

Dhat syndrome: Evolution of concept, current understanding, and need of an integrated approach

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ABSTRACT

Dhat syndrome has often been construed as a culture-bound sexual neurosis of the Indian subcontinent. Symptoms similar to that of Dhat syndrome has been described in other cultures across different time periods. The present paper looks at the evolution of the concept of Dhat syndrome in India. The review also takes an overview of the current understanding of this syndrome in terms of nosological status as a distinct entity and its "culture-bound" status. The narrative finally attempts to discuss the integrated approach for the treatment of this disorder.

KEY WORDS: Culture-bound syndrome, Dhat syndrome, integrated approach

INTRODUCTION

"Dhat syndrome" is a clinical entity, mostly seen in South East Asia, originated, nurtured and carried forward by many orthodox cultural beliefs.^[1] However, it is also reported from many other geographical regions such as – Central Asia, China, Russia, America, and Europe.^[2,3] The patients with Dhat syndrome commonly present with a features of depression, anxiety, multiple nonspecific somatic symptoms, sexual dysfunction, fatigability, and impairment of concentration, which are attributable to semen loss.^[1] Mostly the patients of Dhat syndrome are young males belonging to the rural lower socioeconomic background.^[1,4] Search in "PubMed" using the keyword "Dhat syndrome" revealed only 51 articles, even after more than 40 years of birth of the entity "Dhat syndrome" out of which 31 articles were published in last 10 years. Of these, to note, there is only one systematic review,^[5] and one large multi-centric study,^[6] which was conducted under the aegis of Indian Psychiatric Society. This indicates that Dhat syndrome is poorly studied, though currently it is gradually gaining the interest of researchers.

EVOLUTION OF THE CONCEPT OF DHAT SYNDROME

The term "Dhat" was synthesized from the Vedic depiction of body fluids called

"Dhatu."^[1] Among the seven different body fluids (Dhatu) mentioned in Veda; semen is perceived to be most precious one.^[1] Ancient Ayurvedic literature also mentions genital secretions as highly precious and purified body fluid and emphasizes about its conservation.^[1,7] Ayurveda mentions about the formation of semen by the process of purification and condensation through several steps (from food, through blood, flesh, and marrow).^[1,8]

Not only Hinduism but other religions such as Islam, Buddhism as well as Christianity, also sanction the belief that semen is precious, and its loss may have a harmful effect on the body.^[1] This belief is carried ahead over centuries by traditional healers, who are dealing with such issues since the ancient days.^[1] The concepts were imbibed in such a manner in the culture, that individuals with orthodox views have strong beliefs about different effects on the body due to semen loss.

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In other Asian countries of Sri Lanka and China, the effects of semen loss are described under the names of “Prameha” and “Shen K’uei,” respectively.^[9]

Professor N. N. Wig has coined the term “Dhat syndrome” to the psycho-somatic attribution related to semen loss in 1960.^[10] In those initial days, Malhotra and Wig described Dhat syndrome due to loss of semen through nocturnal emissions or passage in urine.^[11] However, the patients with Dhat syndrome also attributed their symptoms to semen loss through other means such as masturbation, during defecation, and even sexual intercourse.

In the international classificatory systems, for the 1st time Dhat syndrome got a place as a diagnosis entity, in the International Classification of Diseases and Health Related Conditions, 10th Edition (ICD-10) and 4th edition of the Diagnostic and Statistical Manual of Mental Disorders-Text Revision (DSM-IV).^[5]

CURRENT UNDERSTANDING ABOUT DHAT SYNDROME

Current evidences suggest that Dhat syndrome is common among poorly educated males in their second to third decade of life.^[9,11] The features like anxiety, depression, and multiple somatic complaints are the core features of Dhat syndrome, which commonly responds to antianxiety or antidepressant medications, as well as psychological interventions such as psycho-education, counseling, and cognitive behavior therapy.^[9] In a study, it was found that antianxiety medications are more effective than any other medication in the management of Dhat syndrome.^[12] Udina *et al.*, in their systematic review on Dhat syndrome, mentioned about antidepressants as the most commonly used medications.^[5] The treatment effectiveness of antidepressants in Dhat syndrome can be due to the improvement of the symptoms of depression associated with it.^[5]

Though, in the literature, Dhat syndrome is emphasized as an entity seen in males; however, there are evidences regarding existence of similar entity in females and can be said as “Dhat syndrome of females.” In a study on reproductive age females, 40% females’ complaint about vaginal discharge and 32% of these patients attribute their somatic symptoms to vaginal discharge.^[13] Chaturvedi *et al.*, in their study found that females with somatic symptoms more commonly (3.5 times than normal healthy women) mis-attribute their symptoms to physiological vaginal discharge.^[14] Dhat syndrome in females has been subsequently reported in literature through case reports and case series.^[15,16] This entity needs to be studied extensively in females in the coming years. In an epidemiological survey on

South Asian women, Patel *et al.*, found that – reproductive age females attribute psychosocial stressors to be the cause of vaginal discharge.^[17] In South Asian women, vaginal discharge is an over reported symptom with its attribution to other physical and psychological symptoms, possibly due to excessive cultural significance.^[7]

For a long time, there was no formal assessment tool to evaluate for Dhat syndrome. Grover *et al.*, had developed a comprehensive questionnaire for the evaluation of Dhat syndrome.^[18] This instrument has been utilized in a multi-center study in India and has been demonstrated to be applicable across various regions in India.

Before inclusion of Dhat syndrome in the classificatory systems (ICD-10 and DSM-IV), a lot of debate was going on regarding its nosological status, which was expected to end with its inclusion in the classificatory system, but it continued for years together and were still on.^[19-24] In the early days, Dhat syndrome had been struggling to find a place in the classificatory system. Questions were raised regarding its existence as a distinct diagnostic entity. In Dhat syndrome, a unique pattern of symptoms attributed to a unique reason in a unique culture, which established it as a unique culture-bound syndrome. After its inclusion in the classificatory system, questions were raised – whether it was worthy occupying a place in the diagnostic system. Later, many argued that – it can be equivalent to depression and may be used as a specifier of depression or it may be cultural way of manifesting the distress; as a resultant of which it reached the glossary section of DSM-5 describing cultural concepts of distress.^[23-26]

At this point of time, a big question arises – whether Dhat syndrome exists or not? If the answer is no, then where the group of patients diagnosed with Dhat syndrome will fit into? The clinical features of Dhat syndrome have a lot of morphological similarity with – depressive spectrum disorder, anxiety disorder, and somatoform disorder. Hence, the possibility of falling into any one of these categories is more likely. However, the etio-pathogenesis, course, outcome, the target of intervention, and the response to the intervention of Dhat syndrome are quite different from the above three entities as mentioned in Table 1.

Another important fact related to Dhat syndrome is – the etiology of Dhat syndrome is definite (due to loss of semen), and all the symptoms are attributed to semen loss, whereas in depressive spectrum disorders, anxiety disorders or somatoform disorders, there is no single, definite etiological factor that explains the illness entity. Though there is no large study to provide sufficient epidemiological data related to Dhat syndrome, several center-specific studies, case reports, case series were witnessing the existence of

Table 1: Distinction of Dhat syndrome from other related disorders

Characteristics	Dhat syndrome	Depressive spectrum disorder	Anxiety disorders	Somatoform disorder
Vulnerability factors	Male gender Young adults Orthodox culture Low education Low socioeconomic status Personality factors	Female gender Elderly population Family history Low-socioeconomic status Past history of depression Personality factors Loss/bereavement Early life adversities	Positive family history/ past history Personality factors Stress Early life adversities	Female gender Elderly population Family history Low-socioeconomic status Personality factors Loss/bereavement, stress Early life adversities
Stress	Stress is mostly the consequence, but may also be etiological factor	Stress can be the cause, as well as consequence	Stress can be the cause, as well as consequence	Stress can be the cause, as well as consequence
Course	Usually chronic	Episodic to fluctuating May be acute or chronic	Episodic to fluctuating Usually chronic	Fluctuating Usually chronic
Outcome	Depends on the contextual factors	Good	Good	Intermediate
Target of intervention	Sexual myths Explaining the structural and functional aspect of genital system	Cognitive distortions Symptoms of illness Maladaptive behavior pattern Coping skills	Cognitive distortions Coping skills Symptoms of illness Maladaptive behavior pattern	Coping skills Symptoms of illness Maladaptive behavior pattern
Response to intervention	Responds well to anxiolytics, counseling addressing the sexual myths, CBT	Responds well to anxiolytics, antidepressants, ECT, CBT, and other psychotherapies	Responds well to anxiolytics, antidepressants, CBT, other psychotherapies, and behavior therapies	Responds well to anxiolytics, antidepressants, CBT, and other psychotherapies

CBT= Cognitive behavior therapy, ECT= Electroconvulsive therapy

this unique diagnostic entity. Hence, the existence of Dhat syndrome as an independent diagnostic entity cannot be denied.

Subsuming Dhat syndrome under another diagnostic entity such as depression, anxiety disorder, or somatoform disorder may dilute the weight-age of this disorder as an independent clinical entity. This would thwart not only further understanding of the salient characteristics of this condition but also impair the development and delivery of specific interventions for this syndrome. Since this disorder is present in a considerable proportion of individuals from South Asia, addressing the syndrome as a diagnostic entity would help in validating the distinct distress of the sufferers of this condition, and customizing treatment options for them. The second major issue related to Dhat syndrome is whether it should be considered as a culture-bound syndrome? There are evidences regarding the existence of Dhat syndrome in different cultures, and it is not confined within the geographic boundary of India though it is most prevalent in India.^[2,3,9,27,28] It is seen in countries such as – Pakistan, Bangladesh, Nepal, Sri Lanka, China, Malaysia, Indonesia, Japan, America, Russia, Spain, and other European countries besides India.^[2,3,9,27,28] The similar entity is known in different countries in different names. Most of these countries have gross variation in culture and religion. Though there is mixing of culture due to modernization, migration,^[27] and many other ways but is it enough to explain the wide distribution of Dhat syndrome? This is again a debatable issue.

Another way of looking at Dhat syndrome is that it is an abnormal illness behavior of presenting semen loss in the exaggerated form of somatization, as well as heightened emotional (depression and anxiety) response.^[20] The patients with Dhat syndrome go through enormous stress. The development of symptoms of stress is amplified in the presence of stress. At the time of onset of Dhat syndrome, people perceive their genital secretion or semen discharge in a pathological manner; hence give excessive significance to it. Every time they loss semen or have genital secretion they experience stress (as it is not culturally perceived as normal). The stress response gets conditioned with semen loss due to this pathologic way of perceiving, and the vicious cycle goes on. In this conditioning process, the initial stress experience gets amplified with time resulting in exaggeration of psycho-somatic symptoms of Dhat syndrome.^[29] Ranjith and Mohan^[29] had explained Dhat syndrome through the socio-somatic model, emphasizing on the noteworthy interaction of sociocultural factors and psychological factors in the causation of the illness. The relationship of Dhat syndrome to other psychiatric diagnoses and sociocultural influences is shown in Figure 1.

Depression, anxiety disorders, and somatoform disorders are the most common psychiatric co-morbidities as evidenced from earlier studies; however the recent multi-centric study has revealed that sexual dysfunction is associated in more than 50% of patients with Dhat syndrome and is the most common co-morbidity associated with Dhat syndrome.^[6] In this study, approximately 20% patients,

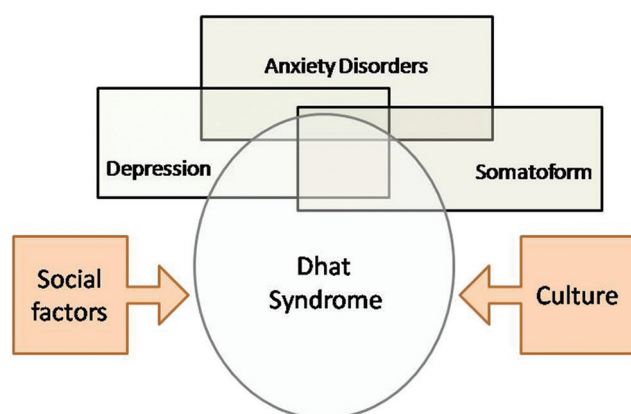


Figure 1: Dhat syndrome

each present with co-morbid depression and neurotic or somatoform disorder.^[6] One-third of patients in this study did not report any other symptoms of psychiatric illness other than Dhat syndrome.^[6]

NEED OF INTEGRATED APPROACH IN DHAT SYNDROME

At present, the patients with Dhat syndrome go to a variety of practitioners, imbibe a variety of information and undergo a range of intervention modalities with or without satisfaction. For a more coordinated management of patients with Dhat syndrome, an integrated approach would be beneficial. Integrated approach for Dhat syndrome can be considered from three different aspects [Figure 2]:

- Integration of psychiatry and allied disciplines (the collaborative approach of psychiatrists, psychologists, psychiatric social workers, psychiatric nurse, etc.). Patients with Dhat syndrome need multifaceted intervention, which could be provided through a team approach
- Integration of other medical disciplines with psychiatry (collaborative approach with other medical disciplines such as – general medicine, dermatology and venereology, urology, and neurology). The patients with Dhat syndrome approach a variety of medical practitioners and specialists with their complaints, who are bewildered about what to do next. Medical practitioners trained in the Western system of medicine do not encounter with Dhat syndrome in their curriculum, which makes their knowledge about the presentation and management of this culture-related disorder deficient. The integrated management would aim to better sensitize the medical fraternity about this disorder and collaboratively treat such patients
- Integration with alternative systems of medicine and traditional healers (collaboration with Ayurvedic, Homeopathic, Unnani, Siddha practitioners). On the face value of it, the modern medical conceptualization

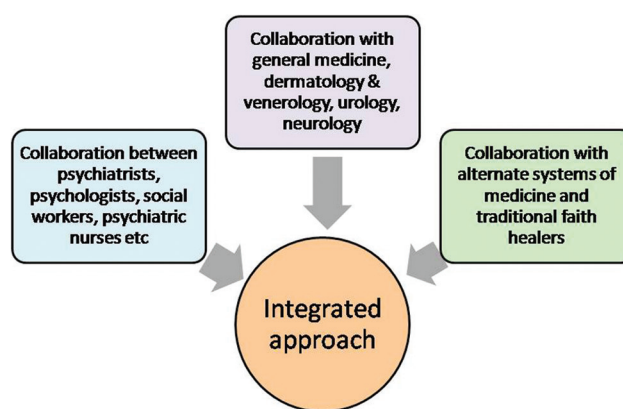


Figure 2: Integrated approach for Dhat syndrome

of Dhat syndrome may seem inimical to the teachings of Ayurveda and Siddha, which emphasize semen conservation. The traditional healers may also find it inimical to their interests, and may view the medical approach with skepticism. The approach here would preferably involve dialog and presentation of an evidence base about the “neurosis” suffered as a consequence of the semen loss. The alternative systems may not be attuned to evidence – base research (which was not common otherwise in the Western system till 50 years back). Yet, the information dissemination into the general public about the condition and constructive dialog with teaching institutes for the alternative medicine may help them downplay the acute emphasis on semen loss as cause of bodily complaints, especially when not proven.

Till date, the majority of patients with psychosexual disorders reach general medical practitioners, practitioners of alternative medicine, and traditional healers, rather than going to a psychiatrist for consultation. The patients with Dhat syndrome before reaching psychiatrist (if at all they reach a psychiatrist) usually go through many other consultations and gather different information related to sexual health, which may be contradicting to each other. It may misguide them and deprive them of getting the right treatment.

Integration with other disciplines will help in delivering a comprehensive, more focused and culturally acceptable, highly effective modality of treatment. At the same time, it will also help in reducing the stigma associated with Dhat syndrome, as well as imparting uniform information, about sexual health. Collaboration with traditional healers may help in breaking the barrier and patients may be referred to appropriate service providers. Even educating the traditional healers may help in resolving the sexual myths that they carry and dissipate to the people in the community.

Integrating sex education to regular educational curriculum may be another approach aimed at dispelling misconceptions prevalent in the community. Explaining about the normal sexual developments, normal anatomy, and physiology of genital system, as well as explaining about the sexual myths, during early adolescence (as this is the time, by which the physiological processes like nocturnal emission start) may be helpful in preventing the emergence of Dhat syndrome. Often, young adults and adolescents do not have adequate avenues of obtaining accurate information about sexual matters, heightening their anxieties pertaining to sexual issues. They are vulnerable to misinformation from lay sources, and imparting appropriate knowledge may allay their concerns and prevent extreme anxiety about semen loss from emerging.

CONCLUSION

Dhat syndrome being a culture-related neurosis mainly in the Indian subcontinent needs to be considered as a specific, distinct disorder, and further research is required to develop culture-specific treatment modalities for the same. Community-based prevalence and risk-factor studies may be helpful in determining the nonclinical cultural vicissitudes of this disorder. An integrated collaborative approach would be helpful for affording better services to the patients.

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Conflicts of interest

There are no conflicts of interest.

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