ECRONICON OPEN ACCESS

EC PSYCHOLOGY AND PSYCHIATRY
Mini Review

The Diagnostic Work-Up of Body Dysmorphic Disorder

Magnus Sjogren*

Institute for Clinical Medicine, Copenhagen University, Psychiatric Center Ballerup, Denmark

***Corresponding Author**: Magnus Sjogren, Research Associate Professor, Institute for Clinical Medicine, Copenhagen University, Psychiatric Center Ballerup, Denmark. **E-mail:** jan.magnus.sjoegren@regionh.dk

Received: December 20, 2018; **Published:** January 02, 2019

Abstract

Background: Body Dysmorphic Disorder (BDD) is characterized by appearance concerns and a preoccupation with thinking and behaviors related to this concern. Several population-based studies show that BDD has a prevalence of 1.5 - 2% in the population, is associated with severe suffering, and that suicidal ideation and attempts are overrepresented compared to a normal population. Despite this, BDD is commonly missed in diagnostic evaluations and in view of the high degree of suffering and increased risk of suicide, improving recognition and diagnosis is an important task for psychiatrists. This following text describes an approach to a diagnostic work-up of BDD in a psychiatric setting.

Material and Method: A narrative review of the literature is included.

Results: A description of the diagnostic work-up to improve recognition and early initiation of treatment is provided.

Conclusion: By introducing questions about appearance concerns as a routine in the diagnostic work-up of psychiatric disorders, this will help to better identify patients with BDD. These questions may be followed up by questionnaires for screening of BDD. A positive response leads to a more thorough interview, the use of diagnostic tools and a psychiatric examination. Excluding differential diagnoses such as OCD and schizophrenia is an integer part of the complete diagnostic process.

Keywords: *Body Dysmorphic Disorder; Diagnosis, Differential Diagnosis*

Abbreviations

BDD: Body Dysmorphic Disorder; BDDE: Body Dysmorphic Disorder Examination; BDDQ-DV: Body Dysmorphic Disorder Questionnaire-Dermatology Version; BDDQ: Body Dysmorphic Disorder Questionnaire; BDD-SS: The Body Dysmorphic Disorder Symptom Scale; BDD-YBOCs: Body Dysmorphic Disorder-Yale Brown Obsessive Compulsive Scale; BIID: Body Integrity Identity Disorder; DCQ: Dysmorphic Concern Questionnaire; DSM-V: Diagnostic and Statistical Manual of Mental Disorders, Edition V; ED: Eating Disorders; MDD: Major Depressive Disorder; NAC: Normal Appearance Concerns; OCD: Obsessive-Compulsive Disorder; OCRD: Obsessive-Compulsive-Related Disorders

Introduction

According to the DSM-V, Body Dysmorphic Disorder (BDD) is an obsessive-compulsive-related disorders (OCRD) [1,2] which most commonly has an onset between 15 and 30 years of age and which is characterized by overwhelming concern of perceived somatic defects that to other people appear slight or even nonexistent. A preoccupation with this perceived defect, usually accompanied by time-consuming behavior such as mirror-watching and ineffective attempts to 'improve' the defect (i.e. usage of cosmetic products of several kinds), leads to significant distress and functional impairment e.g. high rates of occupational impairment, unemployment, but also social dysfunction and social isolation [3]. Typically, these patients isolate themselves, and suffer from comorbid depression, anxiety, and sometimes also other OCRDs. In addition, they suffer an increased risk of suicide with rates of suicidal ideation ranging from 17% - 77%, and suicide attempts from 3% - 63% [4,5].

The most common areas of preoccupations are the skin, hair, nose, eyes, eyelids, mouth, lips, jaw, and chin. However, it may involve any part of the body, and frequently, the preoccupation may be on multiple body parts at the same time. The obsessive thinking characteristically involves perceived or slight defects or flaws on the face, asymmetrical or disproportionate body features, wrinkles, scars, thinning of hair, acne, vascular markings, and pallor, or ruddiness of skin texture.

Despite the seriousness of BDD it has remained in the shadow of other related disorders such as Obsessive Compulsive Disorder (OCD) [1]. Parallels can probably be drawn to OCD in terms of etiology and pathophysiology, however, only dedicated research to BDD will increase our knowledge and opportunities for improved treatments.

The diagnostic work-up of BDD

A recommended approach to diagnosing BDD follows a proper psychiatric diagnostic work-up which includes establishing trust via a professional conduct and patient focused approach, interviewing and retrieving a complete medical history, mental status examination including a somatic examination and using a selection of questionnaires to capture any BDD related concerns and ruling out other diagnoses.

In the psychiatric examination, starting out with a broad approach and following a structured analysis of all relevant psychiatric domains, special attention should be paid to ascertaining detection of core psychopathology i.e. for BDD that the patient is preoccupied with one or more nonexistent or slight defects in their physical appearance e.g. that he/she is thinking about the perceived defects for at least an hour a day. This is most optimally done by asking whether the patient is worried about their appearance or unhappy with how they look and asking how much it affects their life.

It is important to determine whether a physical flaw is only slight or absent since this is key in the diagnosis of BDD. To do this, the clinician can determine whether the perceived defect is clearly visible and apparent at "conversational" distance. Whether or not the perceived defect is detectable or not, the acknowledgment of the patient's concern is essential to ensure trust.

Diagnostically, should the perceived defects be more obvious than just "minor" while the patient still fulfils the "preoccupation" criteria (see below), this condition should rather than BDD be diagnosed as "other specified obsessive-compulsive and related disorder" (OCRD) according to DSM-V (American Psychiatric Association). However, should there be signs of skin picking that has incurred an obvious skin lesions and scarring, the patient may still be diagnosed with BDD (See table 1).

Differential diagnoses of BDD
Normal appearance concerns
Detectable bodily defects
Eating Disorders
Obesity
Obsessive Compulsive Disorder
Trichotillomania
Excoriation disorder
Somatophorm disorder (hypochondriasis)
Social Anxiety Disorder
Schizophrenia
Gender Dysphoria
Dysmorphic concerns
Body integrity identity disorder

Table 1: *Differential diagnoses to BDD.*

The other BDD characteristic sign that the clinician needs to detect for a BDD diagnosis to be set is that the patient has engaged in one or more repetitive behaviors, i.e. fulfilling the "preoccupation criteria". Examples of repetitive behaviors are mirror checking, skin picking, and seeking support from others of perceived appearance flaws. To better enable capturing details, the Body Dysmorphic Disorder Examination (BDDE) [6] interview will further help to both diagnose BDD and get clues on differential diagnoses (See table 2).

In psychopathological terms, the disturbance is in the "thought process" for example perseveration on their physical appearance, particularly in association with their perceived defect, and in the "thought content" i.e. patients' thoughts about the perceived defect in their physical appearance. This is most optimally captured in an in depth mental state examination with directed questions. Such an examination is part of the training to become Psychiatrist, and in the case of BDD, will require both knowledge and awareness of BDD, and a specific attention to thought processes. In addition, the degree of dysfunctional thought should be assessed since the amount of perseveration incapacitate the person, and the content may become delusional. Furthermore, it is important to assess the presence of suicidal and homicidal ideation, also part of the objectives for the psychiatric examination, since patients with BDD often are at an increased risk of taking their life, especially after what they perceive as "unsuccessful" surgery i.e. the problem continues despite trying to "correct it".

Questionnaires for the diagnostic work-up of BDD	Purpose	Patients	Time administration	Abbreviation
Body Dysmorphic Disorder Questionnaire	Screening	Adults Children	1 - 5 minutes	BDDQ
Body Dysmorphic Disorder Questionnaire-Dermatology Version	Screening	Adults Children	1 - 5 minutes	BDDQ-DV
Body Image Disturbance Questionnaire	Screening	Adults Children	5 minutes	BIDQ
Diagnostic Measures				
Structured Clinical Interview for DSM-5, with BDD module	Diagnosis	Adults Children	10 minutes	SCID
Body Dysmorphic Disorder Examination	Diagnosis and severity	Adults Children	30 minutes	BDDE
Differential Diagnosis measures	**Diagnosis**			
Yale-Brown Obsessive-Compulsive Scale	OCD	Adults	15 - 20 minutes	YBOCS
Hamilton Depression Rating Scale	MDD	Adults	20 - 30 minutes	HAM-D

Table 2: *Questionnaires used in diagnostic work-up, for screening, diagnosis and differential diagnosis of BDD.*

The use of diagnostic Questionnaires is recommended, both in the screening phase and for the in-depth diagnostic process (See table 2). The Body Dysmorphic Disorder Questionnaire (BDDQ) [7] is a useful screening tool which will help to guide to further diagnostic evaluation. The Body Dysmorphic Disorder Examination (BDDE) [6] is a 34-item specific questionnaire that measures symptoms of severely negative body image and that is useful in the diagnostic work-up of BDD (See table 2). The BDDE has been used in clinical trials but is also sometimes used as a screening tool, albeit it takes somewhat longer time for the patient to complete. It measures the patient's level of dissatisfaction with respect to the perceived defect. The Body Dysmorphic Disorder Symptom Scale (BDD-SS) [8] is yet another self-report tool to help differentiate, for each group of symptoms, the number of symptoms and their severity (See table 3).

Severity Measures for BDD	Purpose	Patients	Time Administration	Abbreviation
Body Dysmorphic Disorder Examination	Diagnosis and severity	Adults Children	30 minutes	BDDE
Yale-Brown Obsessive-Compulsive Scale Modified for BDD	Current BDD severity	Adult Children	10 - 15 minutes	BDD-YBOCS
Psychiatric Rating Scale for BDD	Global rating of BDD severity	Adults Children	5 minutes	BDD-PSR
BDD symptom scale	Current BDD Severity	Adults	10 - 15 minutes	BDD-SS

Table 3: *Questionnaires and scales used for measuring the severity of BDD.*

In specialist e.g. Dermatology settings, for example for patients' evaluation for the eligibility of undergoing cosmetic surgery, dedicated screening questionnaire may be used for identification of BDD related concerns. Examples of these screening tools are the Body Dysmorphic Disorder Questionnaire-Dermatology Version (BDDQ-DV) [9] and the Dysmorphic Concern Questionnaire (DCQ) [10] which both have been validated for the use in dermatologic surgery settings. If BDD is suspected, further consultation with a psychiatrist should be done.

Should the BDD diagnosis be supported, it is important to assess the degree of BDD. This may either be assessed as how much impairment BDD inflicts upon the person and is assessed as a combination of a) time spent and b) degree of distress induced by the BDD, and degree of control over the BDD thoughts. A questionnaire that helps assess this is the BDD-YBOCS. In addition, the degree of though disturbance, in terms of being able to control and correct the though content should be assessed. This may also be assessed together with level of insight which is characterized in three levels, good to fair insight, poor insight and absent insight including delusional beliefs [2].

There are no specific laboratory tests to help diagnose body dysmorphic disorder (BDD), and although advanced imaging method may be used to detect deviations from normal brain activation, a clinical diagnosis can be made without its use.

Diagnostic criteria for BDD

ICD-11 diagnostic criteria BDD

In ICD-11, BDD is mentioned for the first time as a separate diagnosis in the ICD system. It is covered in the section for "Obsessive-compulsive or related disorders" and coded as 6B21 Body dysmorphic disorder. Depending on degree of insight, it may be further subdivided

depending on level of insight into BDD with fair to good insight (6B21.0), BDD with poor to absent insight (6B21.1), or BDD unspecified (6B21.Z).

BDD in ICD-11 [11] is described as "Body Dysmorphic Disorder is characterized by persistent preoccupation with one or more perceived defects or flaws in appearance that are either unnoticeable or only slightly noticeable to others. Individuals experience excessive self-consciousness, often with ideas of reference (i.e., the conviction that people are taking notice, judging, or talking about the perceived defect or flaw). In response to their preoccupation, individuals engage in repetitive and excessive behaviors that include repeated examination of the appearance or severity of the perceived defect or flaw, excessive attempts to camouflage or alter the perceived defect, or marked avoidance of social situations or triggers that increase distress about the perceived defect or flaw. The symptoms are sufficiently severe to result in significant distress or significant impairment in personal, family, social, educational, occupational or other important areas of functioning".

DSM-V [2] diagnostic criteria BDD

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

Note: Degree of insight ranges from good (recognizes beliefs are not true) to absent/delusional (completely convinced that beliefs are true).

Differential diagnosis

There are several differential diagnoses that a Psychiatrist should be aware of and address in the investigation e.g. foremost normal appearance concerns (NAC). In differentiating NAC from BDD, the most important factors are the lack of preoccupation, repetitive behaviors and suffering in NAC, which clearly separates it from BDD. Another part of the spectrum of bodily concerns is the person suffering from an obvious bodily concern. The psychiatrist may ask the patient if he/she is hiding any perceived flaws and thereafter ask to uncover them. However, the psychiatrist should be careful not to ask should it concern body areas such as breasts, genitals or buttocks. The patient may be asked to tell whether other physicians have seen these flaws. It is important that proper respect is shown and empathy for the patients concerns.

Another potential differential diagnosis is Eating disorders (ED), where sometimes proper BDD concerns coexist, but should it be pure ED related concerns, it typically involves body areas that the patient thinks are too fat or that the body areas corrupt the patients ideal body shape. For ED, the phobia for eating, especially fattening food, and for gaining weight is of special concern and discriminates ED from BDD.

Sometimes, major depressive disorder (MDD) coexist with BDD. For a diagnosis of MDD, the symptoms and signs need to fulfil the diagnostic criteria for depression [2]. With regards to MDD diagnosis, is important to try to deduce whether the two disorders have been present independent of each other. Moreover, in some patients, the pre-occupation and repetitive behaviors are better explained by a phobia for dirt, or an exaggerated control, symptoms not characteristic of BDD, but may co-exist for example with MDD.

There are repetitive behaviors that involve removing hair, such as in trichotillomania, or picking skin, such as in Excoriation or "skin-picking" disorder. In these cases, there is no stated concern to improve a perceived defect. Furthermore, in some cases, the BDD symptoms may be delusional, and should there also be negative and psychotic symptoms present, the disorder is better defined as schizophrenia.

Another form of dysmorphia may appear in the context of a gender identification, such as in gender dysphoria. Here, the body image related concerns are related to gender characteristics. Moreover, if the distress is related to a specific body part e.g. an extremity, which is perceived as mismatched, and there is a wish to get rid of this limb as a whole, the symptoms may be explained as Body integrity identity disorder (BIID) [12-14] also called apotemnophilia.

Conclusion

A proper diagnosis is always essential before psychiatric treatment may be initiated, and in the case of BDD, a screening may be a first step, where after, should BDD concerns be verified, a more in-depth interview using e.g. BDDE including medical history and a psychiatric examination may be done to conclude if BDD is present. Excluding other disorders is also important as there are several differential diagnoses that may mimic BDD, and the treatments of these other disorders often differ in terms of medicines, doses, treatment duration and psychotherapeutic approach of focus.

Acknowledgements

I would like to acknowledge the support from the Mental Health Center Ballerup, Capitol Region Denmark.

Conflict of Interest

None.

Bibliography

1. Black Donald W, Jon E Grant and American Psychiatric Association. Dsm-5 Guidebook: The Essential Companion to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. First edition.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th edition. Washington, DC (2013).
3. Phillips KA., *et al*. "Clinical Features of Body Dysmorphic Disorder in Adolescents and Adults". *Psychiatry Research* 141.3 (2006): 305-314.
4. Varma A and R Rastogi. "Recognizing Body Dysmorphic Disorder (Dysmorphophobia)". *Journal of Cutaneous and Aesthetic Surgery* 8.3 (2015): 165-168.
5. Phillips KA., *et al*. "Rate of Body Dysmorphic Disorder in Dermatology Patients". *Journal of the American Academy of Dermatology* 42.3 (2000): 436-441.
6. Rosen JC., *et al*. "Assessment of Body Image in Eating Disorders with the Body Dysmorphic Disorder Examination". *Behaviour Research and Therapy* 33.1 (1995): 77-84.
7. Brohede S., *et al*. "Validation of the Body Dysmorphic Disorder Questionnaire in a Community Sample of Swedish Women". *Psychiatry Research* 210.2 (2013): 647-652.
8. Wilhelm S., *et al*. "The Body Dysmorphic Disorder Symptom Scale: Development and Preliminary Validation of a Self-Report Scale of Symptom Specific Dysfunction". *Body Image* 17 (2016): 82-87.
9. Dufresne RG., *et al*. "A Screening Questionnaire for Body Dysmorphic Disorder in a Cosmetic Dermatologic Surgery Practice". *Dermatologic Surgery* 27.5 (2001): 457-462.
10. Jorgensen L., *et al*. "A Clinical Validation of the Dysmorphic Concern Questionnaire". *Australian and New Zealand Journal of Psychiatry* 35.1 (2001): 124-128.
11. World Health Organization. "International Classification of Diseases 11th Revision (Icd-11)". Volume 11 (2018).
12. Bou Khalil R and S.Richa. "Apotemnophilia or Body Integrity Identity Disorder: A Case Report Review". *International Journal of Lower Extremity Wounds* 11.4 (2012): 313-319.
13. Blom RM., *et al*. "Body Integrity Identity Disorder". *PLoS One* 7.4 (2012): e34702.
14. Bayne T and N Levy. "Amputees by Choice: Body Integrity Identity Disorder and the Ethics of Amputation". *Journal of Applied Philosophy* 22.1 (2005): 75-86.

Volume 8 Issue 1 January 2019