

Cosmetic Presentations and Challenges of Body Dysmorphic Disorder and Its Collaborative Management

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Abstract

In recent times, there has been a huge surge in the demand for cosmetology. However, not every patient is an ideal candidate for cosmetic interventions, and this needs to be carefully evaluated at outpatient visit. Various patients have underlying undetected psychiatric co-morbidities which prompt them to seek cosmetic care. One such condition is body dysmorphic disorder in which patients are present with marked anxiety which seems out of proportion to their apparently trivial complaints. These patients are also often unsatisfied with their cosmetic outcome, sometimes turning violent or pressing legal charges against their treatment providers. It is therefore of utmost importance for dermatologists and cosmetic surgeons to be aware of this condition and work in liaison with psychiatrists to provide holistic care to these patients. A literature search of PubMed-indexed journals using keywords “body dysmorphic disorder,” “BDD in dermatology,” and “BDD in cosmetic surgery” was carried out from the year 2000 up to date for this review.

Keywords: Body dysmorphic disorder, dermatological non-disease, dysmorphophobia

INTRODUCTION

Body dysmorphic disorder (BDD), also known as dysmorphophobia and dermatological non-disease, is a fairly common condition than is presumed, simply because it is often underdiagnosed and hence left untreated.^[1] Most patients present to a dermatologist or a cosmetic surgeon, concerned excessively with a seemingly trivial complaint, which could be markedly bothersome for them and associated with significant impairment in their daily activity. They spend hours mirror gazing, obsessing over their imagined/slight defect and often comparing themselves to others.^[2] Their preoccupation can begin to affect their personal, social, and professional life, with even suicide and self-harming ideations being reported in severe cases.^[3] These patients often have unrealistic expectations and are almost always unsatisfied with their physician consultations and cosmetic results. It is hence of utmost importance to recognize these patients at the earliest, so that they can be properly counselled and referred to a psychiatrist for further management.^[4]

This article gives a brief overview of BDD and how such patients can present to a cosmetology or dermatology outpatient. It focusses on how to recognize a patient with BDD, challenges faced by a dermatologist or a plastic surgeon, and highlights the importance of timely referral and collaboration with a psychiatrist and psychologist.

PREVALENCE

The point prevalence of BDD in general population ranges from 0.7% to 2–4%,^[5] whereas the prevalence was found to be much higher in cosmetology setting: around 6–15%.^[6-8] BDD is more common in patients with other psychiatric conditions with frequency of 8–37% in patients with obsessive compulsive disorder (OCD), 11–13% in patients with social phobia, 2–35% associated with substance abuse, 26% in patients with trichotillomania, and 39% in

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patients with anorexia nervosa.^[9] Female-to-male gender ratio ranges from 1:1 to 3:2.^[5]

DIAGNOSTIC CRITERIA

For an individual to be diagnosed with BDD, the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5)^[10] diagnostic criteria include:

- The person is preoccupied with one or more perceived defects or flaws in physical appearance that are not observable or appear very mild to others.
- At some point during the course of the disorder, the individual has performed repeated mirror checking, excessive grooming, skin picking, reassurance seeking, or comparing one's appearance with that of others.
- The preoccupation must cause significant distress or impairment in social, occupational, or other important areas of functioning.
- The appearance preoccupation cannot be explained by concerns with body fat or weight or, in other words, do not meet diagnostic criteria for an eating disorder.

CLINICAL FEATURES

BDD symptoms typically emerge during early adolescence. Although the exact cause for development of BDD has not yet been established, most patients give history of negative body-image-related experiences during childhood. Teasing by peers or family members or an excessive importance given to physical appearance during childhood or adolescence can lead to development of preoccupation about a physical defect, even when none exists.^[11,12] Sociocultural influences, for example, beauty ideals portrayed by media, also play a role in shaping one's psyche about body image. Unrealistic standards set by models or actors can lead to insecurities about one's own body.^[13]

The clinical features may be divided into four subdivisions:

- Appearance concerns,
- Compulsive behaviors,
- Impaired functioning,
- Self-harm and suicidal tendencies.^[7,14]

Clinically, both men and women present with almost similar symptoms, although some gender differences have been reported.^[15] Men were found to be more concerned about their body build. Muscle dysmorphia is a form of BDD that occurs exclusively in males, and it consists of preoccupation with the idea that one's body is too small or not muscular enough. BDD symptoms in men were also more specific to body parts, mainly with obsession regarding their genitalia and receding hairline, and they reported resorting to substance abuse. Women reported obsessive thoughts about their weight and eating habits, size of their breasts, buttocks, thighs, and toes and were concerned about excess body hair. Mirror gazing and

comparison with others were also found to be more common with women. The course is usually chronic with waxing and waning of symptoms.^[15,16]

Patients with BDD experience distress to a varying degree due to their perceived defect. While a few may continue to lead a near normal social or professional life, others may be affected severely. Their preoccupation can limit their concentration abilities and memory power and lead to loss of their job or dropout from school. They may avoid relationships and social gatherings and cause them to be home-bound.^[17] This in turn may lead to significant anxiety and depression, with suicide being reported in extreme cases.^[18,19] There are reports of patients who have attempted to perform self-surgery like cutting open their fat with a knife or stapling their skin for tightening in a bid to correct their apparent defect and in turn causing life-threatening complications.^[20]

Degree of insight about their illness can vary from good to completely absent.^[10] Most patients with BDD attempt to hide or camouflage their perceived defects using cosmetics or clothing, or attempt excessive grooming, and may seek care from multiple dermatologists or cosmetic surgeons.^[21]

CLINICAL PRESENTATION OF BDD TO A DERMATOLOGY/ COSMETOLOGY OUTPATIENT

A brief search of literature revealed BDD patients in dermatology, described in numerous ways: dermatological hypochondriasis, dysmorphic syndrome, dysmorphophobia, and dermatological non-disease.^[19,22-24] These patients may seek cosmetic surgery too, and are most often polysurgery patients who are insatiable or difficult to treat. No matter how good the cosmetic results attained may be, they are often unsatisfied.^[1]

Patients with BDD may present with a wide range of dermatological problems related to the skin or hair. Concerns about skin pigmentation, acne, scars, excess facial or body hair, facial asymmetry, thinning scalp hair, and signs of aging are some of the presenting complaints.^[25,26] They often report facing considerable distress due to their problems, meeting multiple doctors, and not finding a satisfactory solution. They may give history of compulsive behaviors like spending long hours in front of the mirror. Few attempt excessive grooming or use of camouflage techniques to hide their perceived defect like wearing a hat to hide balding or undergo tanning or skin-lightening procedures to change their skin tone.

While this may be the case for any patient, what sets BDD apart is that on examination their concern/apparent defect is often absent or negligible from a conversational distance or sometimes even on close inspection. For example, a person with BDD may seek enhancement of a body part like lips, breasts, buttocks which on inspection is of regular size. Another indicator is that these patients often seek reassurance from their physicians and their

peers about their appearance. The delusional variant of BDD lacks insight and hence are unconvinced if they are told that their apparent defect is not so.^[27]

There is a subset of delusional BDD patients who present with excessive and compulsive skin picking and hence do not fit the criteria of having no apparent defect on inspection. They may report picking their skin with their fingers, pins, needles, or, in extreme cases, even blades and knives.^[28]

CHALLENGES FACED BY A DERMATOLOGIST OR A COSMETIC SURGEON

Most often, the first point of care for patients with BDD is a dermatology or a cosmetology set-up. Many patients do not openly discuss the degree of distress that they face due to their perceived defect and thus it becomes quite challenging in identification and recognition of BDD. Few patients frankly explain their concerns and expect that a certain cosmetic procedure will correct their apparent defect and dramatically alter their life. They are described as “difficult” or “insatiable” patients, with unrealistic expectations.^[29] Such patients also have a tendency to consult multiple doctors, often hopping from one to the next until their appearance preoccupations are acknowledged and their demands are met. However, studies have shown that even after procuring medical or surgical appearance enhancing treatment, they had no improvement, or in some cases even experienced worsening of their symptoms.^[30] There are a few reports of BDD patients getting violent and even suing their doctors for not providing satisfactory results.^[31,32] All this underlies the importance of screening of patients for BDD or other psychiatric illness prior to undertaking any medical or surgical intervention.^[33]

SCREENING FOR BDD IN A DERMATOLOGY/COSMETOLOGY SET-UP

Dufresne *et al.*^[34] devised a simple modified method called the BDD questionnaire-dermatology version (BDDQ-DV) for screening of patients attending the dermatology outpatient department. It was found to have 94.7% specificity, 100% sensitivity, 70% positive predictive value, and 100% negative predictive value [Table 1]. In

order to meet the criteria for BDD, the patient’s physical defect should be slight or absent for which a defect severity scale was used [1—absent, 2—slight, 3—visible at conversational distance, 4—moderate, 5—severe]. This was followed up by a questionnaire by the dermatologist to confirm the diagnosis [Table 2].^[34]

Other screening tools that have been used in a dermatology setting include Dysmorphic Concern Questionnaire (DCQ)^[35] and Body Dysmorphic Symptom Scale (BDSS).^[36] A study done by Morselli *et al.*^[37] utilizes the E-pgm (pre-operative expectation questionnaire) for ethical selection of patients who will benefit from cosmetic surgery and the S-PGM (post-operative satisfaction questionnaire) for assessing the level of satisfaction after the surgery.

Another useful tool for pre-procedure screening is the STEP model, originally described by Elsaie.^[38] Although its application is not limited to screening of BDD, it is a practical way to assess a patient’s psychological fitness for a cosmetic intervention. “S” stands for stress, in which a physician tries to assess the stress levels of the patient based on his/her appearance and demeanor. “T” stands for target, i.e. what is the target body part for intervention and is their expectation of the results realistic. “E” is for envision, i.e. in what way does the patient feel that their life would improve after the intervention, and finally “P” stands for proactive.^[38]

MANAGEMENT

Management of a patient with BDD who presents to a dermatology or cosmetology outpatient can be quite challenging, especially when the typical tell-tale signs are not noticeable. The patients are almost always dissatisfied with their cosmetic results and it barely relieves their BDD symptoms. Even if it successfully addresses their problem, they may focus their attention on a new perceived defect, thereby perpetuating the cycle.^[34] Studies done previously to assess patient satisfaction with their appearance after an intervention using tools such as the Overall Facial Appearance Scale (FACE-Q) and Skin Rejuvenation Outcome Evaluation (SROE) have confirmed this finding.^[39,40] Another study done by Wang *et al.*^[41] revealed that there was no improvement in the quality of life (QOL) and self-esteem in patients

Table 1: BDDQ-DV^[34]

Sl no.	Questions	Yes	No
1.	Are you very concerned about the appearance of some body part?		
2.	If yes, do these concerns preoccupy and affect your daily life?		
3.	What are these concerns?	—	—
4.	How does it affect your daily life?	—	—
5.	On a scale of 1–5 (with 1 being least) how much mental distress does it cause?	—	—
6.	On a scale of 1–5 (with 1 being least) how much does it limit your social life and occupation?	—	—
7.	Does it significantly affect your school work/job?		
8.	Do you avoid certain activities due to your defect?		

of BDD after undergoing cosmetic treatments. For this reason, most dermatologists and cosmetic surgeons do not prefer to perform any intervention on such patients.^[42] Hence, the popular consensus is that BDD should be considered as a contraindication for cosmetic treatment and promptly referred for psychiatric management.^[43-45] Patients with delusional variant of BDD lack insight and hence require considerable motivation to seek psychiatric care. Few conditions like skin picking disorder will require a combined treatment approach from a dermatologist as well as a psychiatrist; hence, collaboration between the two specialties is vital for providing wholesome care.^[46]

COUNSELING THE PATIENT

Key strategy while providing counseling to a patient with BDD is to have empathy. It is not advisable to dismiss the patient’s appearance concerns as trivial, as they already face substantial distress regarding the same. However, it is also not advisable to agree that they have any defect. Instead, the focus should be on why and how their concerns affect them and which treatment options could be offered to improve their QOL. It is also essential to educate patients about the duration of treatment, dose, and possible side effects of the drugs given^[47] [Table 3].

Selective serotonin reuptake inhibitors (SSRIs) and cognitive behavioral therapy (CBT), although not US-FDA-approved for BDD, are used as first-line strategy in the management of this condition.

SELECTIVE SEROTONIN REUPTAKE INHIBITORS

SSRIs are second-generation anti-depressant drugs.^[48] Fluvoxamine, fluoxetine, citalopram, and escitalopram are the most common drugs from this class used for BDD. Previous studies have shown patients on treatment to have

a significant improvement in their obsessive thoughts about their perceived defect, reduced anxiety and depression, and improvement in their QOL.^[48-52] Response to therapy on an average takes at least 12 weeks, and in general higher doses of SSRI are required for BDD. It is recommended to start with one drug and gradually increase the dose to the maximum tolerable amount. If ineffective, augmentation therapy can be tried for 12 weeks before switching to a different drug. SSRIs may need to be continued for months or even years and gradually tapered to prevent the risk of relapse. Those with severe BDD associated with suicidal ideation may need to be put on SSRI for lifetime.^[53] Side effects of SSRIs are dose-dependent and relatively less compared with other anti-depressants. Nausea and GI disturbance are the most common adverse effects. Anxiety, agitation, and insomnia are most often reported with fluoxetine. Most disabling long-term side effects are sleep disturbance, weight gain, and sexual dysfunction.^[48]

COGNITIVE BEHAVIORAL THERAPY

Cognitive behavioral model for BDD states that these patients base their self-worth entirely on minor flaws in their appearance and resort to repetitive behaviors like mirror checking and avoiding social situations as a coping mechanism.^[54] CBT aims to address these distressing thoughts and behaviors through psychoeducation, cognitive restructuring to address the distorted thought pattern of these patients. CBT sessions, each lasting 1–1.5 h, are given one to five times a week for several weeks. It may be administered individually or as group CBT.^[55]

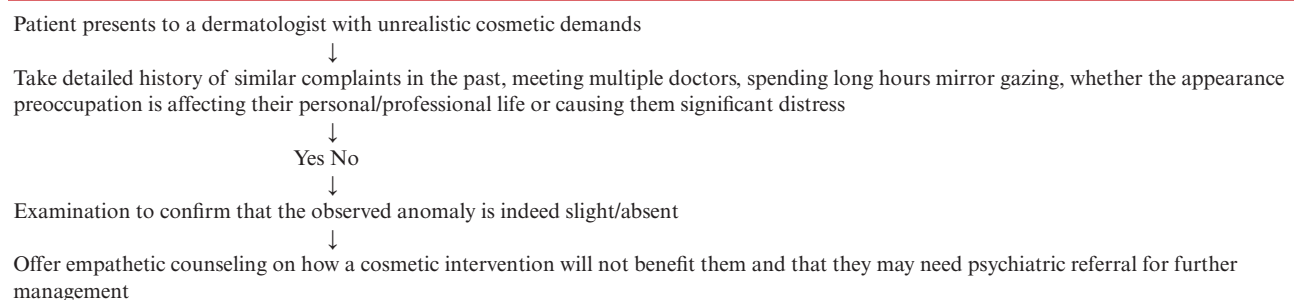
OTHER TREATMENTS

Venlafaxine, a serotonin-norepinephrine reuptake inhibitor, was found to be effective in a small open label

Table 2: Clinician’s questionnaire for confirmation of BDD^[34]

Questions	Criteria	Yes	No
Have you ever been too concerned about your appearance? Explain. Has anyone told you that you are more concerned about it than you should be?	Preoccupation with an imagined/very slight anomaly		
How has it affected your personal life and your family?	Preoccupation causes significant distress OR impairs social life/occupation		
Has it affected you considerably in this past month?	—		

Table 3: Counseling and referral steps to be taken by a dermatologist dealing with a patient of BDD



study.^[56] Another clinical trial showed the efficacy of an anti-epileptic drug, levetiracetam, in treating the symptoms of BDD including insight and psychosocial functioning.^[57] However, larger studies are required to confirm these findings.

Electroconvulsive therapy (ECT) was found to be effective in only two out of 25 cases in a previous study and is to be considered only in patients with severe depression having suicidal ideation.^[22]

Surgical interventions such as modified leucotomy, capsulotomy, subcaudate trachotomy, and bilateral anterior cingulotomy are the last resort for cases of severe BDD not responding to any medications.^[47]

CONCLUSION

BDD is an unrecognized and underdiagnosed condition, and majority of these patients first present to a cosmetic outpatient. They are often unsatisfied with their cosmetic treatments and at times may resort to legal action or violence against the treatment provider for not satisfying their demands. This stresses the need for dermatologists as well as cosmetic surgeons to be well versed and equipped with screening techniques for BDD in order to detect them at the earliest and refer them to a psychiatrist colleague. A collaboration between the two specialties is hence of utmost importance, for holistic management of patients with BDD.

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There are no conflicts of interest.

Author contributions

All authors contributed equally in the production of this manuscript.

REFERENCES

- Phillips KA, Dufresne RG. Body dysmorphic disorder. A guide for dermatologists and cosmetic surgeons. *Am J Clin Dermatol* 2000;1:235-43.
- Mufaddel A, Osman OT, Almugaddam F, Jafferany M. A review of body dysmorphic disorder and its presentation in different clinical settings. *Prim Care Companion CNS Disord* 2013;15:PCC.12r01464.
- Phillips KA, McElroy SL, Keck PE Jr, Pope HG Jr, Hudson JI. Body dysmorphic disorder: 30 cases of imagined ugliness. *Am J Psychiatry* 1993;150:302-8.
- Phillips KA. Body dysmorphic disorder: Diagnosis and treatment of imagined ugliness. *J Clin Psychiatry* 1996;57(Suppl 8):61-4; discussion 65.
- Phillips KA, Menard W, Fay C. Gender similarities and differences in 200 individuals with body dysmorphic disorder. *Compr Psychiatry* 2006;47:77-87.
- Sarwer DB, Wadden TA, Pertschuk MJ, Whitaker LA. Body image dissatisfaction and body dysmorphic disorder in 100 cosmetic surgery patients. *Plast Reconstr Surg* 1998;101:1644-9.
- Sarwer DB, Spitzer JC. Body image dysmorphic disorder in persons who undergo aesthetic medical treatments. *Aesthet Surg J* 2012;32:999-1009.
- Ishigooka J, Iwao M, Suzuki M, Fukuyama Y, Murasaki M, Miura S. Demographic features of patients seeking cosmetic surgery. *Psychiatry Clin Neurosci* 1998;52:283-7.
- Koran LM, Hanna GL, Hollander E, Nestadt G, Simpson HB. Practice guideline for the treatment of patients with obsessive-compulsive disorder. *Am J Psychiatr* 2007;164: 5-53.
- Schieber K, Kollei I, de Zwaan M, Martin A. Classification of body dysmorphic disorder—what is the advantage of the new DSM-5 criteria? *J Psychosom Res* 2015;78:223-7.
- Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment. Washington, DC, USA: American Psychological Association; 2001. xii, 403p (Thompson JK, Smolak L, editors. *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment*).
- Sarwer DB, Grossbart TA, Didie ER. Beauty and society. *Semin Cutan Med Surg* 2003;22:79-92.
- Thompson JK, Heinberg LJ, Altabe M, Tantleff-Dunn S. *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC, USA: American Psychological Association; 1999. xii, 396p. (*Exacting beauty: Theory, assessment, and treatment of body image disturbance*).
- Sarwer DB, Crerand CE. Body dysmorphic disorder and appearance enhancing medical treatments. *Body Image* 2008;5:50-8.
- Taqi AM, Shaikh M, Gowani SA, Shahid F, Khan A, Tayyeb SM, *et al.* Body dysmorphic disorder: Gender differences and prevalence in a Pakistani medical student population. *BMC Psychiatry* 2008;8:20.
- Perugi G, Akiskal HS, Giannotti D, Frare F, Di Vaio S, Cassano GB. Gender-related differences in body dysmorphic disorder (dysmorphophobia). *J Nerv Ment Dis* 1997;185:578-82.
- Quality of life for patients with body dysmorphic disorder—PubMed [Internet]. [cited July 30, 2020]. Available from: <https://pubmed.ncbi.nlm.nih.gov/10749282/>. [Last accessed on 2020 May 05].
- Cotterill JA, Cunliffe WJ. Suicide in dermatological patients. *Br J Dermatol* 1997;137:246-50.
- Cotterill JA. Dermatological non-disease: A common and potentially fatal disturbance of cutaneous body image. *Br J Dermatol* 1981;104:611-9.
- Outcome of cosmetic surgery and “DIY” surgery in patients with body dysmorphic disorder | *Psychiatric Bulletin* | Cambridge Core [Internet]. [cited August 1, 2020]. Available from: <https://www.cambridge.org/core/journals/psychiatric-bulletin/article/outcome-of-cosmetic-surgery-and-diy-surgery-in-patients-with-body-dysmorphic-disorder/75A00DFB8CA8A0312BD0BD5E87DBA53C>. [Last accessed on 2020 May 05].
- Phillips KA. Body dysmorphic disorder and depression: Theoretical considerations and treatment strategies. *Psychiatr Q* 1999;70:313-31.
- Koblenzer CS. The broken mirror: Dysmorphic syndrome in the dermatologist's practice. *Fitz J Clin Dermatol* 1994;March/April:14-9.
- Bishop ER Jr. Monosymptomatic hypochondriacal syndromes in dermatology. *J Am Acad Dermatol* 1983;9:152-8.
- Koblenzer CS. The dysmorphic syndrome. *Arch Dermatol* 1985;121:780-4.
- Dogruk Kacar S, Ozuguz P, Bagcioglu E, Coskun KS, Uzel Tas H, Polat S, *et al.* The frequency of body dysmorphic disorder in dermatology and cosmetic dermatology clinics: A study from Turkey. *Clin Exp Dermatol* 2014;39:433-8.
- Thanveer F, Khunger N. Screening for body dysmorphic disorder in a dermatology outpatient setting at a tertiary care centre. *J Cutan Aesthet Surg* 2016;9:188-91.
- Phillips KA, McElroy SL, Keck PE Jr, Hudson JI, Pope HG Jr. A comparison of delusional and nondelusional body dysmorphic disorder in 100 cases. *Psychopharmacol Bull* 1994;30:179-86.
- O'Sullivan RL, Phillips KA, Keuthen NJ, Wilhelm S. Near-fatal skin picking from delusional body dysmorphic disorder responsive to fluvoxamine. *Psychosomatics* 1999;40:79-81.
- Knorr NJ, Edgerton MT, Hoopes JE. The “insatiable” cosmetic surgery patient. *Plast Reconstr Surg* 1967;40:285-9.

30. Phillips KA, Grant J, Siniscalchi J, Albertini RS. Surgical and nonpsychiatric medical treatment of patients with body dysmorphic disorder. *Psychosomatics* 2001;42:504-10.
31. Hayashi K, Miyachi H, Nakakita N, Akimoto M, Aoyagi K, Miyaoka H, *et al.* Importance of a psychiatric approach in cosmetic surgery. *Aesthet Surg J* 2007;27:396-401.
32. Awareness and Identification of Body Dysmorphic Disorder by Aesthetic Surgeons: Results of a Survey of American Society for Aesthetic Plastic Surgery Members | *Aesthetic Surgery Journal* | Oxford Academic [Internet]. [cited August 1, 2020]. Available from: <https://academic.oup.com/asj/article/22/6/531/204131>. [Last accessed on 2020 May 10].
33. Sweis IE, Spitz J, Barry DR Jr, Cohen M. A review of body dysmorphic disorder in aesthetic surgery patients and the legal implications. *Aesthetic Plast Surg* 2017;41:949-54.
34. Dufresne RG, Phillips KA, Vittorio CC, Wilkel CS. A screening questionnaire for body dysmorphic disorder in a cosmetic dermatologic surgery practice. *Dermatol Surg* 2001;27:457-62.
35. Stangier U, Janich C, Adam-Schwebe S, Berger P, Wolter M. Screening for body dysmorphic disorder in dermatological outpatients. *Dermatol Psychosom* 2003;4:66-71.
36. Kaymak Y, Taner E, Simşek I. Body dysmorphic disorder in university students with skin diseases compared with healthy controls. *Acta Derm Venereol* 2009;89:281-4.
37. Morselli PG, Micai A, Boriani F. Eumorphic plastic surgery: Expectation versus satisfaction in body dysmorphic disorder. *Aesthetic Plast Surg* 2016;40:592-601.
38. Elsaie ML. Psychological approach in cosmetic dermatology for optimum patient satisfaction. *Indian J Dermatol* 2010;55:127-9.
39. Joseph AW, Ishii L, Joseph SS, Smith JI, Su P, Bater K, *et al.* Prevalence of body dysmorphic disorder and surgeon diagnostic accuracy in facial plastic and oculoplastic surgery clinics. *JAMA Facial Plast Surg* 2017;19:269-74.
40. Pusic AL, Klassen AF, Scott AM, Cano SJ. Development and psychometric evaluation of the FACE-Q satisfaction with appearance scale: A new patient-reported outcome instrument for facial aesthetics patients. *Clin Plast Surg* 2013;40:249-60.
41. Wang Q, Cao C, Guo R, Li X, Lu L, Wang W, *et al.* Avoiding psychological pitfalls in aesthetic medical procedures. *Aesthetic Plast Surg* 2016;40:954-61.
42. Gunstad J, Phillips KA. Axis I comorbidity in body dysmorphic disorder. *Compr Psychiatry* 2003;44:270-6.
43. Crerand CE, Phillips KA, Menard W, Fay C. Nonpsychiatric medical treatment of body dysmorphic disorder. *Psychosomatics* 2005;46:549-55.
44. Cotterill JA. Body dysmorphic disorder. *Dermatol Clin* 1996;14:457-63.
45. Sarwer DB. Awareness and identification of body dysmorphic disorder by aesthetic surgeons: Results of a survey of American society for Aesthetic Plastic Surgery Members. *Aesthet Surg J* 2002;22:531-5.
46. Herbst I, Jemec GBE. Body dysmorphic disorder in dermatology: A systematic review. *Psychiatr Q* 2020;91:1003-10.
47. Phillips KA. Pharmacotherapy for body dysmorphic disorder. *Psychiatr Ann* 2010;40:325-32.
48. Ferguson JM. SSRI antidepressant medications: Adverse effects and tolerability. *Prim Care Companion J Clin Psychiatry* 2001;3:22-7.
49. Phillips KA, Najjar F. An open-label study of citalopram in body dysmorphic disorder. *J Clin Psychiatry* 2003;64:715-20.
50. Phillips KA, Hollander E. Treating body dysmorphic disorder with medication: Evidence, misconceptions, and a suggested approach. *Body Image* 2008;5:13-27.
51. Phillips KA, Rasmussen SA. Change in psychosocial functioning and quality of life of patients with body dysmorphic disorder treated with fluoxetine: A placebo-controlled study. *Psychosomatics* 2004;45:438-44.
52. Clomipramine vs. Desipramine Crossover Trial in Body Dysmorphic Disorder: Selective Efficacy of a Serotonin Reuptake Inhibitor in Imagined Ugliness | *Psychiatry* | JAMA Psychiatry | JAMA Network [Internet]. [cited August 5, 2020]. Available from: <https://jamanetwork.com/journals/jamapsychiatry/article-abstract/205488>. [Last accessed on 2020 May 18].
53. Phillips KA, Albertini RS, Siniscalchi JM, Khan A, Robinson M. Effectiveness of pharmacotherapy for body dysmorphic disorder: A chart-review study. *J Clin Psychiatry* 2001;62:721-7.
54. Veale D. Advances in a cognitive behavioural model of body dysmorphic disorder. *Body Image* 2004;1:113-25.
55. Prazeres AM, Nascimento AL, Fontenelle LF. Cognitive-behavioral therapy for body dysmorphic disorder: A review of its efficacy. *Neuropsychiatr Dis Treat* 2013;9:307-16.
56. Allen A, Hadley SJ, Kaplan A, Simeon D, Friedberg J, Priday L, *et al.* An open-label trial of venlafaxine in body dysmorphic disorder. *CNS Spectr* 2008;13:138-44.
57. Phillips KA, Menard W. A prospective pilot study of levetiracetam for body dysmorphic disorder. *CNS Spectr* 2009;14:252-60.