



# Dhat syndrome: past and present - the journey of an Indian culture-bound syndrome across the globe

## Abstract

Dhat syndrome, originally thought to be a culture-bound syndrome restricted to the Indian subcontinent, has now been found to be spread worldwide. This “semen-loss anxiety” is excessive preoccupation with loss of vitality resulting from loss of semen either through urination, nocturnal emission, or masturbation. Semen has been linked to strength and power in the Ayurveda. The ethno-cultural beliefs of a community are important in shaping the expression of underlying psychological disturbances. In developing countries, the repressed emotions usually find expression through somatic symptoms. The presentations can range from depression, anxiety, fatigability, sexual dysfunction, and other somatic symptoms. Dhat syndrome is akin to *shen-k-uei* in China and Taiwan and *shukra prameha* in Sri Lanka. Even in the seventeenth century west, the nobility distinguished themselves from the common by way of sexual sanctity. This poses a question to the usual assumption that Dhat syndrome arose in the east and was prevalent among the less educated classes only. The lack of understanding of the phenomenology and a deficient universal language of reporting has made it difficult to be placed under any specific category in the diagnostic system. The tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) mentions Dhat syndrome under other unspecified neurotic disorders (F48.8) while the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) mentions it under “the cultural concepts of distress.” A better understanding of the disorder requires a comprehensive approach and integration with allied system of medicine as well as community awareness is required to address this problem.

**Keywords:** Semen. Anxiety. Sexual Dysfunction.

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## INTRODUCTION

The word *dhat* has been derived from the Sanskrit *dhatu*, which means metal. Dhat syndrome or “semen-loss anxiety” is the excessive preoccupation with loss of vitality and strength attributed to semen loss either through masturbation, nocturnal emission, loss through urine or stool. It presents as anxiety, mood symptoms, or somatic symptoms.[1] Though initially thought to be a culture-bound syndrome restricted to the Indian subcontinent, cases of Dhat syndrome have been reported from various countries across the globe.[2] In China, it is known as *shen-k-uei*. In Sri Lanka, it is known as *shukra prameha*. This shows the pervasive and unequivocal nature of the illness.[3] Cross-cultural research has led to the finding that the basic psychopathology in culture-bound syndrome is the same. The symptomatology and natural history depend upon the prevalent belief system relevant to a particular community. In this regard, mention may be made of disorders such as *brain-fag*, *koro*, *bilis*, *hwa-byung*, *neurasthenia*, and *latah* to name a few. They are common in their shared presentation as somatic complaints; hence, often called somatisation.

## HISTORY

The ancient system of evolution of medicine in India has been greatly influenced by Ayurveda, and the meaning attributed to semen by Ayurveda has been inculcated deeply into the psyche of generations that followed. Seven dhatus or tissues has been described in Ayurveda medicine; plasma (*rasa*), blood (*rakta*), muscle (*mamsa*), fat (*medas*), bone marrow (*asthi*), nerve (*majja*), and reproductive tissue (*shukra*). Semen or dhatu has been called the elixir of life. It has also been called *shukra* or *virya*. Whatever be the colloquial term used, the bottom-line is that semen represents vitality and masculinity. It is said that it takes 40 days for 40 drops of food to be converted into blood and 40 drops of blood to be converted into a drop of flesh, 40 drops of which is then converted to drop of fat which is then converted to marrow and this marrow is distilled into semen.[4] Hence, semen loss can be traced back to the ultimate loss of most of the other dhatus as well. Some schools also believe that ejaculation leads to loss of cavernosal blood. The *Charaka Samhita* also mentions about the damage to the dhatus as a result of excessive ejaculation. Hence, semen has been explained to be a concentrate of energy and thus, loss of semen is likened to loss

of energy, in the Indian context. Professor NN Wig has been credited for coining the term Dhat syndrome for the group of symptoms attributed to the semen loss and has recognised it as an important Indian culture-bound syndrome.

## CULTURAL BELIEF SYSTEM AND DHAT SYNDROME

Culture can be called a set of beliefs, norms, and values that are specific to a geographical location and are followed by the collective population in that area.[5] Cultural practices are essential in the understanding of psychological disturbances because it attempts to differentiate the impact of environment and social background in the causation of an illness from biological underpinnings. The ethno-cultural beliefs are important in explaining the symptomatology of culture-bound illnesses, e.g. in the third world countries, where the concept of psychological wellness is yet to be promulgated, psychological disturbances often find their expression in the form of somatic symptoms.[6-8] Dhat syndrome is considered by many authors as a ramification of somatization disorders. There is a pervasive system of cultural beliefs regarding the cause and effect of the illness. People usually attribute the illness to excessive use of pornographic material, betrayal in friendship or love, or excessive longing for sexual relationships. The belief system even incorporates physical ailments such as urinary tract infection (UTI), venereal disease, constipation, dearth of sleep, and overeating to be a cause. In turn, Dhat syndrome is believed to lead to development of malformed foetus, birth of female child, early ageing, and other medical conditions like tuberculosis and leprosy. The ejaculate is thought either to be concentrated urine, pus or concentrated blood. In the olden days, it was also called phosphaturia as phosphate was thought to be lost along with semen. As the perceived cause and effect of the illness is largely unfounded in the cultural context, it is quite customary for the affected population to approach traditional modalities of treatment, such as herbs and aphrodisiacs. It is not uncommon to see *hakims* and *vaidis* advertising claims of cure for this syndrome in pamphlets and hoardings. Some go a step further even to consider marriage to be a cure.[9] Apart from Hindus, it is equally prevalent among the Sikhs in Punjab, the Buddhists in Sri Lanka, and the Muslims in Pakistan.

## VARIOUS PRESENTATIONS AND DEMOGRAPHIC CORRELATES

The presentation in Dhat syndrome varies widely. They include fatigability, anxiety, depressive, or other somatic symptoms. Premature ejaculation and erectile dysfunction are frequent associations.[9] Whether they are presentation of Dhat syndrome or are a part of comorbidity is not yet certain due to the lack of a concrete pathophysiological basis. Some authors like to call it a variant of depressive disorder while few others like to call it a variant of somatization disorder. Patients with the disorder can be divided into the following categories:[10]

1. Dhat alone presents with depressive, anxiety, or hypochondriacal symptoms and these are attributed solely to semen loss.
2. Dhat with comorbid depression and anxiety where Dhat

was considered as accompanying the primary symptoms of mood or anxiety disorder.

3. Dhat with comorbid sexual dysfunction.

Going through review literatures, it can be viewed that Dhat syndrome is mostly prevalent in young males in their second to third decade, who have had little formal years of schooling and those who belong to the rural areas of the Indian subcontinent. Studies have shown that there exists a relationship between the demographic profile and symptomatology. Younger men, lesser years of education, unmarried men report greater anxiety, depressive, and hypochondriacal symptoms compared to their counterparts. It can be assumed that in young males there remains considerable pressure regarding sexuality as they enter into adulthood and this pressure is reinforced by the taboo surrounding discussion about sexuality and proper understanding of the same. Hence, there is little chance of the traditional beliefs to be confronted resulting in an even more firm foothold. The dissipation of these beliefs across cultures and ethnicity can be considered one of the causes of Dhat syndrome being reported from across the globe. However, reports have been there of Dhat syndrome in females as well.[9] They present with unexplained aches, pains, and fatigability attributed to the passage of non-foul smelling, non-itchy vaginal discharge. They would associate relief of the physical symptoms with the diminishing of vaginal discharge just after menstruation and increase in the frequency and intensity of physical symptoms concurrent with increased passage of vaginal discharge. Psychodynamic studies also revealed interpersonal conflicts in few of the reported cases of female Dhat syndrome.[11] As a deviation from the accepted age group of youth which is thought to be affected, childhood masturbation is more common than is apparent and the diagnosis is often difficult. Childhood masturbation has been commoner in girls than in boys and during the episode, flushing, sweating, trunk thrusting, and dystonic posturing may be present. It usually manifests as fatigue and changes in the sleep-wake pattern. Manipulation of the genitals is not always present and epilepsy, colic, and movement disorders need to be ruled out which can pose a diagnostic dilemma. Such reports have been there from the Iranian society where sex outside of marriage is a taboo and the major route of obtaining sexual pleasure is through masturbation. But, the pathophysiology is unexplained and children as young as below one year of age are seen to be affected.[12]

Spilling over from the Indian subcontinent, cases have been reported from countries like Pakistan, Bangladesh, Nepal, Sri Lanka, China, Malaysia, Japan, America, and Russia.[5] *Mardana kamzori* is the generic term used in Pakistan for the illness and has similar presentation. However, cases from Pakistan are underreported for the taboo surrounding sex and the sufferers are seen to approach traditional practitioners of medicine.[13] In this regard, the ubiquity of the illness can be stressed upon.

There is lack of a specific definition or diagnostic criteria for Dhat syndrome. It is loosely termed as excessive concern over semen loss which can happen through various routes. Most authors describe the presenting neurotic complaints as being comorbidities. Depression is most commonly reported

with prevalence ranging from 40-60%. There have been reports of suicidal attempt in patients with Dhat syndrome.[14] Anxiety symptoms are reported in 21-38%. Somatoform and hypochondriacal symptoms are reported in as high as 40%. Other psychiatric comorbidities include obsessive disorders, body dysmorphic disorders, and delusional disorders among others.[15]

## INDIAN CULTURE-BOUND SYNDROME OR UNIVERSAL SYNDROME

The previous assumption that culture-bound syndromes basically arose in the east and are found among the uncivilised can be challenged by the fact that Dhat syndrome has been reported from various parts of the world.[3] In China, shen-k-uei has been described as a kind of sexual neurosis where individuals complain of dizziness, fatigue, and mood symptoms due to loss of semen either by sexual intercourse, masturbation, nocturnal emission, or through urine. Chinese culture holds the belief that women are capable of stealing semen from men and hence, their vitality. There is thus an imbalance between yin and yang which ultimately leads to disease. Various practices were in vogue in order to prevent the loss of yang and gain of yin, i.e. the female sexual energy, e.g. enabling the woman to orgasm and avoiding ejaculation with the penis still inside the vagina, thereby acquiring the released orgasmic energy from the female. Another practice called the *huan ching pu nao* involved positive thinking to help semen ascend up to the brain and bring vitality to other body parts. Similar cases of shen-k-uei have been reported from Taiwan. In Sri Lanka, shukra prameha has been described as being similar to Chinese shen-k-uei.

Semen and virility has been linked from the time of Hippocrates and Aristotle. In the western culture too, loss of semen by means other than sexual intercourse with a woman has been embodied as sinful, even accountable for death sentence. In the seventeenth century, in the west, the middle class began distinguishing themselves from the nobility and the poorer section through their way of sexual sanctity while promiscuity was thought to be rampant in the other two classes. As there was rise of the bourgeoisie as the ruling class through sheer dint of hard work, they were orthodox with regards to their sexual habits. They viewed masturbation and semen loss with contempt and considered it an unnecessary waste of energy. However, the aristocratic class who rose in order by way of inheritance seemed to be less stringent regarding the same because it seemed they had easy affluence[16] and had very little to lose. During this time, Tissot's *A Treatise on the Disease Produced by Onanism* was published linking masturbation to disease. Simultaneously, masturbatory hysteria developed and anti-masturbatory campaigns were undertaken and semen loss was considered to be detrimental to the masculinity of men, posing a serious threat to social order. Masturbatory habits marked a loss of control over instinctual urges and posed as derogatory to one's masculinity.[17] Graham[18] viewed semen as the essential oil of animal liquors required for optimal mental and biological functioning. Reverend Sylvester Graham and John Harvey Kellogg were of the opinion that masturbation is detrimental to health and each time a male ejaculates, he loses vital energy and origin of Graham crackers and Kellogg's

Corn Flakes can be traced back to their belief to curb one's desire to masturbate. However, in ancient Rome and Greece, sexual expression and satisfaction was treated as being natural and necessary akin to hunger and thirst. Perhaps, the reason behind the concern over semen loss across cultures is the innate purpose of humans to procreate and populate the earth. This apprehension can thus be rooted back to a threat to survival and the dwindling away of human race.

## CONTROVERSIES

India, in the Vedic age, was liberal in sexual expression. *Kama sutra*, written somewhere between the first and the sixth century mentions the three pillars of Hinduism: *dharma* (religious duties), *artha* (worldly welfare), and *kama* (sensual aspects). The carvings in the Ajanta Ellora caves and the open depiction of female nudity through art and sculpture in South India point towards liberalism. The Indian civilisation had seen a significant change in appreciation of sexuality over the years. After colonisation by the British, a significant change of attitude was observed with the rigid Victorian values dominating the scenario. The earlier more rational and open mindedness towards the expression of sexual instincts had given way to more rigid and conservative approach.[19] A collateral change in the culture-specific beliefs can be postulated hinging on it. For example, Dhat syndrome came into being along with the development of a more orthodox face of sexuality in India. Again, in the western world, there has been a reverse in the scenario. Syndromes akin to Dhat had been described in literature from yesteryears when discussions related to sex were a taboo. However, in the years that followed, with the more rational understanding the reports of sexual neurosis had become infrequent. However, the west is not immune to culture-bound syndromes. Anorexia nervosa is considered a western culture-bound syndrome. The demands of specific occupation such as ballet, swimming, or acting require a lean frame. Also, some religion like the Gnostic sect of Christianity used to practice self-starvation as a form of asceticism and for attaining salvation by suppressing the natural phenomena of hunger and gaining control. They used to term it "Holy Anorexia". Moreover, the unnecessary hype created by the media regarding the perfect physique has led to more and more people falling victims to it.[20] Earlier considered exotic to the west, anorexia nervosa is now spreading across the globe with more and more cases being reported from India and Asia at large. This can be attributed to the intermingling of cultures and traditions as the world is being transformed into a global village through better means of communication and information exchange. In the same manner, the once considered "neurosis of the orient", Dhat syndrome permeated across culture and geography with cases being reported from across the globe.

## CURRENT NOSOLOGY

Dhat syndrome has been mentioned under other unspecified neurotic disorders (F48.8) in the International Statistical Classification of Diseases and Related Health Problems (ICD-10).[21] Other conditions placed under the same heading are koro (anxiety that penis will retract into the abdomen and cause death), latah (imitative and automatic response behaviour), occupational neurosis, including writer's cramp, psychasthenia, psychasthenia neurosis, and psychogenic

syncope. All of them have a strong cultural underpinning and hence, steer clear of the classification of delusional disorders. The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) explains the disorder under “the cultural concepts of distress”.[22] The fourth edition of DSM (DSM-IV) has mentioned culture bound syndrome only in the appendix as “recurrent locality specific patterns of aberrant behavior and troubling experience that may or may not be linked to particular DSM-IV category”.[23]

The placement of culture-bound syndromes in a specific category in the DSM or ICD system of classification is problematic not only due to a lack of understanding of the phenomenology of these syndromes but also due to absence of a common language of reporting the symptoms. Such syndromes are geographically and culturally restricted and though certain common symptomatology exists between them, to put into an international system of classification is a hefty challenge. Another major hurdle is the distinction of “essential” from “accessory” symptoms. Different schools have different views regarding whether Dhat syndrome is an entity in itself with comorbid appearance of depressive and anxiety symptoms or it is an extension of these neuroses. This is another limitation. Moreover, the natural course and outcome is yet to be defined.[15] According to Guarnaccia and Rogler,[24] the following four fields are to be explored in any research on culture-bound syndromes:

1. A definition of the illness together with a phenomenological outline needs to be laid down.
2. The social, cultural, economic, spiritual, or situational events that predisposes, precipitates, or propagates the illness needs to be described.
3. It has to be examined whether these culture-bound syndromes are psychiatric disorders at all or if there is any relationship with other psychiatric disorders.
4. If a culture-bound syndrome and a psychiatric disorder coexist, the link between onset of both, the natural course of both, and the influence of one disorder on the other in the natural history is to be looked into.

## FUTURE DIRECTIONS

A better handling of this sensitive disorder requires an integrated approach. Integration with the traditional system of medicine, with allied health professionals as well as with other disciplines is necessary to tackle it at the root. The importance of constructive education and imparting sex education at schools cannot be overemphasised. Proper education would prevent the quacks from victimising the ignorant sufferers. Research opportunities exist in the cross-cultural validation of the disorder and identification of the pathophysiology.

## REFERENCES

1. Grover S, Gupta S, Avasthi A. Psychological correlates and psychiatric morbidity in patients with Dhat syndrome. *Indian J*

- Psychiatry. 2015;57:255-61.
2. Prakash O. Lessons for postgraduate trainees about Dhat syndrome. *Indian J Psychiatry*. 2007;49:208-10.
3. Sumathipala A, Siribaddana SH, Bhugra D. Culture-bound syndromes: the story of dhat syndrome. *Br J Psychiatry*. 2004;184:200-9.
4. Akhtar S. Four culture-bound psychiatric syndromes in India. *Int J Soc Psychiatry*. 1988;34:70-4.
5. Kar SK, Sarkar S. Dhat syndrome: evolution of concept, current understanding, and need of an integrated approach. *J Hum Reprod Sci*. 2015;8:130-4.
6. Baasher TA. The influence of culture on psychiatric manifestations. *Transcult Psychiatry*. 1963;15:51-2.
7. Barsky AJ, Borus JF. Functional somatic syndromes. *Ann Intern Med*. 1999;130:910-21.
8. Helman CG. Culture, health and illness: an introduction for health professionals. 2nd ed. London: Wright; 1990.
9. Prakash S, Sharan P, Sood M. A study on phenomenology of Dhat syndrome in men in a general medical setting. *Indian J Psychiatry*. 2016;58:129-41.
10. Avasthi A, Nehra R. Sexual disorders: a review of Indian research. In: Murthy RS, editors. *Mental health in India (1995-2000): people's action for mental health*. Bangalore, India; 2001:42-53.
11. Grover S, Kate N, Avasthi A, Rajpal N, Umamaheswari V. Females too suffer from Dhat syndrome: a case series and revisit of the concept. *Indian J Psychiatry*. 2014;56:388-92.
12. Tashakori A, Safavi A, Neamatpour S. Lessons learned from the study of masturbation and its comorbidity with psychiatric disorders in children: the first analytic study. *Electron Physician*. 2017;9:4096-100.
13. Khan N. Dhat syndrome in relation to demographic characteristics. *Indian J Psychiatry*. 2005;47:54-57.
14. Bhuyan D, Nayek S. A case of Dhat syndrome presenting with suicidal attempt. *IOSR J Humanities Soc Sci*. 2016;21(4):76-8.
15. Deb KS, Balhara YP. Dhat syndrome: a review of the world literature. *Indian J Psychol Med*. 2013;35:326-31.
16. Crossman, A. Overview of the history of sexuality [Internet]. ThoughtCo. 2017 Jul 8 [cited 2017 Nov 6]. Available from: <https://www.thoughtco.com/history-of-sexuality-3026762>.
17. Garlick S. Masculinity, pornography, and the history of masturbation. *Sex Cult*. 2012;16:306-20.
18. Graham S. A lecture to young men, on chastity. Providence, RI: Weeden and Cory; 1834.
19. Chakraborty K, Thakurata RG. Indian concepts on sexuality. *Indian J Psychiatry*. 2013 Jan;55(Suppl 2):S250-5.
20. Banks CG. 'Culture' in culture-bound syndromes: the case of anorexia nervosa. *Soc Sci Med*. 1992;34:867-84.
21. World Health Organization. The ICD -10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.
22. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Association; 2013.
23. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Text rev. Washington, DC: American Psychiatric Association; 2000.
24. Guarnaccia PJ, Rogler LH. Research on culture-bound syndromes: new directions. *Am J Psychiatry*. 1999;156:1322-7.

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