PSYCHOLOGICAL ASPECTS OF BODY DISMORPHIC DISORDERS AND COSMETIC SURGERY – LITERATURE REVIEW

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Abstract: All around the world, there is a explosion of cosmetic surgery industry, growing daily. An emerging literature indicate that the cosmetic surgery industry should be more strict about the choice who they accept for treatment. Recent studies assesing the prevalence of body dismorphic disorder (BDD), and the multiple psychological aspects of this menthal health disorder by patients seeking help and hope in plastic/esthetic surgerys and cosmetic/MI (minimally invasive) interventions. This paper examines, as suggested by recent literature, several psychological aspects of menthal illness BDD. We discuss the implication of these finding and offer direction for future research. The *results* shows how many symptoms are includet in this disorder and that the individuals who have BDD are considered high risk patients.*Conclusion.*We conclude that, all the teams involved in the cosmetic surgery industry should be more strict about the choice who they accept for treatment.The awairness of plastic/estethic surgeons using screening tools, as standardised daily practice, to identify patients affected by BDD.The refferal after the recognition of BDD, to a psychiater or psychologist are important steps to an adequate treatment.For patient safety to etablish standards tools for minimize the likelyhood of intervention complication and to avoid psychological complication.

Keywords: body dismorphic disorder, dysmorphophobia, cosmetic surgery, esthetic surgery, body image, psychological aspects.

Introduction

Body dismorphic disorder (BDD) is a menthal disorder characterized by excessive repetitive preocupation with nonexistent or minor flow (Crerand at al., 2010) and very largely variety of symptoms (as living with the doubt if many parts of own body are not your own). In previous version of DSM-IV BDD was clasiffied as somatoform disorders. Recently according to DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, fifth edition), is now classified under new category „obsesive-compulsive and related disorders" (OCRDs) including eating disorders, obsessive-compulsive disorder, trichotillomania, hoarding disorder, somatic anxiety, major depressive disorder, anxiety disorders, psychotic disorders and excoriation disorder (Schieber et al.2013). New criteria was introduced recently in DSM-V, like presence of repetitive behaviors or mental acts (thoughts) helping for (Schieber et al, 2015). Diagnosis involving distress due to a perceived physical anomaly, such as a scar, the shape or size of a body part, or some other personal feature (Schieber et al., 2013). Comorbid depressive symptmoms are also common features of BDD (Phillips et al., 2007). While most individuals feel a degree of doubt or dissatisfaction with their appearance at times, (NHS, 2012) individuals with BDD will experience persistent and intrusive thoughts about the imagined flaw, in the absence of a real physical deformity or anomaly (APA, 1994). The person affected by BDD „at some point during the course of the disorder, the person has performed repetitive behaviours (e.g., mirror checking, excessive grooming, skin picking, reassurance seeking), or mental acts (e.g., comparing his or her appearance with the others) in response to the appearance concerns (Schieber et al.2013). There are also several non DSM-5 disorders and syndromes which are either rare, or culturally specific, such as gender dysmorphia, olfactory reference syndrome, body identity integrity disorder and dysmorphic concern (American Psychiatric Association, 2013).

There is difference between BDD and the distorted body image which is a defining feature of eating disorders, in that distorted body image involves a preoccupation with overall body mass, whereas BDD involves focusing on a specific part of the body or feature.

BDD can cause distress, excessive self-consciousness, and avoidance of social situations and intimacy, leading to depression, isolation, and potentially suicidality, functional impairement (Kenny, Knott, & Cox, 2012), feelings to beeing a burden and social withdrawal (Joiner et al., 2009).

According to DSM-5 data, the incidence of body dysmorphic disorder in the United States is 2.5% in males, and 2.2. % in females (American Psychiatric Association, 2013). There is a 1% prevalence in the population of the UK (NHS, 2012) and among german general population a prevalence rate of 1,7% - 1,8% (Rief et al 2006; Buhlmann et al 2010). The prevalence point in people affected by BDD, who are seeking cosmetic surgery is 15,6% (Buhlmann et al., 2010).

Kollei et al (2012) examined, body image dimensions, emotions and thoughts control strategies in four different groups. The subjects from the group who have been affected by BDD (N=31) scored higher on psychosocial and appearance manipulation dimensions of body image compared to healthy controls (N=33). The groups with anorexia nervosa (N=32) and bulimia nervosa (N=34), reported higher psychosocial impairement and a higher degree of negative emotions compared to the healthy controls (N=33). Different body image dimensions from body image as „negative impression on other people", „assessment by other people", „familial burden" and also a distorded own body image has been study and the results show that they are present in individuals with BDD (Kollei et al., 2012). The results reveal that BDD subjects expect to be judged negatively by other people due their appearance, often feel they experience a lack of understanding from other people when mentioning or talking about their appearance related worries (Kollei et al., 2012). Also individuals with BDD reported more psychosocial burden, appearance manipulation, more psychosocial impairment due to appearance, compulsive checking, camouflaging an mirror avoidance (Kollei et al., 2012). The study findings that negative body image triggers negative emotions wich may again elicit negative and dysfunctional beliefs about one's appearance (Kollei et al., 2012). The necessity of special interventions approaches focused on the whole negative emotions spectrum present in individum affected by BDD has been suggested (Kollei et al., 2012).

According to the cognitive behavioural models that consider certain personality traits to be risk factors for the development of BDD (Schieber et al 2013). In their research wil be examined perfectionism, aesthetic sensitivity and the behavioural inhibition system (BIS).There has been examined individuals with BDD (N=58) and population control trial (N=2071). The main concern of the BDD group in their study were focused on the skin, stomach and hair. BDD group show a mean value of M=8.95 for the Dysmorphic Concern Questionnaire. The results of the study suggest that individuals with elevated perfectionism levels are more adicted to develop a BDD, BIS-reactivity is with BDD associated and specially perfectionism and BIS- reactivity are more prononced in individuals with BDD compare to the population control sample (Schieber et al., 2013)

There are new characteristics of BDD, like presence of repetitive behaviors or mental acts (thoughts) introduced recently in DSM-5 (Schieber et al, 2015). Schieber et al. (2015) compare individuals diagnosed with BDD who present typical clinical carctheristics of BDD as disliked body parts (nose, skin, stomach, breast and hair) and individuals without BDD. Their study results, showed that subjects identified with BDD reported more unattractive body parts, presence of dysmorphic concern, higher degrees of depressive symptoms and self-harming/suicidal ideas than idividuals without BDD (Schieber et al, 2015). The new criteria for BDD in DSM-V may be useful to distinguish between various degrees of severity of BDD (Schieber et al., 2015).

Dey et al. 2015 found out in their study that depression and anxiety scores were elevated and highly correlated in patients with BDD compared with the non-BDD population. Moreover, the features of most common concern to their patients with BDD were the nose, skin, and hair and men and women are equal affected this is consistent with the literature finding that BDD affects men and women with equal frequency (Dey et al. 2015).

Weingarden et al. (2016) design a study to examine anxiety and shame as risk factors for depression, suicidality, functional impairement and days housbound symptoms present in body dismorphic disorder (BDD) as well in obsesive compulsive disorder (OCD). The result shows that anxiety and shame was significant across BDD group (BDD=114) and obsesiv compulsive disorder (OCD) group (n=114) compare to the healthy control sample (HC=133); also this research support the reclassification of BDD and OCD in DSM-V, into the same group Obsessive Compulsive Related Disorder (Weingarden et al., 2016) cause the depression, suicide risk and housbound values were similar in both groups, only the functional impairement was higher for subjects with OCD compare to subjects with BDD (Weingarden et al., 2016). Shame was a significant risk factor special for depression among subjects with BDD but not between subjects with OCD (Weingarden et al., 2016).

The study by Hartmann et al. (2015) examined three caractheristics as folow, body image, beliefs about attractiveness and its importance and coping strategies (avoidance, appearance, fixing or acceptance) for thoughst related to negative appearance. The participants was randomized in three groups, individuals with anorexia nervosa (AN) and body dismorphic disorder (BDD) healthy control group (HC), (Hartmann at al., 2015). The results found out that the two clinical groups showed higher score in BDD symptoms,eating disorders and depressive symptoms comparing to healthy control group (Hartmann et al, 2015). Regarding body image worse self-atitude, lower evaluation of their appearance and both clinical groups significant more avoidance and appearance fixing and less rational acceptance; body area satisfaction was lower and their

overweight preocupation higher; AN Group had a lower BMI compare to the other groups (Hartmann et al 2015).

Recent study from Weingarden et al. (2017), investigate 165 participants and analyze the effect of stressfull events wich contribute to development of BDD symptoms. Part of the participants declare a triggering event and the other bullying experience. 37,6% of participants atribute the responsability on a trigger event as the reason for the development of BDD. Social-cultural message of beauty is well known as event focused on physical appearance (Weingarden et al., 2017). Teasing and bullying incidents are the and the results from the study was the most commonly described events (Weingarten et al., 2017). Triggering events from participants were interpersonal and occured between grade and middle school (Gavrila-Ardelean, 2014). Most common reason now a days are experiences that instilled cultural or social messages about the importance of beauty (Weingarden et al., 2017).

The present paper is the beginning of a more alaborated study on the subject in Romania, where despite recent social and political changesit has been suggested that cultural norms and traditions have not changed at the same pace (Swami et al., 2018, apud Gavreliuc, 2012)

Method

The literature such was conducted using PubMed, Psychinfo, ScienceDirect, ReserchGate and Medline.Reviews and studies were identify using terms as: „body dismorphic disorder”,OR „dysmorphophobia”, OR„ body image” AND „psychological aspects”, OR „depression”, OR „eating disorder”, OR„anxiety”, OR „plastic surgery”, OR „esthetic intervention”, OR „cosmetic surgery”. The eligibility criteria for the studys to be incluted in the review was as folow:

-language of publication englisch or german.

-to investigate the psychological aspects of the BDD.

-to show the relationship between BDD and any risk factors wich increase the aggravation of the menthal health of the individuals with BDD.

Table 1. Summary of incluted studies

Author /Country	**N**		**Measures**
Clinical Variables			
Kollei et al. (2012)	31 (BDD)	1,2,3,4,5,6	a. Disordered body image
Germany	1st group 32 (AN)		b. Negative emotions
	2nd group 34 (BN)		c. Intrusive thoughts

	3th group 33 (HC)		
Schieber et al. (2013) Germany	58(BDD) 2071(control sample)	7,8,9,10	a. Perfectionism b. Aesthetic sensitivity c. BIS reactivity
Schieber et al. (2015) Germany	N= 2129	11,12,13,14	a. Preoccupation with flaw in appearance (n=340) b. Distress/impairment (n=151) c. Behavioral acts (n=142)
Weingarden et al. (2016) USA	N=361 1th group (BDD=114) 2nd group (OCD=114) 3th group (HC=133)	15,16,17,18, 19,20,21,22	a. Anxiety and Shame (relationship) - Depression - Suicidality - Functional impairment - Days housebound b. Level of anxiety and shame across groups
Hartmann et al.(2015) Germany	N=69 1th group AN=24 2nd group BDD=23 3th group HC=22	26,27,28 29,30,31 32,33,34	a. Body image concerns b. Beliefs about attractiveness c. Copy strategies (avoidance, appearance fixing or acceptance) for negative appearance related thoughts.

Dey et al. (2015) USA	N=234 1st group Cosmetic surgery (122) 2nd group Reconstructive surgery (112)	23,24,25	a. Depression b. Anxiety
Weingarden et al.2017 USA	N=165	35, 36, 37, 38, 39, 40, 41, 42	a. Triggering event b. Bullying experience

Abbreviations:

1. Structured diagnostic interview (Mini-DIPS)
2. SCID-I
3. Yale-Brown obsessive compulsive scale,modified for Body Dysmorphic Disorder (BDD-YBOCS)
4. Body Dismorphic Disorder Questionnaire BDDQ
5. Differential Emotions Scale (DES)
6. Control of Intrusive Thoughts Questionnaire (CITQ)
7. Eating Disorder Inventory:Subscale Perfectionism
8. Dysmorphic Concern Questionnaire
9. Highly Sensitive Person Scale:Subscale aesthetic sensitivity
10. Behavioural Inhibition System/Behavioural Activation System –Scale: Subscale BIS
11. BDD diagnosis
12. BDD perceived defects and flaws list
13. Dysmorphic Concern Questionnaire (DCQ)
14. Patient Health Questionnaire (PHQ-9)
15. Body Dismorphic Disorder Questionnaire (BDDQ)
16. Yale-Brown obsessive compulsive scale,modified for Body Dysmorphic Disorder (BDD-YBOCS)
17. Suicide Behaviors Questionnaire-Revised (SBQ-R)
18. Sheehan Disability Scale (SDS).
19. Self-Report BDD Y-BOCS
20. Obsessive Compulsive Inventory-Revised (OCI-R)
21. Depression Anxiety and Stress Scale-21 (DASS-21)
22. Test of Self-Conscious Affect-4 (TOSCA-4)
23. BDD SCID,BDD Structured Clinical Interview for DSM-IV
24. BDDQ, BodyDysmorphic Disorder Questionnaire
25. Beck Depression Inventory (BDI-II)20;andthe
26. State-Trait Anxiety Inventory for adults
27. EDE

28. SCID
29. BDD-YBOCS.
30. BAAS .The beliefs about Appearance Scale
31. BDI-II. Beck Bepression Inventory
32. BCSI.Body Image Coping Strategies Inventory
33. BIDQ.Body Image Disturbance Questionnaire
34. Multidimensional Body-Self Relations
35. MBSRQ-AS.Questionnaire Appearance Scales
36. BDDQ
37. BDD-YBOCS
38. BDD Trigger event
39. Quality of Life Enjoyment and Satisfaction Questionnaire-short form (Q-LES-Q-SF)
40. Depression Anxiety and Stress Scale-21
41. Sheehan Disability Scale (SDS)
42. Multidimensional Scale of Perceived Social Support (MSPSS).

Discussion

The aim of the paper is to investigate the multiple facets of the BDD. Our findings from all the previous literature and incluted studys show the complexity and severity grade of the symptoms characteristic for BDD. Moreover the higher rate of comorbody in BDD shown how serious this mental disorder.

The reclassification of BDD in a new category of Obsesive Compulsive Related Disorders (OCRDs) in DSM-V is justified.Underscore similarity between BDD and OCD has been research in a study by Weingarden et al 2016. Both disease involve obsesion (repetitive intrusive thoughts, urges, or images that cause distress) and compulsion (rituals completed to reduce distress from obsessions(Weingarden et al., 2016). Special individuals with BDD are focused on a imaginated or greatly exaggerated flaw in one's physical appearance, and specifically rituals to reducing distress related to this imaginet appearance flaw (American Psychiatric Association, 2013; Weingarden et al., 2016). BDD and OCD are associated with severe mental outcomes (Weingarden et al., 2016). Individuals with BDD judge their phisical aspect to be defective, they may extend the feeling to be broadly worthless and that determined to respond with shame (Weingarden et al., 2016). If this individuals are treated with intense distress and withdrawal,thats increased the risk to depression BDD symptoms predicted suicidal desire, and the mediator between BDD and suicidal desire is depression (Shaw et al., 2016). Individuals with comorbid BDD and OCD had an incresed risk for suicide attemps between 24% to 28% (Phillips 2007, Phillips et al, 2016,Weingarten 2016). Compare to other mental disorders BDD

has a higher comorbid rates, about 53% to 81% (Philips et al, 2006, Weingarden, 2016).

Recent study point out only few from the wider variety of the risk factors characteristic for BDD:negative emotions, anxiety, personality, body image dissatisfaction, shame, disturbed own body image, intrusive negative thoughts, obsesions, eating disorders, depression.

Anxiety and shame are strongly associated with poor life outcomes, and shame was specifically associated with suicide risk and functional impairment (Weingarden et al., 2016). Anxiety has been showen to be a risk factor for depression and depression mediat the relationship between BDD and suicidality (Shaw et al 2016). Personality traits can be risk factors for the development of BDD (Schieber et al 2013).

Increasingly, BDD patients seek out a cosmetic surgeon for a solution to „fix" their perceived, often delusional, defect/s in their physical appearance, and too often are profoundly dissatisfied with the outcomes of cosmetic surgery (Hodgkinson,2005). Plastic surgeons have recognized the difficulty of operating on patients with psychiatric disorders (Hodgkinson, 2005).Typically for patients with BDD is to try to request additional consultation, new procedures, well known, without any results. (Dey et al., 2015).

A range of screening instruments are available for professionals in mental health and cosmetic /estethic seetings to help aid succesful diagnosis (Dey et al., 2015). They recommend also, that cosmetic surgeons should screen their patients for BDD as part of standard practice. The BDDQ screening instrument can be complete during the wait time to requaired their appointmentthe takes evaluated time,only 1 to 2 minutes.Grading takes seconds, and a positive screen result should flag the patient for further evaluation (Dey et al., 2015). Many recomandation for how to manage patients with BDD and might diagnose in both fields surgical and cosmetic/estethic seetings (Crerand et al., 2006).

The gap in the research field is the motivation for a persons who have BDD to seek help in appropriate psychotherapie. Future studies are needed.

Conclusion

Body dismorphic disorder is a disease with a various symptomatic and subtle presentation of this affection. The clinical picture of BDD, grooming, camouflaging and mirror checking trying to correct, hide or distract from their perceived phisical defect, need from the teams a special awairenes, standardized screening tools for diagnostic to detect patients affected from BDD, befor any surgical/esthetic/Cosmetic/MI intervention and to recomand them to mental health care professional. Thus, in order to obtain valid and robust results,

studies should take into consideration to use a validated and culturally adapted instruments (Tudorel et al., 2018; Vintila et al., 2018).

This demand is a responsability not only to protect vulnerable, weak patients with BDD, it is to protect all team members involved in the procedures seetings too.

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