Review Article

"I don't look good" unexplored parameter of orthodontic treatment

ABSTRACT

Body image plays a significant role for patients seeking orthodontic treatment. But sometimes, some patients are preoccupied with a perceived defect in his or her physical features (body image) and are excessively concerned about it. They focus on physical defects that are unnoticeable by others and are suffering from a psychological (somatoform) disorder known as body dysmorphic disorder (BDD). Therefore, aware of the condition by orthodontists is essential as these are cases either with no deformity or is a most unsatisfied group. This article focuses on the identification of BDD, its etiology, symptoms, role in orthodontics and management.

Keywords: Body dysmorphic disorder, body image disorder, dysmorphophobia, orthodontist

INTRODUCTION

As orthodontic treatment is not only limited in aligning the teeth, it also provides facial esthetics and physical attractiveness hence, patients seeking orthodontic treatment expect an overall positive change in their appearance. Sometimes, patients come with either small or no deformity or request for retreatment for a well-finished case, these patients generally suffer from body dysmorphic disorder (BDD).

During the disorder, the individual often performs repetitive behaviors such as mirror checking, excessive grooming, skin picking, reassurance seeking, or mental acts in response to the appearance concerns, for example, comparing his or her appearance with that of others. Furthermore, the preoccupation also causes considerable distress in occupational, social, or other important areas of human function.

HISTORY

Morselli, in 1886, first documented BDD as dysmorphophobia.[1] BDD first appeared in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition (DSM-III) with the name of "dysmorphophobia" in 1987.[2]

Afterward, BDD was classified under somatoform disorders in DSM-IV. Currently, BDD is described in DSM-V under obsessive-compulsive and related disorders.[3]

ETIOLOGY

The age of onset of BDD is usually during adolescence,[4] but it can also begin in childhood. The exact cause differs from person to person. However, it is said to be a combination of psychological, biological, and environmental factors from their past or present.[5] Abuse and neglect can also be contributing factors.[6]

Bienvenu *et al*.[7] found that 8% of BDD patients had a family member with the same condition, while Phillips *et al*.[8] reported that 5.8% of first-degree relatives of patients with BDD also had the disorder. A study by Monzani *et al*.[9]

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which checked the heritability of dysmorphic concerns in a big sample of twins found that 44% of the variation was attributable to genetic factors, while individual environmental factors account for the remaining variance.

Phillips[10] suggested that BDD arises from the unconscious displacement of emotional or sexual conflict or feelings of guilt, inferiority, or poor self-image onto a body part.

PREVALENCE

The exact prevalence of BDD is unknown. Underdiagnosis and underrepresentation are likely as patients are often "secretive" about their symptoms.[11,12]

According to national population-based surveys [Table 1]:

SEX PREDILECTION

BDD occurs in both the sexes although reports of sex bias are variable.

Phillips[10] quotes a ratio of 1.3:1 female to male, but in later papers[18] the ratio is said to be approximately 1:1.

It seems that higher rates for females are more likely in samples which consist of self-referrals, a preoccupation with the overall body weight or shape, and milder forms of BDD.[11]

Table 1: National population based survey

Country	Prevalence (%)
United States[13]	2.4
Germany[14,15]	1.7-1.8
Australian[16]	2.3
Pakistan[17]	5.8

Crerand *et al*. assessed nonpsychiatric medical treatment and found that 71% of patients with BDD sought, while 64% received, nonpsychiatric treatment for their "flaw" or "defect." Among the 528 procedures delivered, the most frequently requested were dermatologic. Among the dental treatment sought, the frequently requested was tooth whitening (7.7%), and then orthodontic treatment (4.9%).[19] An additional study showed that those who demonstrated features of BDD were nine times more likely to consider tooth whitening, and six times more likely to consider orthodontic treatment in the near future, compared with those without BDD traits.[20] Hence, it is important for orthodontists to be vigilant in identifying the affected patient to avoid unnecessary treatment and distress to both patient and clinicians.

COMMON SYMPTOMS AND COMPULSIVE BEHAVIOR ASSOCIATED WITH BODY DYSMORPHIC DISORDER

Common Symptoms and compulsive Behavior associated with BDD is mentioned in Table 2.

MANAGEMENT

Studies have found that cognitive behavior therapy (CBT) has proven effective. Due to low levels of serotonin in the brain, another commonly applied treatment is selective serotonin reuptake inhibitor drugs.[22] In extreme cases, patients are directed for surgery as this is the only solution after years of other treatments and therapy. A combined approach of CBT and antidepressants is more effective than either alone.[23]

CONCLUSIONS

As orthodontists providing esthetic treatment to patients, they should be aware of BDD and its implications. It is a psychiatric disorder in which patient has a preoccupation with a "slight" or "perceived" defect in appearance.[24] These individuals

Table 2: Common symptoms and compulsive behavior associated with body dysmorphic disorder

Common symptoms of BDD	Common compulsive behaviors of BDD
Obsessive thoughts about perceived appearance defects	Compulsive mirror checking, glancing in reflective windows, doors, and other reflective surfaces. Alternatively, an inability to look at one's own photographs or reflection of oneself
Major depressive disorder symptoms	
Chronic low self-esteem	
Delusional beliefs and thoughts related	In addition, the removal of mirrors from the home
Family and social withdrawal, loneliness, and self-imposed social isolation. Social phobia[21]	Camouflage the imagined defect, for example, using cosmetic camouflage, maintaining specific body posture, wearing baggy clothing, or wearing hats
Suicidal ideation	Use of distraction techniques: to divert attention away from the person's perceived defect, for example, wearing excessive jewelry or extravagant clothing
Anxiety; possible panic attacks	
Strong feelings of shame	Excessive grooming behaviors: hair combing, skin picking, plucking eyebrows, shaving, etc.
Avoidant personality	
Inability to work or to focus at work due to preoccupation with appearance	Compulsive skin-touching, especially to measure the perceived defect
Problems initiating and maintaining relationships	
Alcohol and/or drug abuse	
Repetitive behavior such as regularly checking appearance in mirrors; constantly (and heavily) applying make-up	

BDD: Body dysmorphic disorder

sometimes seek inappropriate or unnecessary treatment from multiple health-care providers including orthodontist and are frequently dissatisfied with the results of treatment. This could potentially increase the medicolegal risk for the clinician.

If patients understand the limitations of their treatments, they will have more realistic expectations. It is not feasible to have psychological evaluations of all patients, but a few carefully selected questions during the first consultation could help to identify patients who might cause problems.[25]

BDD remains a challenge to diagnose, and further research is required to ascertain the proper management for affected orthodontic patients.

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Conflicts of interest
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