Case report

Body dysmorphic disorder in Oman: cultural and neuropsychological findings

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Introduction

Cases of preoccupation with feelings of unbearable ugliness caused by an imagined bodily defect or grossly excessive concerns about slight physical anomalies have been well documented in psychiatric reports from industrialized countries [*1–3*]. This tendency has been called "Thersites" or the "Quasimodo" complex [*4*]. In 1891, Morselli introduced the term dysmorphophobia to describe the pathological concern with appearance [*5*]. The concept was variously encapsulated into the writings of Kraepelin, Janet and Freud [*6*]. Preoccupation with an imagined defect is currently known as body dysmorphic disorder (BDD), a somatoform disorder. Since BDD sufferers tend to be concerned with appearance and with ritual behaviours, it has been suggested it is closely related to obsessive–compulsive disorder [*7,8*].

Although Munro suggested BDD is independent of culture, to date there is a dearth of cross-cultural reports to substantiate this view [*9*]. With the exception of anecdotal reports of preoccupation with parasitosis, infestation and bromosis [*10–14*], to our knowledge there are no reports from developing countries of cases of preoccupation with physical appearance. This case study from Oman, an Arab Islamic country, indicates the universality of BDD. By examining illness and illness behaviours in their cultural context, it shows the way health and illness are perceived and interpreted among this sociocultural group.

Case report

An Omani male, 24 years of age and normal in appearance, presented with a history of prolonged brooding about his "cursed" physical deformities, which he believed had rendered him prone to misfortunes. His contempt of his "defective" body resulted in an intense yearning for a "cure".

He was born at home in a village in the interior of Oman. His parents were non-consanguineous and were illiterate but had a cursory knowledge of the Quran. He was the third of six children.

Until he reached 15 years of age, he was "top of his class". From then onwards, however, he started to dread his "disfigured appearance". This included his nose, which he thought was not in the centre of his face. He also felt that his eyes, neck, jaw, knees, feet and back were deformed. Sometimes his dissatisfactions were vague to the extent of being almost meaningless.

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The patient recounted an emotionally deprived childhood. His father was remembered as punitive and distant. His mother was more available but was perceived as devaluing and affectionless. The patient recalled that his father used to make fun of his appearance and he felt that his neighbours and schoolmates did not like his looks. He felt deep resentment towards his schoolmates. He had markedly low self-esteem and difficulty in concentration. However, in spite of this personal distress, 6 years ago he managed to finish his secondary education and then distinguished himself with entrance into the national university to study physics.

At the university, his concerns about his deformities fluctuated with time. However, the episodes became more frequent and more distressing. During his bouts of tormented thoughts, he had episodes of lethargy and dysphoria. He slept all day and watched television all night. He had strong urges to touch electric wires or to drive very fast and collide with other vehicles. The patient spent a great deal of time looking at himself in the mirror. He described himself as being incapable of sustained attention and concentration, which led to the deterioration of his academic performance, avoidance of classes and exam failure. Socially, he became withdrawn. He blamed all these problems on perceived defects in his appearance. He had tried to make a fresh start by opting for another study course. However, his performance continued to deteriorate and resulted first in academic probation and eventually in expulsion from the university.

When, the patient came in to our care, we treated him conservatively with various pharmacological agents, including clomipramine hydrochloride, trifluopertine, fluspenthixol, imipramine, pimozide and sulpiride. All treatments were poorly complied with or only transiently effective. Although he admitted that some of these drugs made him "calmer", they did not affect his concern about his appearance. He frequently asked assistance to be sent abroad for "treatment".

The patient's frenetic search for a "cure" caused him to resort to plastic surgery and his nose was corrected twice. He remained dissatisfied and the surgeon refused to operate further. He then consulted a local magician to place a spell on the surgeon to operate on him again, to turn around his cursed life and bring him good luck and to help him pass his examinations. The magician gave him an amulet and advised him to change his name, which he did. The intervention from the magician was, however, unsuccessful.

During our assessment, he appeared calm and composed and not at all distressed. Our clinical staff told him that his appearance was normal. However, he resisted entertaining the idea that his problem was psychological. Instead, he spoke eloquently about finding the right doctor to operate on him. Apart from the firmly held conviction that he was "deformed" due to a curse and bad luck, there was no other psychopathology.

More recently, when he came to our attention after having been off medication for at least 13 months, our physical examination was unremarkable. As for psychiatric symptoms, on the Hospital Anxiety and Depression Scale (HADS) [*15*], both his anxiety and depression scores were clinically significant. Similarly his performance on the Yale–Brown Obsessive Compulsive Scale (Y–BOCS) was clinically significant [*16*]. Psychometric assessments, which are described elsewhere [*17*], included measurement of intellectual ability and neuropsychological functioning. In Standard Progressive Matrices, a nonverbal culture-

fair test of intelligence, the patient obtained a score of 53 (i.e. above the 75th percentile), indicating above-average intellectual ability. Buschke Selective Reminding Test (BSRT) indicated that his attention and concentration were poor. Other aspects of his memory functioning were intact as assessed using the Wechsler Memory Scale. Tests sensitive to frontal-subcortical neural pathways functioning [*18*], such as the Wisconsin Card Sorting Test, Verbal Fluency and Tower of London, showed no abnormal features.

Seven months ago, fluoxetine and psychosocial rehabilitation were started in order to address the conflict in his relationship with his family, pervasive depression, suicidal ideation and his unrealistic preoccupation with his perceived defective body. Using culturally sensitive psychotherapeutic techniques described elsewhere [*19*], the patient became less preoccupied with thoughts of ugliness and his suicidal ideation decreased. His sleep pattern returned to normal and his social interaction also improved. This improvement was also associated with a reduction in both anxiety and depression on HADS as well as the indices of Y-BOCS. Subjectively, the patient reported improvement in his concentration and awareness of his surroundings. This was complemented by enhanced performance on tests of sustained attention (BSRT). For the last 6 months, his condition has remained essentially unchanged.

Discussion

This case of preoccupation with a feeling of unbearable ugliness caused by an imagined bodily defect fulfills the DSM-IV [*20*] criteria for the diagnosis of BDD, i.e. preoccupation with some imagined defect in appearance in a normal-looking person; complaint of an overvalued idea; intense searching for a cure; and clinically significant distress or impairment in psychosocial functioning.

As cardinal signs of BDD may also overlap with other psychiatric disorders, often complicating their presentation, the relationship between BDD with affective disorders and obsessive–compulsive disorder has been a subject of debate [*21,22*]. In our patient, there were elevations of both anxiety and depression as gauged by HADS. However, the items of this scale do not make it clear whether disturbances are primary or secondary to other phenomena [*17*]. Since BDD involves both obsessive concern with appearance and other ritual behaviours, Munro and Steward [*7*] and Phillips et al. [*8*] have suggested that BDD is closely related to obsessive–compulsive disorder. For our patient, we have tried to investigate this link by examining the neurocognitive functioning thought to be impaired in obsessive–compulsive disorder [*18*]. His performance on neuropsychological tests alleged to be sensitive to structural abnormality in obsessive–compulsive disorder were unremarkable despite obsessive–compulsive disorder symptomatology, such as compulsive mirror checking, and clinically significant scores on the Y-BOCS. It is noteworthy that literature on neuropsychological functioning of both obsessive–compulsive disorder and BDD tends to be marred with inconsistencies [*23,24*].

Although the prevalence of BDD is unknown, its symptoms usually develop in adolescence. Surgical, dermatological, dental and other medical procedures to address the alleged defects are generally unsuccessful [*25*]. Various pharmacological interventions have been proposed, with only limited benefit. In our case, however, with adjunct psychosocial rehabilitation,

fluoxetine, a compound thought to enhance the activity of the serotonergic system, was effective in reducing various psychopathologies bringing about a remission of afflictive emotions and an improvement in cognitive functioning. The patient commented that he felt generally more confident in himself. The efficacy of the selective serotonin-reuptake inhibitor, fluoxetine, is consistent with other reports [*26,27*]. It is worth mentioning, however, that previous medication trials have probably not been adequate in terms of dose or duration.

Although there have been many reports of "culture-bound" abnormal attitudes towards the body [*4,10,14*], this case, which had all the essential features of BDD, substantiates the largely anecdotal reports available so far from developing countries. Being a somatoform disorder, it is of interest to speculate on why BDD might be rare, despite the widely held view that psychic distress is mostly expressed as a somatic metaphor in developing countries [*28*] and since Munro [*9*] has suggested that it is independent of culture. It is possible that BDD is underreported in this part of the world for the same reasons observed in other cultures; namely, patients are likely to go to cosmetic surgeons rather than to mental health professionals [*29*]. Furthermore, as the present case illustrates, sufferers may also seek supernatural explanations for their "misfortunes" as many interpersonal difficulties are managed by traditional healers in developing countries [*30*]. Or are there subtle culturally sanctioned mechanisms that may protect a vulnerable individual from developing BDD in an Arab Islamic country like Oman? Since institutions such as marriage are often arranged, Osman has suggested that physical beauty and attractiveness are not highly valued in these cultural settings [*10*]. Such social prescription is reinforced by Islamic teachings. Islam, which means "total submission to God", teaches that one's physical appearance is foreordained. By implication, therefore, to despair of or to seek to change one's physical appearance is to question God's will [*31*]. As a corollary to this, it is also believed that beauty renders certain individuals vulnerable to the evil eye, and misfortune is blamed on envy, especially "the fear of envy in the eyes of the beholder" [*32*].

Two interrelated issues should be examined with consideration to these caveats. How does institutionalized negation of the importance of beauty provide protection from developing excessive concern about personal appearance? Also, is there a disjunction between the reality of the preoccupation and the patient's belief system to an extent that may exacerbate the psychopathology of BDD? As BDD is rare in developing countries, our case from Oman poses more questions than it answers.

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