

Culture-Specific Pathogenicity of Dhat (Semen Loss) Syndrome in an Arab/Islamic Society, Oman

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ABSTRACT

A number of reports from different parts of the world have challenged the assumption that Dhat syndrome is confined to populations in and around the Indian subcontinent. This single case study reports an Omani with features typical of Dhat syndrome. Psychometric measures showed elevated scores on indices of hypochondriasis, psychastenia, and gender role development as defined in the Minnesota Multiphasic Personality Inventory. He rated adequately in measures assessing cognitive and executive functioning. Implementation of cognitive behavioral therapy, concurrent with a successful marriage proposal, resulted in a gradual resolution of the symptoms. This report concludes with a discussion on whether his Dhat syndrome should be viewed as a culture-reactive or culture-specific syndrome.

The central tenet of mental sciences in the late 20th and early 21st centuries of descriptive or Kraepelinian psychiatry embraced observable cognitive, emotional, and behavioral phenomena. Wide application of the 'standards' of descriptive psychiatry, namely the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5)¹ and the World Health Organization's International Classification of Diseases and Health-Related Problems (ICD),² appears to testify to such a view. However, within an increasingly globalized world and in the midst of pluralism, a critique of descriptive psychiatry has suggested that both the DSM and the ICD tend to focus on a view of human nature limited to Western European and North American populations.³

Despite these possible limitations, prevailing descriptive psychiatry has modeled Euro-American characteristics as having a 'pan-human predisposition'.⁴ In this, emotional and behavioral dysfunction remains constant throughout the world, regardless of the cultural contexts in which they appear. For example, a myriad of 'idioms of distress' exhibited by troubled people in different parts of the world are viewed within the framework of a pan-human predisposition or neurogenetic determinism.⁴ Conditions that are not described in this pan-human predisposition, or that fall short

of the symptom checklist in the existing psychiatric nomenclature, are labelled as 'atypical' or 'exotic'.

Given these constraints, the 'culture specific syndrome' term was created, under the umbrella of transcultural psychiatry or cross-cultural psychology,⁵ to address atypical or exotic conditions. Both the DSM and ICD have given notice to many culture-specific syndromes. Among these is Dhat syndrome, which was thought to be limited to the population in and around the Indian subcontinent.⁶ The afflicted person is characteristically preoccupied with or suffering from premature ejaculation, semen loss, spermatorrhoea, or impotence, and often times believe that they are passing semen in their urine.⁷ Thus far, there is no evidence of any underlying organic etiology to Dhat syndrome. Nonetheless, the fact that this syndrome has been reported as being limited to regions within and around the Indian subcontinent has led some authors to speculate that Dhat syndrome owes its origin to Hinduism, where semen is perceived to be a "vital fluid". As a result, semen loss is believed to compromise one's zest for life. In the 1960s, Wig⁸ was credited as the first to introduce a description of such distresses to psychiatric literature. To our knowledge, Dhat syndrome has been reported elsewhere, but the condition has been speculated to be particularly prevalent in and around the Indian subcontinent and among diaspora around the world who trace

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their origin to the Indian subcontinent.⁹ Studies have indicated that psychological therapy can ameliorate the symptoms of Dhat syndrome.¹⁰ A previous study based on impressionistic observations formulated the syndrome's clinical hallmarks,¹¹ but studies on psychometric files, which would shed light on cognitive functioning and characterological analysis, have not been forthcoming in the existing literature.

A number of studies have emerged to question the culture-specific status of Dhat syndrome,^{12–15} including the present study, which suggests that Dhat syndrome is also present in Oman. This case study provides a personality and cognitive function profile of a single individual diagnosed with Dhat syndrome from Oman.

CASE REPORT

Our patient was a 26-year-old, single Omani male from a rural family who had a traditional upbringing with no personal or family history of mental illness. The patient distinguished himself with secondary education, having had 12 years of formal schooling. He performed fairly well on his final high-school examinations, which consequently granted him entry to a technical college. He did not, however, graduate, leaving during his third year after exhausting his probation period for under-performing in his studies. Coinciding with his academic underperformance was the emergence of a distressing preoccupation with semen loss, which occurred at least once a day. He claimed that the quantity of penile discharge amounted to a spoonful and that the discharge was milky-colored. As a result, he was convinced that the discharge was semen. He reported that this semen loss would pass through his penis at any time, with and without specific triggers. Some situations that would result in semen loss included urination or passing stool. Other triggers included 'daydreams' characterized by sexual content, and watching sexually stimulating television programs. It was also reported that some factors would precipitate and/or exacerbate his semen loss, including 'strained abdominal feelings' from overeating, particularly seafood or excessive liquids, which would lead to loose bowel movements. Consequently, on the other hand, constipation typically decreased semen loss.

The patient informed us that the semen loss would leave him fatigued and with 'no feeling' or with no 'zest for life'. He was preoccupied with

inadequacy, lack of self-esteem, marked with depressive cognitions, and doubted his masculinity. On some occasions, he felt somatic distress such as body aches, back pains, headaches, chest pains, shortness of breath, nausea, dizziness, and episodes of syncope. He also stated that he often experienced poor attention and concentration, as well as excessive worry, and was irritable and easily angered.

His pathway to care began with visits to traditional healers, although he claimed no benefit from these various interventions. Thereafter, he started 'treatment shopping', first in the primary healthcare centers near his village, and later in regional hospitals. He also sought help from private clinics that believed a urinary tract infection may have been the cause of his symptoms. As a result, he was prescribed antibiotics. He was also given multivitamins and psychotropic medications to reduce the emotional component of his distress. Lastly, he traveled abroad to seek treatment. Despite such a concerted effort, his distress remained undiminished.

During his initial meeting with us, the patient expressed frustration at not knowing what was happening to him. The patient willingly engaged with the clinical team and appeared eager for individualized attention. He was cooperative, maintained good eye contact, readily responded to questions with descriptive details and was clearly oriented to person, place, time, and situation. His responses to hypothetical situations requiring decision-making skills suggested sound judgment. There was no evidence of persecutory ideas, thought interference, passivity phenomena, perceptual disturbances, flight of ideas, circumstantiality, nor formal thought disorders.

Blood tests revealed normal blood cell count, blood biochemistry, thyroid function, and lipid levels. The patient was referred to a urologist who deemed him free of any established urological disorder. To accommodate the patient's symptoms, the urologist prescribed ciprofloxacin antibiotic treatment. Nonetheless, said treatment had no effect on his condition.

In addition to work-up tests, the patient underwent various cognitive assessments, in which he performed adequately on indices of intellectual functioning (Raven's Progressive Matrices), cognitive functioning (Folstein Test), and both short-term and long-term memory (Hopkins Verbal Learning Test-Revised). He also performed adequately

on indices of executive functioning (Tower of London, Wisconsin Card Sorting Test, and Verbal Fluency). In a computerized personality measure, the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), the patient scored significantly high on the hypochondriasis and psychasthenia scales. Oppositely, he obtained a significantly low score on the masculinity-femininity scale, which taps into gender role development.

On clinical grounds, pharmacotherapy was instituted according to the literature.⁷ To mitigate the patient's spontaneous semen discharge, as well as to modulate his impaired affective range, dapoxetine treatment was started. Dapoxetine is a selective serotonin reuptake inhibitor, and is the first compound developed specifically for the treatment of premature ejaculation. Other psychotropic medications for anxiety and depression, which were not previously prescribed, were initiated as detailed elsewhere.¹⁶ The patient's distress was unresponsive to the prescribed pharmacotherapy. Consequently, psychotherapy was sought via qualified cognitive behavioral therapy (CBT).¹⁰ CBT assumes that changing maladaptive thinking can lead to changes in cognition (e.g., thoughts, beliefs, and attitudes), behaviors, and emotional regulation.

The approach used with this patient was multifaceted, involving aspects of CBT, acceptance and commitment therapy (ACT), which is a third-generation evolution of CBT that explores how our thoughts can either help or hinder us, mindfulness, and psychoeducation.^{17,18} His preoccupation with inadequacy, depressive cognitions, lack of self-esteem, and doubts concerning his masculinity were addressed with cognitive restructuring and modification of cognitive errors. Cognitive restructuring helped the patient become more aware of his thoughts and feelings, and how they affected his behavior. This acknowledgment ultimately led to the amelioration of his depression. ACT enabled and encouraged the patient to stop fighting his thoughts and feelings, and to recognize, understand, and use these feelings more constructively. The psychoeducational portion of his treatment incorporated sex education and the study of basic human physiology, as well as addressing his religion-based fears that were exacerbating his condition. Lastly, his somatic distress was addressed with emphasis on reversing his selective attention to it.

CBT appeared to have a positive outcome on the

patient's presenting complaints. After approximately two years of follow-up, the patient's preoccupation with semen loss abated, and his occupational competency returned to his premorbid level. Further psychotherapeutic intervention allowed the patient to soon entertain the idea of getting married. Ultimately, after approximately three years of follow-up, the patient informed us that he was free of the distress that initially brought him to our unit.

DISCUSSION

In this Dhat syndrome case study, the patient exhibited dysphoria, anxiety, and somatic complaints. These signs and symptoms fulfill the required criteria as reported by Grover et al,¹¹ in their diagnostic categorization of Dhat syndrome. To our knowledge, distress characterized by a preoccupation with semen loss had not been previously reported in an Arab/Islamic population. It appears that the patient's condition was improved using CBT, which remains consonant with past research.¹⁰ However, the fact that it took approximately three years for the patient's symptoms to abate raises the possibility that recovery might have been spontaneous rather than treatment induced. In fact, Sameer et al,¹⁹ examined the long-term (> 6 years) outcome of "pure" Dhat syndrome, and found that the majority of patients eventually attained full remission of the condition. Future studies should explore how common spontaneous recovery of Dhat Syndrome is.

Our case study suggests that Dhat syndrome is under-recognized among medical professionals in Oman. It is a direct result of this that the patient underwent multiple futile treatments for urinary tract infections and, out of desperation, sought help from traditional healers. In existing psychiatric nomenclature, Dhat syndrome is featured in the section 'Glossary of cultural concepts of the distresses in the DSM-5'.¹ It describes the condition as "anxiety and distress about the loss of *Dhat* in the absence of any identifiable physiological dysfunction" while ICD-10 lists it under "other specified nonpsychotic neurotic disorders" (F48.8).²

In the available literature, three clinical entities - anxiety disorder, depression, and somatoform disorders (e.g., hypochondriasis) - are thought to be integral parts of the condition as described by both the DSM-5 and ICD.^{1,2,20} It is possible that Dhat syndrome is simply an integral part of a yet

unrecognized physical disorder.^{21,22} However, as reported by others,⁷ there is no indication that Dhat syndrome has primary enduring physical symptoms, although reaction secondary to the distress remains plausible. In the present case, the urology examinations were all unremarkable. It had been previously reported that the chlamydia infection can cause penile discharge of a white substance, often necessitating the use of an antibiotic.²³ As previously stated, however, all urology examinations determined unremarkable results. Nonetheless, the patient was prescribed a similar antibiotic regimen, to which his condition remained largely unresponsive.

One of the strengths of our case study is that, unlike previous reports on Dhat syndrome, objective cognitive measures were obtained. While the patient subjectively reported the feeling of tiring easily, poor concentration, and reduced processing speed, he performed adequately on indices of intellectual and cognitive functioning. This suggests that the emotional symptoms reported might be orthogonal to cognitive functioning. In addition, this study examined the possibility that Dhat syndrome might be associated with a specific personality profile or psychopathology. To address such an association, the MMPI-2 was employed. The patient obtained significant results on three subscales of the MMPI-2. Firstly, he scored highly on the hypochondriasis subscale, which implies he had a propensity to react to stress and avoid responsibility through the self-development of physical symptoms despite absence of an actual medical condition. A link between hypochondriasis and Dhat syndrome has been alluded to previously.²⁴ Secondly, the patient obtained an elevated score in the psychasthenia subscale, indicating the continued presence of a state of anxiousness, discomfort, and apprehension, often leading to rumination and feelings of inferiority and insecurity. This disposition is further supported by the patient's obtained score on the masculinity-femininity subscale, which suggests doubtfulness of his masculinity. Preoccupation with eroding masculinity is consistent with the central tenet of Dhat syndrome, where semen loss is equated with the weakening of male power.²²

While the relation of Dhat syndrome to other psychiatric conditions has been proposed, most of the discussion has dwelled on whether the condition is culture-specific or global. Prince and Tcheng-Laroche²⁵ have characterized a number of

interrelated themes relevant in identifying Dhat syndrome as a culture-specific syndrome. One such theme is the recognition that certain cultural groups view semen loss as a manifestation of disease, misfortune or maladaptive behavior, and that this underlying pathology is rooted in sociocultural teaching.²⁵ A second theme is that the categorization of these symptoms as 'distress' in a specific culture is amenable to intervention derived from sociocultural teaching. A third theme, is that a culture-specific syndrome should occur exclusively in a defined geographical area, in which it is widely prevalent.²⁵ It appears that this case study contradicts the present conceptualization of Dhat syndrome being a culture-specific disorder.

Dhat Syndrome has been reported in many other parts of the world, including Spain^{13,14} and has counterparts in other regions, including Shen-k'uei in China¹⁵ and Jiryan in Sri Lanka.¹² According to Sumathipala et al,²⁶ there are sociocultural factors involved in the development of Dhat syndrome that shape the manifestation of its distress. Islam holds a complex view toward semen loss in the instance of masturbation, with some sects condemning it and others condoning it. Ibn al-Qayyim, a 14th century Sunni Islamic scholar, is credited with having stated that: "If a man is torn between continued desire for releasing it, and if this man does not have a wife, and he fears that he will suffer because of this (someone like a prisoner, or a traveler, or a pauper), then it is permissible for him to masturbate".²⁷ While masturbation appears to be either condemned or condoned in Islamic schools of thought, there is evidence that the ordinary Muslim harbors the view that semen loss outside of vaginal intercourse depletes one's 'vital energy'.²⁶ A protracted review on the historical evolution of attitudes towards semen loss, particularly due to masturbation and libidinal dreams, suggests that many societies around the world have abhorred semen loss under the pretext that such an act has the potential to trigger many forms of malady.²⁶ However, with the erosion of puritanical teachings, and the emergence of industrialization and urbanization in many of these areas, the stigma associated with semen loss has dissipated and consequentially, so has the adverse psychological reaction associated with it.¹² The problem with such a view is the tendency to equate 'spontaneous discharge of semen' and masturbation as related phenomena. The situation is further compounded by the fact that

both phenomena tend to produce similar symptoms or complaints. Despite such a caveat, the view that an adverse reaction to semen loss is likely to dissipate with increased urbanization and modernization in many traditional societies,²⁶ means that the distress associated with Dhat syndrome in some populations is more appropriately characterized as a culture reactive syndrome.

CONCLUSION

To our knowledge, this is the first case study of an Omani exhibiting typical features of Dhat syndrome, which was previously thought to be confined to a particular population and geographic setting. The patient was subjected to personality measures, via MMPI-2, on which he obtained significant results on the hypochondriasis, psychastenia, and gender role development subscales. He performed adequately on indices of cognitive and executive functioning. The patient's condition, Dhat syndrome, was impervious to pharmacotherapy but responded well with CBT. Upon marriage, he experienced a full remission of symptoms. This case from Oman challenges the view that Dhat syndrome is a culture-bound distress.

Disclosure

The authors declared no conflicts of interest.

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