to correct, fix or hide their body or parts of it².

Insights regarding BDD beliefs can range from good to absent/delusional, where the individual is convinced that their appearance is abnormal and the defect actually exists. In addition, most present ideas or delusions of reference, believing that they are the target of special attention or ridicule by others because of their appearance⁵.

BDD arises from a combination of psychological and environmental factors¹². The development of this disorder is associated with past experiences of abuse, neglect, violence and trauma and these are considered risk factors for the disease¹³. Children who have suffered emotional abuse, neglect or physical abuse are at greater risk of developing changes in body image and BDD¹⁴. These results are in line with the current understanding that BDD is associated with a poor quality of life and with increased suicide rates in this population¹².

BDD is commonly associated with shame, depression, anxiety, and suicide risk. It is a silent disease, as these patients are afraid to reveal their concerns about their appearance, thus performing their rituals in secret. Allied to this, they fear being considered futile when sharing their questions or, even, calling attention to the "physical defect" that distresses them so much¹⁵. The shame they experience from the distortions they present in their body image is a factor that can contribute to the stress and risk of suicide in these patients¹⁶. Patients with dysmorphic symptoms show extreme shame and stigma also constitutes an important barrier to treatment¹⁷. It is estimated that only 10% of dysmorphic patients receive adequate treatment¹⁸.

BDD resembles Obsessive Compulsive Disorder (OCD) in many ways: obsessive thoughts, compulsive behaviors, and similar response to treatment¹⁹. Although some patients with OCD have impaired criticism of their obsessions, this is less common in BDD. Patients with OCD present obsessions of different contents, however, but with BDD, they focus on body issues, involving one or more concerns, simultaneously or successively²⁰.

Research also shows commonalities in the response to treatment with cognitive behavioral therapy (CBT) and the role of selective serotonin reuptake inhibitors (SSRIs) in treatment, suggesting neuroanatomical similarities between the two disorders. Both pathologies are known to share similar brain anomalies that compromise the functioning of the frontal lobe¹⁹. Neuroimaging studies in BDD show changes in the structure and function of the occipitotemporal and frontolimbic regions, as well as thinning of the cortical gray matter of the inferior parietal and left temporal regions²¹. Functional MRI (fMRI) studies suggest that patients with BDD have brain changes with aberrant perceptions and activation of areas that increase perceptions such as fear and anxiety²².

The mainstays of BDD treatment typically involve a combination of CBT modalities and pharmacotherapy¹². Antidepressant medications improve the core symptoms of

BDD and the quality of life of these patients, thus decreasing the risk of suicide²³. For first-line pharmacological treatment, SSRI are used. Therapeutic levels are, in general, higher than the therapeutic doses for other psychiatric disorders, which becomes a problem due to the increase in drug side effects. Among the SSRIs, there is no therapeutic superiority of one drug over another, although escitalopram and fluoxetine are more frequently administered. It is important to note that escitalopram is associated with a higher risk of cardiac toxicity as the therapeutic dose is higher than the doses normally used¹². The response to the SSRI occurs gradually and requires 12 to 16 weeks to determine it, with the time day for the therapeutic response being 4 to 9 weeks. The dose increment should be done cautiously according to the response. If there is no improvement in symptoms, one can change to another drug of the SSRI class. There is little evidence that the combination of two drugs of the same class is effective. Buspirone, clomipramine, venlafaxine and atypical antipsychotics may be useful in association with SSRI when there is no clinical improvement with its use²³.

Relapse can occur²³ with a greater probability of relapses in those whose disease starts at a very early age or if the initial symptoms are very severe at presentation. Maintenance therapy is indicated²⁴.

Neurostimulation techniques represent new directions for research in the treatment of BDD. Recent studies incorporate techniques such as repetitive transcranial magnetic stimulation and bilateral deep brain stimulation for patients who are treatment resistant²⁵.

Individuals with BDD interpret information ambiguously compared to healthy controls. They also have difficulty in correctly interpreting facial expressions and emotions. CBT is the most studied for the disorder and includes psychoeducation, patient engagement, cognitive interventions, perceptual reeducation, ritual exposure and prevention, and relapse prevention directly targeting the maladaptive thoughts, beliefs, and behaviors characteristic of the disorder²⁵, and therefore a minimal risk and highly effective treatment²⁶.

Based primarily on the principles of extinction learning, CBT and related therapies (eg, habit reversal training) produce equivalent or superior results to pharmacotherapy for OCD and obsessive-compulsive spectrum disorders with few associated adverse side effects. It can be done once or more times a week and adopt different formats (individual or in groups). It should focus on exposure and relapse prevention. Behavioral therapies are highly effective, long-lasting, and acceptable interventions for obsessive-compulsive spectrum disorders²⁵.

It is believed that there are factors that imply a better response to treatment with CBT: patients with greater motivation/readiness to change, greater expectation of good results and greater basic information about the disease showed better responses to CBT . There is no difference in treatment success rates considering the intensity of symptoms or their association

with depression, suggesting that even the most severe group benefits from CBT. For patients with poor *insight*, employing strategies to increase motivation or SSRI pharmacotherapy prior to initiation of CBT may help to optimize outcomes²⁷.

CONCLUSIONS

BDD is a serious, chronic, underdiagnosed and neglected disease, which often leads to episodes of relapse. It begins in adolescence, a period of great vulnerability and physical and psychological transformations. These patients present significant damage to their quality of life, with social isolation and a tendency to commit suicide. Delusional ideas about their physical appearance make them seek aesthetic surgeries that do little to improve the degree of suffering imposed on them by the disease. Treatment consists of psychotherapy and pharmacological therapy. CBT treatment aims to improve readiness /motivation and confidence to change. It is known that drug and psychological treatment is able to improve symptoms in about 40% of patients. There are still few studies on the subject and new therapeutic options are being studied. Given the above, it is important that physicians and psychologists are aware of this pathology and the available approaches, given its prevalence and impact on the lives of these patients.

REFERENCES

- Veale D, Gledhill LJ, Christodoulou P, Hodsoll J. Body dysmorphic disorder in different settings: a systematic review and estimated weighted prevalence. Body Image. 2016 Set;18:168-86.
- 2. Phillips KA. The broken mirror: understanding and treating body dysmorphic disorder. New York: Oxford University Press; 2005.
- Shevaugn JS, Williamson P, Wade TD. A systematic review and metaanalysis of cognitive processing deficits associated with body dysmorphic disorder. Behav Res Ther. 2018 Ago;107:83-94.
- 4. Singh AR, Veale D. Understanding and treating body dysmorphic disorder. Indian J Psychiatry. 2019 Jan;61(7 Supl 1):S131-S5.
- Barros S. A contribuição da TCC no tratamento do transtorno dismórfico corporal [dissertação]. São Paulo: Centro de Estudos em Terapia Cognitivo Comportamental, Curso Lato Sensu em Terapia Cognitivo Comportamental; 2017.
- Sociedade Brasileira de Cirurgia Plástica (SBCP). Número de cirurgias plásticas entre adolescentes aumenta 141% em 4 anos [Internet]. São Paulo: SBCP; 2013; [acesso em 2019 Out 03]. Disponível em: http://www2. cirurgiaplastica.org.br/2013/08/07/numero-de-cirurgias-plasticas-entre--adolescentes-aumenta-141-em-4-anos/
- Sweis IE, Splitz J, Barry Junior DR, Cohen M. A review of body dysmorphic disorder in aesthetic surgery patients and the legal implications. Aesthetic Plast Surg. 2017 Ago;41(4):949-54.
- Godoi B. O que é uma revisão integrativa? Como fazer? [Internet]. Brasil: Academia Médica; 2013; [acesso em 2019 Out 03]. Disponível em: https://academiamedica.com.br/blog/o-que-e-uma-revisao-integrativa-como-fazer
- American Psychiatric Association (APA). Diagnostic and statistical manual of mental disorders (DSM-V). 5a ed. Arlington: APA; 2013.
- 10. Carlier IVE, Andree WDH, Van Rood YR, Van Veen T, Dekker J, Van Hemert AM. Treatment course and its predictors in patients with somatoform

- disorders: a routine outcome monitoring study in secondary psychiatric care. Clin Psychol Psychother. 2018 Mar;25:550-64.
- 11. Abramowitz J. Presidential address: are the obsessive-compulsive related disorders related to obsessive-compulsive disorder? A critical look at DSM-5's new category. Behav Ther. 2018 Jan;49(1):1-11.
- 12. Hong K, Nezgovorova V, Uzunova G, Schlussel D, Hollander E. Pharmacological treatment of body dysmorphic disorder. Curr Neuropharmacol. 2019;17(8):697-702.
- 13. Ciaramella A. The influence of trauma on autobiographical memory in the assessment of somatoform disorders according to DSM IV criteria. Psychiatr Q. 2018 Dez;89(4):991-1005.
- 14. Paxton SJ, Damiano SR. The development of body image and weight bias in childhood. Adv Child Dev Behav. 2017;52:269-98.
- 15. Fang A, Wilhelm S. Clinical features, cognitive biases, and treatment of body dysmorphic disorder. Annu Rev Clin Psychol. 2015;11:187-212.
- Weingarden H, Shaw AM, Phillips KA, Wilhelm S. Shame and defectiveness beliefs in treatment seeking patients with body dysmorphic disorder. J Nerv Ment Dis. 2018 Jun;206(6):417-22.
- Weingarden H, Renshaw KD, Davidson E, Wilhelm S. Relative relationships of general shame and body shame with body dysmorphic phenomenology and psychosocial outcomes. J Obsessive Compuls Relat Disord. 2017 Jul;14:1-6.
- Brohede S, Wingren G, Wijma B, Wijma K. Prevalence of body dysmorphic disorder among Swedish women: a population-based study. Compr Psychiatry. 2015 Abr;58:108-15.
- MalcIm A, Labuschagne I, Castle D, Terrett G, Rendell PG, Rossell SL. The relationship between body dysmorphic disorder and obsessive-compulsive disorder: a systematic review of direct comparative studies. Aust N Z J Psychiatry. 2018 Nov;52(11):1030-49.

- Hartmann AS, Cordes M, Hirschfeld G, Vocks S. Affect and worry during a checking episode: a comparison of individuals with symptoms of obsessive-compulsive disorder, anorexia nervosa, bulimia nervosa, body dysmorphic disorder, illness anxiety disorder, and panic disorder. Psychiatry Res. 2019 Fev;272:349-58.
- Grace SA, Buchanan BG, Maller JJ, Toh WL, Castle DJ, Rossell SL. Reduced cortical thickness in body dysmorphic disorder. Psychiatry Res Neuroimaging. 2017 Jan;259:25-8.
- Rangaprakash D, Bohon C, Lawrence KE, Moody T, Morfini F, Khalsa SS, et al. Aberrant dynamic connectivity for fear processing in anorexia nervosa and body dysmorphic disorder. Front Psychiatry. 2018;9:273.
- Phillips KA, Keshaviah A, Dougherty DD, Stout RL, Menard W, Wilhelm S. Pharmacotherapy relapse prevention in body dysmorphic disorder: a double-blind, placebo-controlled trial. Am J Psychiatry. 2016 Set;173(9):887-95.
- 24. Skapinakis P, Caldwell DM, Hollingworth W, Bryden P, Fineberg NA, Salkovskis P, et al. Pharmacological and psychotherapeutic interventions for management of obsessive-compulsive disorder in adults: a systematic review and network meta-analysis. Lancet Psychiatry. 2016 Ago;3(8):730-9.
- Krebs G, Fernández de la Cruz L, Mataix-Cols D. Recent advances in understanding and managing body dysmorphic disorder. Evid Based Mental Health. 2017;20(3):71-5.
- 26. Wilhelm S, Phillips KA, Greenberg JL, O'Keefe SM, Hoeppner SS, Keshaviah A, et al. Efficacy an posttreatment of therapist-delivered cognitive behavioral therapy VS supportive psychotherapy for adults with body dysmorphic disorder: a randomized clinical trial. JAMA Psychiatry. 2019 Abr;76(4):363-73.
- Greenberg JL, Phillips KA, Steketee G, Hoeppner SS, Wilhelm S. Predictors
 of response to cognitive-behavioral therapy for body dysmorphic disorder.
 Behav Ther. 2019 Jul;50(4):839-49.