doi:10.36849/JDD.8156

 ORIGINAL ARTICLE

Appearance Dissatisfaction and Body Dysmorphic Disorder in the Dermatology Patient

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ABSTRACT

Dermatologists routinely see patients with inflammatory skin conditions and aesthetic concerns that involve substantial psychological comorbidity. However, most dermatologists do not receive formal training in this area, and many are unsure how to best help treat certain patients holistically. Body dysmorphic disorder (BDD) is a common and distressing psychiatric condition that disproportionately impacts dermatology patients, including patients living with chronic inflammatory skin conditions such as acne and atopic dermatitis. BDD is characterized by preoccupation with nonexistent or minimally noticeable flaws in physical appearance that cause clinically significant distress or impairment in functioning. Adolescent populations may be particularly vulnerable to clinically significant body image dissatisfaction, including BDD, due to the high prevalence of acne and the pervasive role of social media platforms. The rise of social media may exacerbate body image issues through repetitive exposure to idealized and often unrealistic beauty standards. Though screening questionnaires can assist dermatologists in recognizing BDD, dermatologists must collaborate with mental health providers to provide comprehensive care to vulnerable patients, including adolescents.

J Drugs Dermatol. 2024;23(7):545-550. doi:10.36849/JDD.8156

INTRODUCTION

A recent survey of 500 United States (US) dermatologists inquired about the current state of psychological wellness evaluation of dermatology patients, as well as the extent of mental health training in dermatology.[1] While 75% of the dermatologists reported routinely asking their patients about their psychological health (including mood, quality of life, and face/body image), 60% of respondents reported having no formal training about mental health in the dermatology patient. Of the respondents who reported having received some form of psychodermatologic training, 65% had obtained this training outside of residency and fellowship (ie, conferences, journal articles, continuing medical education). Given that dermatologists see patients daily who present with inflammatory conditions such as acne and eczema and aesthetic concerns with substantial psychological comorbidity, 92% of surveyed respondents agreed with the statement that dermatology education should provide some training on the psychological health of the dermatology patient.

Body dysmorphic disorder (BDD) is an often debilitating psychiatric disorder categorized within the spectrum of obsessive-compulsive and related disorders.[2] BDD is particularly prevalent among dermatology patients because the skin and hair (for example, minor or nonexistent acne, scarring, telangiectasias, perceived thinning) are the two most common body areas of concern in both females and males with BDD.[3] In addition, the skin, being our outward projection to the world, plays a significant role in shaping body and face image perception.[4,5] The overall prevalence of BDD in the US is 2.4%,

but among dermatology patients it ranges from 9 to 15%.[4,5,6,7] The prevalence of BDD in the adolescent population has been estimated to be 2.2%.[8]

BDD is characterized by excessive preoccupation with nonexistent or minimally noticeable flaws in one's physical appearance. To be diagnosed as BDD, the appearance preoccupations must cause clinically significant distress or clinically significant impairment in functioning; this is important for differentiating BDD from nonpathological (non-BDD) appearance concerns. The appearance preoccupations are coupled with and are the trigger for repetitive behaviors or repetitive mental acts, which often also cause significant distress or impairment in numerous areas of individual functioning.[2,4,8] These perceived appearance flaws are not limited to the skin and hair; they can involve any aspect of an individual's appearance, including weight, hair, stomach, chest, buttocks, body build, and/or genitalia.[4,5,8,9] Excessive mirror checking, reassurance seeking, excessive grooming, skin picking, and cosmetic treatment seeking are all examples of the repetitive behaviors that are commonly observed in individuals with BDD.[2] It is common for individuals with BDD to isolate themselves and limit their social interactions or occupational responsibilities, thus hindering their ability to lead a normal life.[4,9] In severe cases, patients may be completely socially isolated, housebound, and unable to attend school or work. Scores on standardized measures indicate marked impairment in psychosocial functioning and quality of life.[10] BDD is often associated with high comorbidity rates with other mental disorders – including major depressive disorder, substance use disorders, and social anxiety disorder – and low quality of life.[4,5,11,12] Individuals with BDD are also at very high risk for suicidal ideation and suicide attempts.[4,5,12,13] Rates of suicidal ideation and suicidal behavior appear to be higher than in many other psychiatric disorders that are characterized by high rates of suicidal ideation and attempts.[14,15]

Two-thirds of individuals with BDD experience the onset of the disorder before the age of 18, with the most common age of onset being 12 or 13 years of age.[16] The important role of body image in the psychological and interpersonal development of children and adolescents, may contribute to the onset of BDD in this age group.[16]

Individuals with BDD often have poor or absent disorder-related insight, believing that what is wrong is a true physical flaw rather than a psychological disorder. As such, dermatologic and surgical treatments are frequently sought by individuals with BDD as nonpsychiatric options; about three-quarters of those with BDD seek cosmetic treatment, and about two-thirds receive such treatment, with dermatologic treatment the type of cosmetic treatment that is most often sought and received.[17,18] These treatments may include a range of aesthetic procedures for the face, body, and hair; there is consensus among BDD experts that such treatments are not recommended.[19] Nonetheless, these patients may put pressure on physicians to perform ill-advised and unjustifiable treatments, making them more challenging to treat in dermatologic practice and leading to lower satisfaction with treatment outcomes.[19] Even when treated, individuals with BDD tend to be dissatisfied with the outcomes of cosmetic treatment, and their dissatisfaction may lead to a fixation on a new perceived defect.[17,18] They may subsequently seek out multiple further procedures which are nearly always met with dissatisfaction.[19] Some dissatisfied patients with BDD who receive surgical and dermatologic treatment threaten the provider legally or physically, despite an objectively acceptable cosmetic outcome.[20,21] Due to the high frequency of encountering individuals with BDD compared to other medical specialties, dermatologists can play a crucial role in detecting and facilitating appropriate treatment for patients with BDD.

Pediatric dermatologists may be unaware of how common BDD is in their patient population. Recent research reveals that patients with dermatologic conditions such as acne and atopic dermatitis, which are highly prevalent during adolescence, are associated with a six-fold increase in developing prominent BDD symptoms.[5,22] In addition, people living with BDD have significantly increased risks for other psychiatric problems, including depression and suicidal ideation and behavior, making it essential for dermatologists to be able to recognize patients with BDD in practice.[4,5,12,23] Working in collaboration with patients, their families, and mental health professionals, dermatologists can effectively address the challenges posed by BDD, shedding light on this challenging disorder.[24]

The Impact of Social Media

With the growing use of technology and social media, especially among younger people, it has never been more important for dermatologists to be aware or educated on BDD. The importance of awareness and education of BDD in dermatology patients, and pediatric dermatology in particular, has never been greater. Smartphones and social media are increasingly becoming more widely utilized and have been found to be integral to adolescent communication, entertainment, and obtaining and sharing information regarding skin conditions.[25,26,27]

A 2022 Pew Research Center survey of American teenagers ages 13 to 17 reported that since 2014-2015 there has been a 22% rise, from 73% to 95%, in the proportion of adolescents who have access to smartphones.[28] Ninety-seven percent of teens reported daily use of the internet, with the most popular social media sites being YouTube, TikTok, Instagram, and Snapchat.[28] Though these sites can offer adolescents a space to seek emotional support, find community, share experiences, and obtain information, 95% of surveyed dermatologists reported that social media was a problem for their adolescent and young adult patients.[28] Thus,

it is important to balance the positive benefits of social media use with its potential negative impact.[25,27]

Social media use has been shown to negatively impact body image, especially when used to view appearance ideals; this practice is highly common in the current social media landscape and may be particularly problematic amongst adolescents.[29] Body image and social status (eg, inclusion or exclusion from peer groups) are of critical importance during adolescence, and differences, including visible differences in skin such as acne and atopic dermatitis, can poorly impact self-image and others' perceptions.[16,25] In our experience, constant comparison to filtered images and unattainable beauty standards can exacerbate feelings of depression and isolation among dermatology patients and other adolescents.[25] Moreover, frequent use of social media can impact how our brains perceive what is attractive. The "mere-repeated exposure effect" is a psychological phenomenon whereby individuals tend to form a liking for objects or concepts that have become familiar to them through repeated exposure.[30] Social media platforms like Instagram and TikTok frequently showcase individuals with exaggerated and anatomically unrealistic facial and body features. These platforms establish an environment for repeated, rapid-fire, brief encounters with images that may cause individuals to view these unnatural traits as more attractive.[30] Alternatively, adolescents may be repeatedly exposed to certain unrealistic, filtered, or edited body types or facial features that become unrealistic aesthetic ideals that they strive to achieve. In our experience, adolescents, amid their formative emotional and social development, are particularly susceptible to the impact of such imagery. This can potentially contribute to a skewed self-image, foster unrealistic appearance expectations, and lead to heightened insecurities about their appearances. Taken together, the frequent, ubiquitous use of social media and the unique susceptibility of adolescents to internalize repeated imagery underscores the importance of identifying patients who may be at risk and addressing these concerns in pediatric and adolescent dermatology settings.

Validated Screening Scales for BDD in Dermatology

The self-report Body Dysmorphic Disorder Questionnaire - Dermatology Version (BDDQ-DV) has been validated as a screening tool for BDD in adult dermatology settings (Box 1).[31] When the BDDQ-DV was evaluated in a cosmetic dermatologic surgery practice in adults, the questionnaire was found to have 100% sensitivity and 93% specificity for the diagnosis of BDD.[31]

Box 1: Questions Asked in the BDDQ-DV[31,32]

BDDQ-Dermatology Version

This questionnaire asks about concerns with physical appearance. Please read each question carefully and circle the answer that is true for you. Also please write out your answers where asked.

1. Are you very concerned about the appearance of some part of your body, which you consider especially unattractive?

   Yes No

   If no, thank you for your time and attention. You are finished with this questionnaire.

2. *If yes*, do these concerns preoccupy you? That is, you think about them a lot and wish you could think about them less?

   Yes No

   What are these concerns? What specifically bothers you about the appearance of these body parts?

3. What effect has your preoccupation with your appearance had on your life? (please describe):

3a. Has your appearance defect (flaw) often caused you a lot of distress, torment or emotional pain? How much? (circle best answer)

1	2	3	4	5
No distress	Mild, and not too disturbing distress	Moderate and disturbing but still manageable	Severe and very disturbing distress	Extreme and disabling distress

3b. Has your appearance defect (flaw) caused you impairment in social, occupational or other important areas of functioning? How much? (circle best answer)

1	2	3	4	5
No limitation	Mild interference but overall performance not impaired	Moderate, definite interference, but still manageable	Severe, causes substantial impairment	Extreme, incapacitating

3c. Has your appearance defect (flaw) often significantly interfered with your social life?

Yes No

If yes, how?

Because adolescents are also at risk for the development of BDD, the original BDDQ has a modified self-report version for use in the screening of adolescent populations (Box 2).[32] These tools are highly efficient, standardized, and reliable. Both the BDDQ-Dermatology Version and the BDDQ for adolescents are copyrighted, and any use or further publication of the scales requires approval from the author at kap9161@med.cornell.edu. Moreover, screening questionnaires consistently outperform clinical judgment in the identification of BDD, even among doctors who practice in the aesthetic space.[33]

BDD is likely to be present if the patient reports on the BDDQ-Dermatology Version or the BDDQ for adolescents that they are very concerned or worried about some aspect(s) of their physical appearance, they are preoccupied with these aspects of their appearance (ie, think about them for at least an hour a day if they add up all the time they spend), and their appearance concerns cause at least moderate distress or moderate impairment in functioning. If a patient is primarily concerned that they weigh too much or that non-facial parts of their body are too fat (see question 2 on the BDDQ for adolescents), an eating disorder may be a more accurate diagnosis for these concerns.

If a patient screens positive for BDD on one of these questionnaires, the treating dermatologist should ask the patient follow-up questions to confirm, for example, that the perceived defect(s) are actually nonexistent or only slight and that any reported distress or impairment in functioning are clinically significant.

How to Approach the Adolescent Patient with Suspected BDD

It is recommended that all adult dermatology patients with an aesthetic chief complaint be screened for BDD. It is less clear which patients should be screened for BDD in adolescent dermatology practices. Screening would be most prudent among patients with conditions including inflammatory disorders like acne, psoriasis, atopic dermatitis, hidradenitis suppurativa, prurigo nodularis, and bullous diseases, as there

Box 2: Questions Asked in the BDDQ for Adolescents[32]

BDDQ for Adolescents

This questionnaire asks about concerns with physical appearance. Please read each question carefully and circle the answer that is true for you. Also please write out your answers where asked.

1. Are you very worried about how you look? Yes No
   If no, thank you for your time and attention. You are finished with this questionnaire.

   If yes: Do you think about your appearance problems a lot and wish you could think about them less?
   Yes No

   If yes: Please list the body areas you don't like:

   Examples of disliked body areas include: your skin (for example, acne, scars, wrinkles, paleness, redness); hair; the shape or size of your nose, mouth, jaw, lips, stomach, hips, etc.; or defects of your hands, breasts, or any other body part.

   (If you answered "No" to either of the above questions, you are finished with this questionnaire. If you answered "Yes" to both of them, please continue filling it out.)

2. Is your main concern with how you look that you aren't thin enough or that you might get too fat?
   Yes No

3. How has this problem with how you look affected your life?
   Has it often upset you a lot? Yes No
   Has it often gotten in the way of doing things with friends or dating?
   Yes No

   If yes: Describe how:

   Has it caused you any problems with school or work? Yes No
   If yes: What are they?

   Are there things you avoid because of how you look? Yes No
   If yes: What are they?

4. How much time a day do you usually spend thinking about how you look? (Add up all the time you spend, then circle one)
   a. Less than 1 hour a day b. 1 to 3 hours a day c. More than 3 hours a day

are data to suggest increased incidences within these patient populations.[5]

It is worth repeating that while BDD is common, in our clinical experience, it is often missed in practice because dermatologists may not suspect it or are not asking the right questions. It is also worth emphasizing that people – including adolescents – with BDD appear normal, and often quite attractive, to others, even though the patients see themselves as looking unattractive or ugly. In reality, their defects are nonexistent or only slight; most of the time they appear insignificant or invisible to the treating physician. One exception to this is that patients with BDD who compulsively pick their skin, in the hope of improving their skin's appearance, can unwittingly create actual skin lesions and scarring.[34]

If dermatologists are concerned that an adolescent patient may have BDD, it is essential for dermatologists to use a self-report screening questionnaire like the BDDQ-Adolescent Version. In addition, the treating dermatologist might want to consider asking adolescents about their social media use, as social media has been linked to an increased risk of negative body image.[29] If adolescent patients are using social media in excess or are having body image issues related to social media use, it is advisable to place limits on their screen time or recommend a break from social media altogether. Limiting the use of social media has been shown to improve depression and feelings of loneliness in young people.[25] However, only 12% of dermatologists report routinely asking their patients about social media consumption. Decreasing social media use will likely be difficult, perhaps especially for adolescents, as social media use is so intertwined with everyday life, and therefore limiting use must be a joint effort between the adolescents, their parents, and their providers.

Simply recommending that adolescents stop using social media is not enough for patients who have BDD; dermatologists must make connections with mental health providers who are knowledgeable about BDD to facilitate comprehensive assessment and adequate treatment of BDD. In the same way that dermatologists are networked with pediatricians, internists, and family medicine physicians, they should consider connections with mental health providers to be another area for multi-specialty collaboration. This network would allow patients to have a more seamless and prompter referral to the appropriate mental health services once BDD is suspected. The general goal for the treating dermatologist would be to develop rapport, gradually introduce the idea of mental health referral, and then slowly transition their relationship with the patient from one in which they are the patient's primary provider to one in which the mental health professional becomes the primary provider. More specific suggestions for how to accomplish this transition are provided by Sun and Rieder (2022).[4] The two recommended evidence-based treatments for BDD are serotonin-reuptake inhibitors (often, high doses are needed) and cognitive-behavioral therapy that is tailored to BDD symptoms specifically.[36,37]

Dermatologists might also want to consider providing additional educational mental health resources to their patients; this includes resources such as the National Alliance on Mental Illness (NAMI, nami.org), the International OCD Foundation (iocdf.org), the Trichotillomania Learning Center (bfrb.org), and the Body Dysmorphic Disorder Foundation (bddfoundation.org).

CONCLUSION

BDD is a distressing psychiatric disorder that is prevalent among dermatology patients, including adolescents, and can be associated with severe sequela, including impaired social functioning and increased risk of suicidality. Dermatologists can play a significant role in detecting and addressing BDD. Validated screening questionnaires, such as the Body Dysmorphic Disorder Questionnaire, can be valuable tools for dermatologists in quickly identifying BDD. Dermatologists treating adolescents should also be aware of the influence of social media on their patients. The recognition and management of BDD in dermatology practice requires a holistic approach that integrates education, awareness, screening, and collaboration with mental health providers. By addressing BDD effectively, dermatologists can make an important, positive impact on the lives of their patients.

DISCLOSURES

This work has been supported by an unrestricted educational grant from CeraVe US. All authors contributed to the manuscript, reviewed it, and agreed with its content.

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