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Cognitive-Behavioral Therapy for Youth with Body Dysmorphic Disorder: Current Status and Future Directions

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SYNOPSIS

Body dysmorphic disorder (BDD), a distressing or impairing preoccupation with nonexistent or slight defect(s) in appearance, usually begins during early adolescence and appears to be common in youth. BDD is characterized by substantial impairment in psychosocial functioning and markedly high rates of suicidality. Cognitive-behavioral therapy (CBT) tailored to BDD's unique features is the best tested and most promising psychosocial treatment for adults with BDD. CBT has been used for youth with BDD, but it has not been systematically developed for or tested in this age group, and there is a pressing need for this work to be done. This article focuses on CBT for BDD in adults and youth, possible adaptations for youth, and the need for treatment research in youth. We also discuss BDD's prevalence, clinical features, how to diagnose BDD in youth, recommended pharmacotherapy for BDD (serotonin-reuptake inhibitors), and treatments that are not recommended (surgery and other cosmetic treatments).

Keywords

body dysmorphic disorder; treatment; cognitive-behavioral therapy; children; adolescents

Body dysmorphic disorder (BDD) is an often-severe disorder that usually begins during early adolescence and appears to be common in youth. BDD consists of preoccupation with a nonexistent or slight defect(s) in physical appearance that causes clinically significant

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distress or impairment in functioning; the symptoms are not better accounted for by another mental disorder (e.g., anorexia nervosa).¹ BDD is characterized by substantial impairment in psychosocial functioning and markedly high rates of suicidality.^{2–6} However, despite its severity and description for more than a century, BDD remains underrecognized in both youth and adults.^{4,5,7–12}

Because BDD usually begins during early adolescence,^{13,14} is often chronic,¹⁵ and causes substantial morbidity in youth,^{16,17} early intervention is critical. Cognitive-behavioral therapy (CBT) is the best tested and most promising psychosocial treatment for adults with BDD.^{4,5,18–20} However, CBT has not been developed for or tested in youth. In fact, no evidence-based psychosocial treatment of *any type* is available for youth with this common and severe illness. Thus, there is a pressing need for an efficacious psychosocial treatment for this age group. A BDD treatment practice guideline from the United Kingdom's National Institute for Health and Clinical Excellence underscores the paucity of treatment research on BDD and calls for more treatment research, especially in youth.²¹

AN ADOLESCENT WITH BDD

J, a normal-appearing 12-year-old boy, was preoccupied with the belief that his head was “too big,” his arms looked like “toothpicks,” and his hair looked “ugly and weird.” He was convinced that he looked abnormal, and he thought about these “defects” for 5 to 6 hours a day. J's preoccupations caused severe distress and depressed mood. He spent 4 to 5 hours a day checking his appearance in mirrors, asking his parents if he looked okay, and combing his hair to try to make it “look right.” He sometimes stayed in the bathroom for hours at a time, scrutinizing himself in the mirror, frantically combing his hair, and crying because he was so distressed over how he looked. These time-consuming repetitive behaviors and preoccupations interfered with his concentration, causing his grades to plummet. J went to school only because his parents insisted, and he missed school at least once a week because he felt so ugly. He stopped all athletic activities because they “messed up” his hair. J avoided classmates, friends, and most social events because he was convinced that others thought he was ugly. He often felt angry because he erroneously believed that other people mocked his appearance.

BDD IS A COMMON DISORDER

In a study of 566 high school students, BDD's prevalence, based on a self-report questionnaire, was 2.2%.²² A study of psychiatric inpatients found that 14% of 21 adolescents had BDD.¹⁰ In a larger study of adolescent psychiatric inpatients, 6.7% of 208 consecutively admitted adolescents met DSM-IV criteria for definite or probable BDD.²³ And in a subsequent study of 327 consecutive psychiatric inpatients age 12–17, 7.1% met DSM-IV criteria for BDD (Dyl et al, unpublished data).

In adults, three nationwide studies in the U.S. and Germany found a point prevalence of 1.7%, 1.8%, and 2.4%,^{24–26} making BDD more common than many other mental disorders.¹ BDD is even more common in adults in inpatient and outpatient psychiatric settings as well as dermatology, cosmetic surgery, cosmetic dental, and orthodontia settings.^{3,5,27} BDD is underrecognized, however, in both adults and youth. Studies that systematically assessed patients for BDD found that those with BDD rarely or never had the diagnosis recorded in their medical record.^{9–12,23,28,29} BDD patients typically do not disclose their appearance concerns to clinicians unless asked about them, most often because they are too embarrassed to do so.^{10,29}

BDD USUALLY BEGINS DURING EARLY ADOLESCENCE

In a study of 293 individuals with BDD, the mean age at BDD onset was 16.0 ± 6.9 (range, 4–43).³⁰ In a more broadly ascertained sample of 200 individuals with BDD, the mean age at BDD onset was 16.4 ± 7.0 years (range, 5–49).¹⁴ The mode was 13 in both samples, and 70% of cases had onset of BDD before age 18. In the latter sample, subclinical BDD began at a mean age of 12.9 ± 5.8 years.¹⁴ Among adults ascertained for major depressive disorder who had BDD, the mean age at BDD onset was 17.5 ± 10.0 years.³¹

CLINICAL FEATURES OF BDD

Available data, while limited, indicate that BDD's clinical features are very similar in youth and adults.^{16,17} Preoccupations may focus on any body area, most often the skin (e.g., scarring, acne) and hair (e.g., balding, excessive facial or body hair).^{11,13,14,16,17,32–34} Concern with multiple body areas is common.^{13,14} Appearance preoccupations occur, on average, for 3 to 8 hours a day.³⁵ The preoccupations are usually difficult to control and are distressing.³⁵ In 33 youth with BDD, the appearance concerns caused severe or extreme/disabling distress in 72% of the sample.¹⁶

Insight is usually poor or absent; many patients have delusional appearance beliefs^{36–39}—i.e., complete conviction that they look disfigured. Some describe themselves as looking like a monster or a burn victim.⁴ In a study that compared adults ($n=164$) and adolescents ($n=36$) with BDD on the Brown Assessment of Beliefs Scale,⁴⁰ adolescents had poorer insight regarding their appearance “defects” than adults did ($p<.001$), and a higher proportion of youth had delusional BDD beliefs (59% vs 33%, $p=.006$).¹⁷ This finding may reflect youth's poorer metacognitive skills, which may continue developing into adolescence⁴¹ and are hypothesized to mediate poor insight in some mental disorders.⁴² Two-thirds of patients have ideas or delusions of reference, believing others take special notice of the “defect” (e.g., mock the patient).^{36,37} Self-esteem is often poor;^{33,43–45} in youth, body image may be the most important contributor to adolescents' global self-esteem.^{46,47} Mean levels of depressive symptoms, anxiety, and social anxiety are high.^{23,29,48–51} In two of the above-noted inpatient studies in youth, those with BDD had significantly greater depression and anxiety than youth without significant body image concerns; in one of these studies, youth with BDD also had higher levels of PTSD symptoms and dissociation (Dyl et al, unpublished data).²³

Nearly all persons with BDD perform time-consuming repetitive behaviors in response to their appearance concerns—for example, frequently checking their appearance in mirrors and other reflecting surfaces, comparing their appearance with that of other people, excessively grooming, and seeking reassurance about how they look.^{11,13,14} Compulsive skin picking that intends to improve the skin's appearance can cause significant lesions and scarring, bodily injury, and even life-threatening injuries.^{52–54} In one study, lifetime skin picking was more common in adolescents than in adults at a trend level (58% vs 41%, $p=.06$) (Phillips KA, unpublished data). Comorbidity is common in both youth and adults, with major depressive disorder, substance use disorders, social phobia, and OCD most commonly comorbid.^{14,16,17,30}

INDIVIDUALS WITH BDD HAVE SUBSTANTIAL FUNCTIONAL IMPAIRMENT

The literature describes both youth and adults with BDD as severely distressed and impaired, often to a debilitating degree.^{34,55–59} Case descriptions indicate that they may avoid activities, stop working, or drop out of school because they think they look ugly or deformed.^{60–65} They often avoid dating and other social interactions.^{4,32,59} Some become extremely isolated, even housebound for years.^{60,66}

On standardized measures, studies have found that youth with BDD have very poor psychosocial functioning and quality of life.^{16,17} Mean scores on the Global Assessment of Functioning (44.9 – 45.7) indicate serious symptoms or serious impairment, and mean scores on the Social Adjustment Scale (SAS) and Quality of Life Enjoyment and Satisfaction Scale (Q-LES-Q) are markedly poor.^{16,17} In a study of 33 youth with BDD, 18% had dropped out of elementary school or high school primarily because of BDD symptoms,¹⁶ and in a more broadly ascertained sample of 36 youth with BDD, 22% had dropped out of school primarily because of BDD symptoms.¹⁷ Twenty six percent of the 36 youth wanted to work but were unable to because of psychopathology (BDD was the primary diagnosis for most).¹⁷ Adults with BDD, too, have markedly poor functioning and quality of life on standardized measures.^{2,67} For example, among 176 broadly ascertained individuals with BDD, SAS and Q-LES-Q scores were approximately 2 standard deviation (SD) units poorer than normative data.² In two samples, SF-36 mental health scores were 1.5 to more than 2 SD units poorer than U.S. population norms, 0.4 SD units poorer than norms for depression, and poorer than norms for medical illnesses.^{2,67}

SUICIDALITY AND AGGRESSION/VIOLENCE APPEAR COMMON IN BDD

In two studies, 67% of 33 youth and 81% of 36 youth with BDD had lifetime suicidal ideation,^{16,17} which is far higher than rates reported in the community (15%–27%).^{68,69} In these studies, 21% and 44% of youth, respectively, had attempted suicide.^{16,17} In the latter study, suicide attempts were more common in youth than adults (44% vs 24%, $p=.01$).¹⁷ In two studies of psychiatric inpatients²³ (Dyl et al, unpublished data), youth with BDD had higher scores than youth without significant body image concerns on the Suicide Probability Scale ($p<.001$ – $p<.0001$), which reflects suicide risk.⁷⁰ In adolescents, greater body image dissatisfaction more generally is associated with higher suicidality risk.⁷¹

Lifetime suicidal ideation (78%–81%) and suicide attempts (24%–28%) are also common in adults with BDD.^{6,13,32,33,72,73} In a recent nationwide epidemiologic study, 31% of adults with BDD reported thoughts about committing suicide due to appearance concerns, and 22% had attempted suicide due to appearance concerns.²⁴ Data on completed suicide are very preliminary; however, the standardized mortality ratio appears markedly elevated^{73–75} (Phillips KA, unpublished data). Indeed, persons with BDD have many suicide risk factors.^{6,76–80}

BDD-related aggressive/violent behavior may also occur,⁸¹ with 22%–38% of youth with BDD reporting lifetime physical aggression/violence due primarily to BDD.^{16,82} In a survey of 265 cosmetic surgeons,⁸³ 12% reported being physically threatened by a BDD patient due to dissatisfaction with surgery, which appears to usually be ineffective for BDD.^{33,84–86} High mean levels of anger-hostility have been reported.⁵⁰ Clinical observations suggest that aggression/violence may be fueled by: 1) anger about looking “deformed,” 2) inability to fix the “defect,” 3) delusions of reference, and 4) feeling rejected because of the “defect.”⁵ Persons with BDD appear particularly sensitive to social rejection,³¹ which is associated with aggressive and hostile behavior.⁸⁷ They also tend to misinterpret other people’s facial expressions as contemptuous and angry,⁸⁸ which may have the potential to fuel aggressive behavior.

DIAGNOSING BDD IN YOUTH

The clinical features described above indicate that BDD is not simply normal adolescent concern with appearance; rather, it is a severe and even life-threatening disorder.⁸⁹ Thus, all youth should be asked about appearance concerns, and BDD should be diagnosed when present.⁸⁹ Table 1 contains questions clinicians can ask to diagnose BDD in youth, which follow DSM-IV criteria.⁵ The BDDQ, a self-report screening questionnaire for BDD, has an

adolescent version with good psychometric properties.^{4,10} Clues to BDD's presence include the clinical features described above (e.g., excessive mirror checking). While some clues (e.g., being housebound) are not specific to BDD, youth who display any of these behaviors should be asked about BDD and whether the behaviors are related to appearance concerns.

TREATMENT OF BDD

A Cochrane Review on BDD and a treatment practice guideline on OCD and BDD from the United Kingdom's National Institute for Health and Clinical Excellence (National Health Service) recommend CBT and SRIs as first-line treatments for BDD.^{21,90} Although virtually no treatment research has been done in children and adolescents with BDD, these treatments are considered the first-line treatments for this age group.^{5,21,90} Other types of psychosocial interventions for BDD are virtually unstudied; thus, they are not recommended as monotherapy for BDD.

Cognitive-Behavioral Therapy

CBT for Adults with BDD—CBT that specifically targets BDD symptoms is currently recommended as the psychosocial treatment of choice for BDD.^{4,5,18–21,90} Because BDD is a unique disorder, CBT for other disorders is not suitable for BDD. While BDD may be related to major depressive disorder, social phobia, or OCD, it differs from them in important ways and does not appear to be identical to any of them.^{4,35,43,51,91–102} For example, BDD patients have more delusional beliefs, greater suicidality, and a higher prevalence of major depressive disorder than patients with OCD.^{35,98–101} Patients with BDD are concerned with more body areas (typically not weight) than eating disorder patients are, and they have more negative self-evaluation and self-worth, more avoidance of activities, and poorer functioning and quality of life due to appearance concerns.^{43,97} Unlike patients with social phobia, those with BDD have prominent repetitive behaviors and perceptual distortions involving body image.^{4,102} In a prospective longitudinal study, BDD symptoms persisted in a sizable proportion of subjects who remitted from comorbid OCD, major depressive disorder, or social phobia, suggesting that BDD is not simply a symptom of these disorders.⁹³

Most published studies of CBT for BDD have included cognitive restructuring, exposure (e.g., to avoided social situations), and response (ritual) prevention (e.g., not seeking reassurance) that is tailored specifically to BDD symptoms.^{18,20,103} Additional strategies (used in combination with the above approaches) include perceptual retraining with mirrors, habit reversal for BDD-related skin picking or hair plucking, cognitive approaches that target core beliefs, incorporation of behavioral experiments into exposure exercises, motivational interviewing tailored to BDD, and other approaches.¹⁰³

BDD patients typically need more intensive engagement and ongoing motivational interventions than patients with other disorders such as OCD, because many BDD patients have poor or absent insight^{36–39,101,104} and are thus reluctant to initiate or remain in psychiatric care. Cognitive interventions are more complex and intensive for BDD than for OCD or social phobia because of the delusional nature of BDD beliefs and delusions of reference. Exposure exercises and behavioral experiments are needed for prominent social avoidance, unlike treatment for OCD, depression, or eating disorders.¹⁰² And intensive ritual prevention is a core component of treatment for BDD, which is not needed for depression or social phobia.¹⁰² Treatment must also target other problematic symptoms unique to BDD, such as surgery seeking and skin picking/hair pulling done in an attempt to improve one's appearance.

Several authors have developed cognitive-behavioral models of BDD's development and maintenance, which provide a foundation for CBT treatment for BDD.^{19,103,105–107} BDD likely results from a combination of biological, psychological, and sociocultural factors.^{4,5,108} CBT models additionally and more specifically propose that persons with BDD selectively attend to specific aspects of appearance or minor appearance flaws. This hypothesis is supported by clinical observations and neurocognitive (e.g., fMRI) research findings which indicate that persons with BDD excessively focus on detail rather than on larger configural elements of visual stimuli.^{109–112} BDD patients consider their perceived flaws to be important and to reflect personal defectiveness and lack of self-worth³³ (e.g., “if I don’t get chin surgery, I will always be alone. I am completely worthless”). The CBT model further proposes that patients react to perceived imperfections and related maladaptive interpretations with negative emotions (e.g., shame, depression, anxiety) that further increase selective attention to perceived flaws. To try to neutralize their distressing feelings, patients avoid social situations and other triggers,^{49,51} and they perform repetitive ritualistic behaviors (e.g., excessive grooming, mirror checking). Patients’ misperception of situations and faces as threatening or angry^{88,113,114} may further contribute to neutralizing behaviors such as social avoidance and rituals. Rituals and avoidance are negatively reinforced because they sometimes temporarily diminish painful emotions. Thus, these behaviors are posited to maintain maladaptive BDD beliefs.¹⁰³

CBT for BDD that is based on this or similar models, and that incorporates strategies described above, appears to often be efficacious for adults. In a randomized trial of 54 adults who received eight weekly two-hour group sessions of CBT for BDD or were assigned to a waitlist condition, CBT was more efficacious than no treatment.¹¹⁵ Improvement was sustained at follow-up 4.5 months later.¹¹⁵ A study that randomized 19 adults to individual CBT or a waitlist found that CBT led to greater improvement than no treatment.¹⁰⁷ In single cases and case series of adults (n=10–17), symptoms improved significantly at post-test.^{18,116–118} For example, a study of group CBT for BDD (n=13) found that BDD symptoms and depressive symptoms significantly improved.¹¹⁷ One small study suggested that delusional BDD beliefs predict a poorer outcome,¹¹⁹ although this finding requires replication. Session number and frequency have varied greatly across studies, from 12 weekly hour-long sessions to 12 weeks of daily 90-minute sessions. To more adequately establish CBT’s efficacy for BDD, CBT must be directly compared to other psychosocial interventions that control for therapist time, attention, and other non-specific treatment elements.

CBT for Youth with BDD—Reports are limited to a small number of case studies. The reports below used approaches similar to those for adults. Greenberg, et al¹²⁰ described individual CBT with family involvement for a 17-year-old female who was horrified by her “flabby” stomach, “bushy” eyebrows, “frizzy” hair, and the size and symmetry of her ears, which made her feel “totally ugly.” The patient thought about these perceived flaws for more than 8 hours a day, which caused intense anxiety, shame, disgust, and depression. To try to reduce her distress and “fix” her appearance, she spent 3 to 8 hours a day performing BDD rituals, such as excessive mirror checking, reassurance seeking, clothes changing, hair styling (to cover her ears), and excessive makeup application. Her preoccupations and behaviors made it difficult to get to school on time, sit through class, or focus on her schoolwork. As a result of these concerns, she avoided gym class and stopped socializing with friends. She argued with family members about their involvement in her BDD rituals.

Treatment consisted of twelve 50-minute sessions (twice weekly for 4 weeks followed by 4 weekly sessions). Initial sessions focused on assessment, obtaining information from the family to better understand their involvement in the illness, and psychoeducation. The therapist and patient developed a CBT model of the patient’s BDD. The patient listed pros

and cons of changing versus not changing her BDD behaviors, and treatment goals were established. Cognitive strategies consisted of recognizing self-defeating thoughts and developing more accurate and helpful beliefs. The patient then developed a hierarchy of BDD-related rituals and avoidance behaviors and did in-session and out-of-session exposure exercises while not ritualizing (ritual prevention), starting with less anxiety-provoking situations on her hierarchy. Perceptual retraining using mirrors helped the patient learn to see her entire body (without excessive checking) rather than focusing on disliked details, and to describe herself in neutral and nonjudgmental ways. Treatment increasingly focused on re-establishing friendships and activities. Throughout treatment, the parents assisted with behavioral assignments, reduced their accommodation of BDD symptoms (e.g., did not provide reassurance), positively rewarded their daughter for participating in non-BDD activities, and helped maintain her motivation for treatment. Finally, strategies for relapse prevention were discussed. CBT homework was assigned throughout treatment. The patient's score on the Yale-Brown Obsessive-Compulsive Scale Modified for BDD (BDD-YBOCS)¹²¹ decreased from 36 (severe) to 8 (subclinical). Self-esteem, mood, and quality of life improved on standardized measures. At 3-month follow-up, the patient's intrusive thoughts and related distress remained low, and she reported no deliberate avoidance, although her compulsive behaviors had returned to baseline, suggesting that she may have benefitted from longer treatment or booster sessions.

Aldea et al¹²² used intensive CBT to treat a 16-year-old girl with BDD who had previously been misdiagnosed with social phobia because of her prominent social avoidance. The patient was convinced that her face, freckles, ears, and hair color and texture were ugly. To diminish anxiety over her "ugliness," she spent 4 to 6 hours a day changing her clothes, applying makeup, blow-drying and straightening her hair, seeking reassurance, and checking her appearance in windows and mirrors. Because she thought other people noticed her "flaws" and were disgusted by her, she did not leave her house during the day, did not attend school, and rarely saw friends.

The patient received fourteen 90-minute sessions of CBT on consecutive weekdays, with three additional follow-up sessions during the next 3 months that included bolstering relapse prevention skills. The first three sessions focused on building rapport, providing psychoeducation about BDD and its treatment, and developing a hierarchy of situations that caused BDD-related distress. In these initial sessions, rather than trying to convince the patient that she needed treatment, or challenging her irrational beliefs, the therapist focused on her BDD-related distress. Subsequent sessions focused on exposure and response prevention plus cognitive restructuring that included challenging the patient's perfectionism, self-criticism, and need for approval. In-session exposures were done – for example, walking outside in bright sunlight without hiding her face. The patient completed CBT homework assignments (e.g., exposure and ritual prevention), which were reviewed at each session. The parents were asked to not respond to their daughter's requests for reassurance about her appearance and to refrain from buying her an excessive amount of beauty products. The patient's score on the BDD-YBOCS decreased from 27 (moderate) to 10 (subclinical). Gains were maintained at 3-month follow-up.

Horowitz et al¹²³ used CBT in addition to other treatment modalities for a 16-year-old girl who had a series of referrals to a plastic surgeon for a breast surgery consultation. The patient then presented to an outpatient psychiatric treatment center with a chief complaint of "I want to have surgery soon to remove my breasts, because they don't look like breasts; they look like flaps of skin hanging." The patient thought her breasts were too large; she also worried about the appearance of her face, and she applied creams and bleaches to her face, hair, eyelashes, and eyebrows, and at times picked her skin. These rituals kept her in the bathroom or looking at the mirror during class and before school, causing her academic

performance to suffer. Because the patient thought her peers laughed at her appearance in school, she sometimes hid in the bathroom or walked down the hallway pressed up against the walls so she could hide her face and breasts. At home, she sometimes kept the shades drawn or hid under the bed or in the closet because she believed other people were looking at her face and breasts. As a result of her appearance concerns, she became increasingly socially isolated.

Initially, treatment focused on establishing an alliance with the patient and her parents, as the patient believed she was going to therapy to convince her psychiatrist that she needed a bilateral mastectomy. Subsequently, treatment included multiple treatment modalities -- elements of CBT, psychodynamic psychotherapy, medication (fluvoxamine 400 mg/day), and consultations with other physicians. CBT focused on cognitive restructuring and exposure/response prevention, which the patient was initially reluctant to engage in. Over time, she made some progress -- for example, she developed a hierarchy of activities for exposure therapy, did exposure exercises, and used some therapy time to walk outside. Ritual prevention focused on decreasing mirror checking and other repetitive behaviors. Family sessions focused on psychoeducation about BDD, parenting skills, and improving communication. With this multimodal approach, the patient improved although had some remaining symptoms.

Sobanski and Schmidt¹²⁴ used primarily behavioral approaches (exposure and response prevention) for a 16-year-old girl who was convinced that her pubic bone was becoming increasingly dislocated and prominent, and that everyone stared at it and talked about it. She was convinced that she could be helped only by surgery. In an attempt to achieve a smaller hip girth and change her pubic bone, she reduced her weight to a body mass index of 15.8 kg/m², which caused amenorrhea. As a result of her constant preoccupation with her hipbone and shame over her appearance, she became completely housebound, spending most of the day in her bedroom. She frequently measured her pubic bone and camouflaged her pelvis with large clothes.

The patient was treated with exposure, response prevention, and 125 mg/day of doxepin. An anxiety hierarchy of avoided situations was established, with increasing degrees of difficulty: 1, wearing jeans in her own room; 2, wearing jeans in the hospital ward and meeting others; 3, wearing jeans, going to town and visiting a pub; and 4, visiting her school and meeting classmates. She received thirty 60–90 minute sessions. The patient was gradually able to face avoided situations. Her BDD symptoms improved; she felt less distressed and had no impairment in functioning. These gains were maintained at 6-month follow-up.

Needed Research on CBT for Youth with BDD and Possible Adaptations for Youth—Currently, no evidence-based psychosocial treatment of any type is available for children or adolescents with BDD, and CBT has not been studied in this age group. Using CBT for youth has face validity, because BDD's clinical features appear largely similar in youth and adults,¹⁷ CBT for adults with BDD is very promising (see above), and CBT is efficacious for youth with other disorders that have similarities to BDD.^{125–128} However, CBT must be developed for and tested specifically in youth to ensure that it is feasible to implement and efficacious.

We recommend that CBT for youth with BDD incorporate both cognitive and behavioral approaches, as in the cases described above. However, CBT must be adapted for youth. For example, while establishing a therapeutic alliance is important for all patients, regardless of their age, building rapport and engaging the patient is especially important before beginning CBT with youth. Often, parents bring youth with BDD to treatment, and many youth will

not want to be in treatment. Furthermore, youth will likely have less insight into their illness than adults will.¹⁷ Thus, it may be helpful for therapists to use a motivational interviewing style and not directly challenge a youth's defenses and resistance at the beginning of treatment. Spending initial sessions learning about the youth's interests, what is important in his or her world, and how he or she views BDD can go a long way toward establishing rapport. Using humor may help facilitate rapport, although this should be done with care, as patients with BDD tend to be rejection sensitive, and humor about BDD or the patient's appearance is not advised. Another helpful technique to aid rapport building is respecting the youth's need for autonomy. Although parental involvement is necessary for successful treatment of youth with BDD, paying close attention to topics the youth wants to be kept confidential builds trust. Clarifying at the beginning of treatment with the youth which topics cannot be kept confidential (those involving safety) helps foster a good therapeutic relationship. Once rapport is well-established, CBT for BDD can proceed.

CBT for youth must be modified so it is age appropriate. For example, treatment forms should use modified language and graphics, and the therapist's communication style must be age appropriate (e.g., when providing psychoeducation about BDD or using metaphors). Types of external reinforcement and rewards for treatment attendance and adherence should also be appropriate for the patient's age.

CBT for BDD in youth must also address developmental transitions and tasks. Body image more broadly is an important aspect of psychological and interpersonal development in youth;^{46,47} it is particularly salient during adolescence because substantial physical development occurs. In addition, at puberty, across species, the brain appears to increasingly attend to indicators of social status, including appearance, as well as cues of social rejection.⁵ Body image may influence normative developmental transitions and tasks, such as affiliation transitions (greater autonomy from the family and peer affiliations, development of romantic affiliations), achievement transitions (e.g., school and work), and identity transitions (e.g., changes in self-definition).¹²⁹ Thus, treatment should address issues such as relationships with family and peers, dating, and school-related difficulties. Because severe psychopathology, including BDD, may adversely affect key developmental transitions,¹³⁰ some patients may benefit from an additional focus on skills training to address developmental deficits such as a lack of peer relationships or not completing school.¹²⁰

Parents/guardians need to be involved in psychoeducation and treatment. Younger patients will likely require more parental involvement than older adolescents. Parents can learn to decrease their participation in BDD rituals, encourage and help their child with CBT homework assignments, enhance motivation for treatment, reinforce positive behaviors and activities, and develop realistic expectations for their child's progress.⁵ Teachers may need to be informed about treatment and advised about recommended approaches for students who are struggling in school because of their symptoms. In some cases, alternative education plans or home tutoring may be needed for youth who cannot attend school because they are too ill.

CBT may need to be modified for more severely depressed youth to ensure that depressive symptoms that may interfere with treatment are addressed (for example, via activity scheduling). Treatment modification will also be needed for youth who are more highly suicidal or appear at risk for violent behavior, so the safety of the patient and others is adequately addressed. In the authors' opinion (based on their clinical experience), patients with very severe BDD or depressive symptoms, and those who are suicidal, should receive an SRI in addition to CBT.^{4, 5}

Pharmacotherapy

SRIIs are considered the medication of choice for BDD.^{5,21,90,131,132} Randomized, double-blind, controlled studies demonstrated that fluoxetine was more efficacious than placebo and that the SRI clomipramine was more efficacious than the non-SRI antidepressant desipramine.^{133,134} Methodologically rigorous open-label studies^{131,135–138} and large clinical series^{37,139} also support SRI efficacy. Response rates (intention-to-treat analyses) are 53% to 73%.^{131,132} Patients with delusional BDD beliefs are as likely to respond to SRI monotherapy as patients with non-delusional beliefs.^{37,133–136,140} In adults, relatively high SRI doses are often needed, and a 12–16 week trial is recommended to determine efficacy.^{5,131,132}

In children and adolescents, SRI efficacy has been reported in case reports^{e.g.,65,141–144} and a series of 33 patients, in which a majority of patients had clinically significant improvement in BDD with SRIIs but no improvement with non-SRI medications.¹⁶ Given concerns about suicidality and SRI use in youth,¹⁴⁵ caution should be used when prescribing these medications in this age group. In patients with BDD age 18 and older, SRIIs have been shown to decrease suicidality¹³⁵ and to exert a protective effect against worsening of suicidality.¹⁴⁶

Cosmetic Treatment

Studies have found that 41%–63% of youth with BDD seek dermatologic, surgical, dental, or other cosmetic treatment for BDD concerns; most requested treatments are received.^{16,84,85} Such treatment appears to virtually never improve overall BDD symptoms in youth or adults, and some patients develop new appearance concerns.^{16,28,33,84,85,147} Thus, cosmetic treatment is not recommended for youth or adults with BDD.

CONCLUSIONS

Because BDD is common, usually begins in early adolescence, and is associated with substantial impairment in psychosocial functioning and markedly elevated suicidality rates, there is a pressing need for the development of evidence-based treatments for youth. CBT that is tailored to BDD's unique symptoms is the best-tested and most promising psychosocial treatment for adults with BDD. Because no evidence-based psychosocial treatment of any type is available for youth, there is a critical need to develop and test CBT and other interventions in this age group.

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TABLE 1**QUESTIONS TO DIAGNOSE BDD IN CHILDREN AND ADOLESCENTS***

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1	Are you very worried about how you look?
<i>If yes, What don't you like?</i>
Do you think (body part) looks really bad?
2	Is there anything else you don't like about how you look? What about your face, skin, hair, nose, or the shape, size or other things about any other part of your body?
3	Do you think about (body part) a lot? Do you wish you could worry about it less?
4	Do other people say you worry about it too much?
5	How does this problem with how you look affect your life?
6	Does it upset you a lot?
7	Has your worry affected your family or friends?
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* These questions will help determine whether DSM-IV criteria for BDD are met.