# Indian Journal of Health, Sexuality & Culture



#### **Advisor**

**Dr. Santosh Kumar Mishra**, MD (O & G) Sanjita Maternity Care & Hospital, Plot No-1 Ekamra Marg, Unit-6, Bhubaneswar-751001 E mail- drskmishra@rediffmail.com

### **Editorial Advisory Board Members**

**Dr. Adarsh Tripathi**, MD (Psychiatry)
Associate Professor
Department of Psychiatry, KGMU, Lucknow, UP
E mail- dradarshtripathi@gmail.com

**Dr. Bandna Gupta**, MD (Psychiatry) Associate Professor Department of Psychiatry, KGMU, Lucknow, UP E mail- drbandna@yahoo.in

#### **Executive Editor**

**Dr. Sujit Kumar Kar**, MD (Psychiatry)
Associate Professor
Department of Psychiatry, KGMU, Lucknow, UP
E mail- drsujita@gmail.com

#### **Editorial Board Members**

**Dr. Saumya Ranjan Mishra**, MBBS, MPH Indian Institute of Sexology, Sanjita Maternity Care & Hospital, Plot No-1, Ekamra Marg, Unit-6 Bhubaneswar-751001 E mail- sexualityinfo@gmail.com

**Dr. Maheswar Satpathy**, PhD (Psychology) Assistant Professor Department of Psychology, Utkal University Vani Vihar, Bhubaneswar, Odisha E Mail- maheswarsatpathy@gmail.com

Dr. Lalatendu Swain, MD (Anatomy)
Associate Professor
Department of Anatomy, Govt. Medical College
& Hospital, Balasore, Odisha
E mail- lalatenduswain1975@gmail.com

Dr. Samir Anil Singru, MD (PSM)
Associate Professor
Department of Community Medicine, SKNMC
Narhe, Pune, Maharashtra
E mail- psmsamir@gmail.com

**Dr. Satyajit Panda,** MCh (Neuro-Surgery) Consultant Neurosurgeon MAYO Medical Centre, Lucknow, UP E mail- drsatyajitpanda@gmail.com

**Ms. Meha Jain**, MPhil (Psychology) Child Psychologist AIIMS, Patna, Bihar E mail- jainmeh@gmail.com

### **Publication Editor**

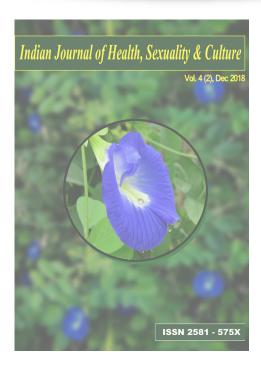
**Dr. Saumya Ranjan Mishra**, MBBS, MPH Indian Institute of Sexology, Sanjita Maternity Care & Hospital, Plot No-1, Ekamra Marg, Unit-6, Bhubaneswar-751001

E mail- sexualityinfo@gmail.com



The ancient world conceptualized health with limited support evidences. Most of the concepts were based experiences, observations and assumptions. Conceptualization about various aspects of health have been changed over centuries. It is not a claim of the modern medicine nor a blame to the ancient medicine; the changes in conceptualization about various aspects of health is rather attributable to the evolutionary process. Since, ancient times body fluids gained interest of people, who practiced medicine. Hippocrates, who is recognized as the father of medicine had given emphasis to four body fluids/secretions (Blood, Phlegm, Yellow Bile and Black Bile) as the attribute to well-being as well as psychological characteristics of individuals. These four body fluids were classically known as 'four humors'. Ancient literature has also given significance to genital secretions and semen. Importance of semen has been clearly emphasized in the ancient texts as an attribute to physical and psychological well-being and strength. As semen is a symbol of survival of the race through procreation, it might have gained the attention of intellectuals of ancient times, who might have glorified its importance and emphasized on its preservation.

Semen loss was mostly perceived in the perspective of illness in the ancient medicine. Even the normal physiological process got an illness label due to propagation of myths related to semen and its health implications.



Please send your article for June 2019 issue of IJHSC. Your article should reach us by 31st March 2019. For standard article format please visit www.iisb.org.

If you have any comments or suggestions, please share with us.

Write a mail to

sexualityinfo@gmail.com

or drop a letter to

Indian Institute of Sexology,

Sanjita Maternity Care & Hospital, Plot No-1, Ekamra Marg, Unit-6, Bhubaneswar-751001, Odisha, India. Though the condition is common in the Indian as well as many South East Asian countries and being treated by traditional healers and general practitioners since centuries, it caught the attention of researchers and systematically studied after Prof. N. N. Wig described it as 'Dhat Syndrome' in 1960s.

Since the term 'Dhat Syndrome' was coined, researchers attempted to study various aspects of this condition. Most of the existing researches are conducted over past two decades. Till date a single systematic review and a single long term follow up study exist on 'Dhat Syndrome'. There is no randomized control trial conducted among patients with 'Dhat Syndrome' to analyse the treatment effectiveness. Similarly, there is no standard diagnostic criteria as well as treatment protocol for patients with 'Dhat Syndrome'. Existing research mostly focus on the phenomenology, co-morbidities, belief systems, pathway of care and help seeking behaviour in patients. There are limited studies to explore the course & outcome, diagnostic stability and efficacy of various management strategies.

As 'Dhat Syndrome' is discussed in the context of South East Asian population and always seen as a culture specific phenomenon with overlapping phenomenology with various neurotic disorders, it is struggling to get a valid position in the current diagnostic system. However, considering it's prevalence in a population that roughly covers one fourth of the global population, it becomes an important diagnostic entity worthy for detailed and extensive research. More systematic researches on 'Dhat Syndrome' will give us better insight to the illness and enable us to formulate its remedy.

Dr. S.K. Kar 1st December 2018

The contents and views reflected in the articles are of the respective authors. IISB is not responsible for any controversy or any intellectual property right infringement.

## <u>Contents</u>

- 4 Historical Perspective of Dhat Syndrome: A Brief Overview Dr. Kshirod Kumar Mishra | Dr. Pritha Roy
- 8 Current Nosology of Dhat Syndrome and State of Evidence
  Dr. Vivekanandan Kavanoor Sridhar | Dr. Karthick Subramanian | Dr. Vikas Menon
- 15 Pathways to Care for Dhat Syndrome Dr. Amit Singh
- 19 Approach to A Case of Dhat Syndrome Dr. Jai Singh | Dr. Adarsh Tripathi
- 25 Management of Dhat Syndrome: An Overview Dr. Rekha H.G | Dr. Sameer Belvi Mangalwedhe
- 29 Dhat Syndrome among Females: Is There Enough Evidence?
  Dr. Mukesh Kumar Swami
- 32 Ayurvedic Concept of Semen Dr. Saroj Kumar Sahu
- Therapeutic Implication of Associated Co-morbidities in Dhat Syndrome: A Case Report Dr. Shubha Joshi | Dr. Amardeep Patel
- 39 Prof. N. N. Wig & His Contribution to Understand Dhat Syndrome Dr. Sujit Kumar Kar | Dr. Saumya Ranjan Mishra

## Historical Perspective of Dhat Syndrome: A brief overview

## Dr. Kshirod Kumar Mishra<sup>1</sup> | Dr. Pritha Roy<sup>2</sup>

- 1. Professor & HOD, Department of Psychiatry, Mahatma Gandhi Institute of Medical Sciences, Sevagram, Maharastra
- 2. Senior Resident, Department of Geriatric Mental Health, King George's Medical University, Lucknow, Uttar Pradesh

## Abstract

'Dhat syndrome' is considered as one of the culture-bound phenomenon in South East Asia. Historically, it was also seen in China, Japan, Russia, America and Europe in early 19th century. Cultural basis of this illness was emphasized by Dr N.N. Wig in 1960's. It has been introduced in classification system ICD 10 (1992) & DSM-IV (1994). Since then several debates are going on regarding its nosological status. The condition of semen loss anxiety has been more or less abolished from the western culture which has been attributed to rapid urbanization & industrialization but it continues to retain a place in South Asian countries as a culture bound phenomenon.

#### Introduction

Yap in 1962 used the term 'atypical culture bound psychogenesis psychosis' to the several conditions, which had connection to the cultural belief system of the community [1]. Later, he abbreviated that to culture bound syndrome [2]. Those conditions were causing little harm to the humanity though they throw light on the little understood aspect of the human functioning [3]. The sufferer used to have unpredictable chaotic behavior and were considered uncivilized. The link between cultural belief system and environmental state was overlooked in western diagnostic system [4].

Culture bound syndromes have been described in various names viz: ethnic psychosis, ethnic neurosis, historical psychosis, exotic syndrome etc [2,5,6]. Though once upon a time, culture bound syndromes were essentially considered as illness of eastern world, several western conditions have been discussed under the culture bound syndrome viz: type A behavioral pattern in which an individual chronically experiences a feeling of struggle against time, gets easily frustrated and aggressive at not achieving set targets; alongwith being highly ambitious and easily impatient in interpersonal relationships [7]. The entity of Bulimia Nervosa was described by Littlewood, as a western culture-bound syndrome [8].

## Dhat from Indian/Ayurveda perspective

The term 'Dhat' comes from the Sanskrit word 'Dhatu' that means 'metal and elixir or constituent part of the body'. Of the seven 'Dhatus' constituting our body, 'Shukra Dhatu' (semen) has been ascribed the most importance. Even ancient Vedic literature depicts 'Sukra' as the 'force of life' [9].

Ayurveda elaborates a multistep process for formation of semen - 40 drops of food being converted to 1 drop blood, in turn, 40 drops of blood to 1 drop of flesh, then, 40 drops of flesh forming 1 drop of marrow, and finally, 40 drops of marrow culminating into a drop of precious semen [10]. More importantly, semen is described to contribute to physical strength, beauty as well as intelligence and memory of an individual. Further, loss of semen has been ascribed to loss of mental happiness, vigor and memory disturbances. There is mention of some substances and foods in Ayurveda that can increase libido as well as specific foods and behaviors those are to be avoided so as to prevent semen loss and preserve sexual potency [11]. The texts also prescribe restriction of sexual intercourse with advancing age of an individual as this can aggravate physical weakness, breakdown of vitality and result in serious ailments and even death [12].

In the Sushruta Samhita, 'Dhat' has been described as the most concentrated, perfect, and powerful substance of the body, preservation of which is vital for a healthy life [13].

The Charaka Samhita has also mentioned about loss of semen/ semen-like substances in the urine under different terminologies e.g. Shukrameha (semen in urine), Suklameha (white substance in urine) and Sitameha (sweet and cold urine) [14].

As per the Charaka Samhita, excessive sex, having sex with impassionate women, intense sexual urges, obstructing the ejaculation of semen and black magic might cause deterioration of sexual performance. Suppression of natural urges (e.g., defecation and urination) might obstruct the natural flow of semen and,

further, ejaculation of this semen which was obstructed as a result of inhibition of natural urges, would result in fatigue and tiredness (Avasadi) [13]. Prolonged semen obstruction (Veeryavarodha) as well as semen loss (Sukra Kshya) were also attributed to loss of libido and impotency [9,11].

The 'Kama Sutra' written in the 300 A.D. by Vatsayana also had details about traditional and cultural attitude towards semen loss and also emphasized the importance of semen in maintaining the health of an individual [15]. Naturally, loss of the vital fluid-semen- results in morbid anxiety, fear, sadness and other psycho-somatic symptoms.

## Semen loss from western perspective

Hippocrates and Aristotle consider semen extremely important for the healthy life of a human. Galen described symptoms following semen loss which were similar to that of 'Dhat syndrome' [16]. According to Talmudik's writings, masturbation was considered as a criminal act, punishable with death penalty. Semen loss was feared even in Jewish and Christian religious texts. Boulaguh hypothesized this fear may be attributed to the belief that unexpected and improper loss of semen may lead to decrease in the population of a particular tribe [17]. Tissot in 19th century, described the symptoms of semen loss like - clouding of ideas, decay of bodily powers, pimples on the face, acute pain in the head, reduction in the power of generation, and even madness, which are similar to the symptoms of 'Dhat syndrome'. Tissot's writing lead the Western world into a stage of masturbating insanity [18]. Benjamin Rush, the father of American psychiatry described in his writings that careless indulgence in sex leading to seminal loss manifest in weakness, impotence, dysuria, dyspepsia, vertigo, hypochondriasis, loss of memory, myalgia, and even death [19]. According to Graham, one ounce of semen loss was equivalent to loss of several ounces of blood, that results in symptoms of headache, impaired vision, memory loss, epilepsy, and insanity. His belief was similar to that described in Ayurveda [20]. Kellogg attributed the symptom complex of priapism, piles, rectal

prolapse, varicocele, and testicular atrophy to the seminal loss. He further developed his cereals as a remedy for the adverse effects of masturbation [21]. George Beaney described sleep disturbances, erotic dreams, confusion of mind, wakefulness, depression, impotency and irritation of bladder as the consequences of masturbation and spermatorrhoea. Darby further recommended circumcision as a treatment to reduce sexual urges and a cure for spermatorrhoea [22].

## Semen loss from Chinese perspective

Shen-K-wei (kidney deficiency), a form of sexual neurosis among Chinese, is caused by loss of excessive semen as a result of masturbation, frequent intercourse, nocturnal emissions or passage of white and turbid urine, supposedly containing semen. In the 80s, Wen & Wang defined Shen-K-Wei as deficiency of kidney where kidney is considered to be the reservoir of semen [23]. Young people in China who used to think they are suffering from Shen-K-Wei used to suffer from dizziness, back pain, easy fatigue, weakness, and insomnia, which are usually seen in 'Dhat syndrome'. The concept of anxiety associated with semen loss, in Chinese literature, was related to Koro (culture bound syndrome, symptoms of hypersexuality and impotence). Similar symptoms among Cantonese patients in Hong Kong were also reported by Yap [24]. Tseng conceptualised semen as the essence of energy, excessive excretion of which produced weakness [25].

## Seminal work of Dr. Wig

Late Dr. N. N. Wig described about 'Dhat syndrome' in 1960, characterized by vague somatic symptoms of fatigue, physical weakness, anxiety, decreased appetite, guilt feelings and sexual dysfunction, attributed to semen loss through urine, in nocturnal emission or through masturbation [26]. Malhotra & Wig described 'Dhat syndrome' as a 'sex neurosis' of the Orient [27]. The continuing effort of Dr. Wig made a place for 'Dhat syndrome' both in ICD-10 and DSM-IV [28, 29]. 'Dhat syndrome' is commonly encountered among the poorly

educated males in there 2nd and 3rd decade of life [27,30]. There is a continuing debate on the nosological status of 'Dhat Syndrome' till date[31,32]. In the process of continuing debate it got place in the glossary section of DSM-5 in the cultural concept of distress [33].

## Dhat syndrome in females

Dhat syndrome is no more a culture bound phenomenon restricted to males. Similar symptoms of weakness and somatic symptoms have been described among females also following vaginal discharge [34]. Chaturvedi et al., in their study described female with somatic symptoms, who misattributed these symptoms to physiological vaginal discharge [35,36]. In a study by Patel et al., among South Asian women of reproductive age group, females attributed psychosocial stressors as the cause for vaginal discharge leading to other somatic symptoms similar to Dhat syndrome [37].

## Conclusion

Sumathipala and Siribaddana in their seminal paper 'Culture-bound syndromes: The story of Dhat syndrome' discussed semen loss anxiety in Western subcontinent from a historical perspective and their seminal work in semen loss anxiety is primarily reported from South Asia [14]. In the West, this kind of symptomatology was mainly reported back in the 19th century. Prevalence of similar symptoms had been noted around the same century in Europe, USA and Australia. While in India, elaboration of these symptoms existed even in the Ayurvedic era. They hypothesized that semen loss anxiety in the West diminished with industrialization and urbanization. They hope same to happen in Southern Asia. They further go on to conclude 'Dhat syndrome' as not a Culture-bound syndrome and certainly, not as an 'exclusive exotic neurosis of the Orient'. It has been almost 60 years when Dr. Wig described it as an exotic neurosis of the orient and more than a decade since the review by Sumathipala et al., still, semen loss anxiety continues to grow an entity not only in males, but also in females of the South Asian countries.

This article is dedicated in the memory of Late Prof. Dr. N.N. Wig for whom Dhat Syndrome got a place in the International Classificatory System.

#### References

- [1] Yap PM. Words nd things in comparative psychiatry, with special reference to the exotic psychoses. Acta Psychiatr Scand. 1962;38:163.
- [2] Yap PM. The culture bound syndromes. In: Cahil W, Lin TY (eds). Mental Health Research in Asia and The Pacific. East— West Centre Press, Honolulu, 1969; 33–53.
- [3] Murphy HBM. Notes for a theory of latah. Cult Bound Syndr Ed W Lebra. 1976;3–21.
- [4] Bhugra D, Jacob KS. Culture bound syndromes. Troubl Disguises. 1997;296–334.
- [5] Devereux G. Normal and abnormal: the key problem of psychiatric anthropology. 1956.
- [6] Arieti S. Rare, unclassifiable, collected and exotic syndromes. Am Handb Psychiatry. 1959;1:525–551.
- [7] Hughes CC. The culture bound syndromes and psychiatric diagnosis. Cult Psychiatr Diagn DSM-IV Perspect Wash DC APA. 1996;298–308.
- [8] Littlewood R. Cultural comments on culture bound syndromes: 1. Cult Psychiatr Diagn DSM–IV Perspect. 1996;309–312.
- [9] Dudhmal A, Mokashi M, Sawant B, Thakur S, Bakre S. Herlekar. Klaibya: Ayurvedic concept of erectile dysfunction. Natl J Ayur Altern Med. 2012;1:157–62.
- [10] Bhugra D, Buchanan A. Impotence in ancient Indian texts: Implications for modern diagnosis. Sex Marital Ther. 1989;4(1):87–91.
- [11] Asha MR, Hithamani G, Rashmi R, Basavaraj KH, Rao KJ, Rao TS. History, mystery and chemistry of eroticism: Emphasis on sexual health and dysfunction. Indian J Psychiatry. 2009;51(2):141.
- [12] Byadgi PS. Concept of immunity in Ayurveda. J Appl Pharma Sci. 2011;1:21–4.
- [13] Prakash O, Kar SK, Rao TS. Indian story on semen loss and related Dhat syndrome. Indian J Psychiatry. 2014;56(4):377.
- [14] Sumathipala A, Siribaddana SH, Bhugra D. Culture-bound syndromes: the story of dhat syndrome. Br J Psychiatry. 2004;184(3):200–9.
- [15] Avasthi A, Grover S, Jhirwal OP. Dhat syndrome: A culture-bound sex related disorder in Indian subcontinent. Sex Transm Infect. 2012;2:1225–30.
- [16] Harkins PW, Riese W. Galen on the Passions and Errors of the Soul. The Ohio State University Press; 1963.
- [17] Bullough VL. Sexual variance in society and history. 1976.
- [18] Tissot SA. Onanism, or aTreatise on the Diseases Produced by Onanism (trans. A. Hume). Lond Pridden. 1766.
- [19] Rush B. Medical Inquiries and Observations Upon the Diseases of the Mind in 1812. 1812.

- [20] Graham S. A Lecture to Young Men on Chastity: Intended Also for the Serious Consideration of Parents and Guardians. GW Light; 1838.
- [21] Kellogg JH. Plain facts for old and young. IF Segner; 1882.
- [22] Darby R. A source of serious mischief. In: Understanding Circumcision. Springer; 2001; 153–97.
- [23] Wen J-K, Wang C-L. Shen-k'uei syndrome: a culture-specific sexual neurosis in Taiwan. In: Normal and abnormal behavior in Chinese culture. Springer; 1981; 357–69.
- [24] Yap PM. Koro—a culture-bound depersonalization syndrome. Br J Psychiatry. 1965;111(470):43–50.
- [25] Tseng W-S. The development of psychiatric concepts in traditional Chinese medicine. Arch Gen Psychiatry. 1973;29(4):569–75.
- [26] Wig NN. Problems of mental health in India. J Clin Soc Psychiatry. 1960;17:48–53.
- [27] Malhotra HK, Wig NN. Dhat syndrome: A culture-bound sex neurosis of the orient. Arch Sex Behav. 1975;4(5):519–28.
- [28] santé O mondiale de la, Organization WH, Staff WHO, WHO. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Vol. 1. World Health Organization; 1992.
- [29] Frances A, Pincus HA, First MB. Diagnostic and statistical manual of mental disorders: DSM-IV. American Psychiatric Association Washington DC; 1994.
- [30] Mehta V, Abhishek De CB. Dhat syndrome: a reappraisal. Indian J Dermatol. 2009;54(1):89.
- [31] Chadda RK. Dhat syndrome: Is it a distinct clinical entity? A study of illness behaviour characteristics. Acta Psychiatr Scand. 1995;91(2):136–9.
- [32] Kattimani S, Menon V, Shrivastava MK. Is semen loss syndrome a psychological or physical illness? A case for conflict of interest. Indian J Psychol Med. 2013;35(4):420.
- [33] Prakash S, Mandal P. Is the DSM-5 position on dhat syndrome justified? Asian J Psychiatry. 2014;12:155–7.
- [34] 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(4):388.
- [35] Chaturvedi SK. Psychaesthenic syndrome related to leukorrhoea in Indian women. J Psychosom Obstet Gynecol. 1988;8(1):67– 72.
- [36] Chaturvedi SK, Chandra PS, Issac MK, Sudarshan CY. Somatization misattributed to non-pathological vaginal discharge. J Psychosom Res. 1993;37(6):575–9.
- [37] Patel V, Pednekar S, Weiss H, Rodrigues M, Barros P, Nayak B, et al. Why do women complain of vaginal discharge? A population survey of infectious and pyschosocial risk factors in a South Asian community. Int J Epidemiol. 2005;34(4):853–62.

## Current Nosology of Dhat Syndrome and State of Evidence

Dr. Vivekanandan Kavanoor Sridhar' | Dr. Karthick Subramanian<sup>2</sup> | Dr. Vikas Menon<sup>3</sup>

- 1. Senior Resident, Department of Psychiatry, Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry
- 2. Assistant Professor, Department of Psychiatry, Mahatma Gandhi Medical College & Research Institute, Puducherry
- 3. Associate Professor, Department of Psychiatry, Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry

## Abstract

The nosological status of 'Dhat syndrome' is unclear. The Diagnostic and Statistical Manual of Mental Disorders -5th edition (DSM-5) has withdrawn the separate diagnostic status given to 'Dhat syndrome' in the earlier versions and looks at Dhat syndrome as a culturally influenced method of expressing distress. Small variations in presentations noticed across cultures may thus be explained as a function of cultural influences. This is perhaps, contrary to the traditional reliance on descriptive psychopathology and clinical phenomenology as the fulcrum of nosology and diagnosis in psychiatry. The present article does not aim to provide an exhaustive review of 'Dhat syndrome'. Instead, it looks at the current nosological status of 'Dhat syndrome' from a clinical, phenomenological, psychopathological and diagnostic stability standpoint. It is hoped that these insights will contribute to a more informed nosological framework for culture bound syndromes in general and 'Dhat syndrome' in particular.

## Introduction

Culture has a major impact on human mind and behavior. Dhat syndrome has been included under Culture Bound Syndromes (CBS) in Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV. CBS refer to "recurrent locality specific patterns of aberrant behavior and troubling experience that may or may not be linked to a particular DSM-IV category" [1]. DSM-5, however, prefers the term Cultural Concepts of Distress (CCD) which encompasses three related constructs: cultural syndromes, cultural idioms of distress and cultural explanations of distress or perceived causes [2]. Many researchers have suggested that the term CBS may be a harmless misnomer at best (as many of them have cross-cultural applicability) or a misleading moniker at worst (as the term suggests that it may be relevant only in some cultures reducing the global interest to include it meaningfully in the classificatory systems) [3].

The nosological status of 'Dhat syndrome' remains unclear. Several arguments have been raised; that it may be subsumed under depression, or that it may be a culturally appropriate way to express distress

and that it may not merit a separate diagnostic category. Classification of a condition helps in understanding it better and also spurs research into its biological correlates which has the potential to further validate its diagnostic status. Both DSM-IV [1] and DSM-5 [2] have included Dhat syndrome under appendix while the International Classification of Diseases (ICD)-10 [4] includes the disorder under somatoform spectrum disorder. The ICD-11 is expected to be tabled in 2019 and would carry significant implications whenever it is released. The time is ripe therefore, to relook at the evidence for nosological status of Dhat syndrome.

## Historical overview

The word Dhat is derived from the Sanskrit language 'Dhatu' which means constituent of the body [5]. History of Dhat syndrome dates to Sushruta Samhita(1500BC). Concept of Dhat syndrome has been mentioned as 'Shukrameha', which means passage of sperm in urine [6]. Hippocrates (460-377BC) mentions the importance of semen as a component to give form to the human body [7]. Aristotle (384-322 BC) mentions the importance of semen as the 'most perfect' component of our food [8].

In the Indian subcontinent, semen is meant as a conservative fluid. The ayurvedic school of teaching propagates that 40 drops of food is converted to one drop of blood [9], 40 drops of blood to make one drop of bone marrow, 40 drops of bone marrow to make one drop of semen [10]. Thus, it takes a lot of time for the production of semen and hence it needs to be conserved. The concept of Dhat as a 'culture bound syndrome' was formally introduced by Wig in 1975, who conceptualized it as a cluster of psychosomatic and sexual symptoms [11]. In more recent times, Dhat syndrome features have been reported in females also [12]. Dhat syndrome is present in other Asian countries as well. In China, it is called shen-k'uei, a condition characterized by distressing passage of semen as vital deficiency [13]. Dhat syndrome have also been discussed in Sri Lankan [14] Thailand [15] and Arabian [16] literature as excessive semen loss presenting as physical symptoms.

## Classification of Dhat syndrome in major diagnostic systems

In the ICD-10, Dhat syndrome finds a mention under other specified neurotic disorders [4]. It lacks any diagnostic and cultural explanatory guidelines except for a purported association with locally accepted cultural beliefs and practices.

In ICD-11, previously classified neurotic and stress related disorders are classified under 6B1 Anxiety and fear related disorders [17,18]. Further explanations and importance of Dhat syndrome among other Culture bound syndromes has not been discussed.

In DSM-IV-TR, Dhat syndrome is classified in Appendix -I as a culture bound syndrome, which is defined as "locality-specific patterns of aberrant behavior, recurrent, and troubling experience, that may or may not be linked to a particular DSM-IV diagnostic category indigenously considered to be illnesses, or at least afflictions". It is generally understood as limited to specific societies or culture areas [1].

In DSM-5, released in 2013, there are some significant changes [2]. The term 'culture bound syndrome' has been replaced with a broader term called 'cultural concepts of distress'. The latter refers to ways that cultural groups experience, understand, and communicate suffering, behavioral problems, or troubling thoughts and emotions. This includes three sub-concepts—syndromes, idioms, and explanations

- Syndromes refer to clusters of symptoms and attributions that tend to co-occur among people in specific cultural groups contexts and recognized locally as coherent patterns of experience.
- Idioms are mentioned as ways of expressing distress that may not involve specific syndromes or symptoms, but with collective, shared ways of experiencing and talking about social and personal concerns.
- Explanations are the labels, features or attributions of an explanatory model that explains culturally recognized meaning of symptoms, illness, or distress.

In addition, DSM-5 has also proposed specific interview guidelines called Cultural Formulation Interview (CFI) which can be used for in depth assessment and understanding the cultural concepts of distress [2].

There are several critiques about changes in DSM-5 classification of 'Dhat syndrome'. Firstly, it appears that the concept of idioms, upon deeper analysis, actually resembles old wine in a new bottle. The very fact that cultural influences on these idioms of distress are marked enough to alter the presentation of the disorder seems to be sufficient to justify the status of a separate diagnostic status for Dhat syndrome [19,20]. Secondly, one of the common arguments given against the validity of 'Dhat syndrome' construct is the high burden of comorbid depressive symptoms. As the same authors state, this finding does not necessarily invalidate a diagnosis of 'Dhat syndrome', as depressive symptom burden is similarly high in a variety of other conditions such as anxiety disorders too [20].

## Current understanding and evidence for Dhat syndrome

## Phenomenological aspects

#### **Causative attributions**

Propagated by Vedic literature, the cultural ideology boosts the belief that the vitality of a male resides in his semen [21-23]. Patients with Dhat syndrome exhibit undue concern for the loss of semen because they feel that their vitality is drained out from the body. Most common cause attributed to initiate loss of semen is masturbation [23-26], followed by night falls [23,25], having sexual relations prior to marriage [25,26], excessive sexual desire or intercourse, poor food hygiene [25], less water intake and less physical exercise [23]. The assertion that many such factors initiate and maintain the semen loss remains unexplored.

#### Semen loss characteristics

Patients with 'Dhat syndrome' were able to appreciate the loss of semen while it was occurring. The semen, while being lost, may appear as a less viscous and thin liquid [27], sometimes with a creamy or slimy [28], milk-like or

watery consistency [25]. A lesser proportion of subjects report that Dhat may be thick and oily in its consistency and may be meagre in subjective measure of quantity [27]. Almost all the studies report that the patient recognizes loss of semen per urethra.

#### Alternate routes of loss

Patients report of loss of semen in urine [25,29,30]. Some reports do exist which reveal that patients do complain of loss of semen through the anus while during straining in defecation [22,28]. A recent study found that in a general medical setting, one in two patients of Dhat syndrome reported passage of semen through anus [31]. Rarely, highly suggestible patients have reported the passage of semen through saliva [32].

#### Consequences

Passage of Dhat leads to burning sensation while passing urine, fatigue, lack of energy [21,25], inducing amotivation and anhedonia [33], diminishing penile size, mental illness or potential death [25,34]. The additional consequences reported are losing minerals from bones, begetting deformed offspring or only female children [34].

## **Psychopathology**

Patients with Dhat concerns are found to report more of depressive symptoms followed by anxiety features [26,35]. A landmark study by Dhikav and colleagues showed that two-thirds of patients with 'Dhat syndrome' actually met the criteria of depression and they responded to anti-depressant [36]. Studies have found that patients with 'Dhat syndrome' and family history of depressive disorders are more likely to report of depressive symptoms [37]. The expression of depressive symptoms are manifold: such as excessive guilt, low mood, ideas of worthlessness, and decreased self-esteem [23,27]. The concerns on the penile size and sexual functioning could be viewed as a manifestation of decreased self-esteem as seen in depression [37]. This implies that Dhat can be a form of expression of depressive cognitions [22].

As the patients with 'Dhat syndrome' often somatise their

complaints, the psychosomatic aspects of the disorder has also received significant attention. Studies point out that patients harbor hypochondriacal concerns, abnormal illness behavior, and somatic symptoms characteristic of functional somatic syndrome [25,28,38]. The somatic concern is coupled with increased scanning behavior reinforced by cultural beliefs [26].

Contrasting reports reveal that the Dhat syndrome construct shows weakly significant correlations with depressive and anxiety symptoms. Hence, the core or central belief system, which is more focused on somatic and sexual health, could be a manifestation of an internalizing psychopathology warranting further exploration [31].

## Comorbidity patterns

Most studies reveal that the presence of solitary Dhat syndrome is rare in the population. The systematic approach and exploration for comorbid psychiatric illnesses is the rule in most cases. The syndrome more often presents with psychiatric comorbidities and comorbid sexual dysfunction. Studies posit that the genesis of comorbidities can be attributed to the psychological distress associated with loss of semen [39]. Depressive disorders are the more frequently observed psychiatric comorbidities followed by anxiety neurosis, stress-related, and somatoform disorders [25,31,33,39].

Figure A depicts the shared symptoms between Dhat syndrome and depressive, anxiety and somatoform

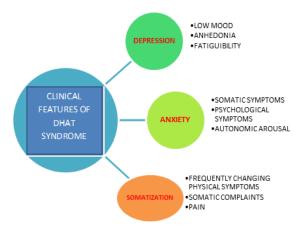


Figure A: Symptoms of Dhat syndrome shared with other psychiatric disorders

disorders. Some studies have found the presence of obsessional neurosis [12, 29]. There are case reports which studies the association between Dhat syndrome and closely-related behavioral syndromes such as pornographic addiction [27]. Substance use disorders is a frequent comorbidity in patients with Dhat syndrome possibly due to the perception of self-medication of Dhat symptoms with alcohol [37]. Reports do exist which reveal that borderline personality can be associated with Dhat syndrome [40]. A single case report has identified the presence of Dhat syndrome as a prodrome of schizophrenia, which was diagnosed later when the patient developed psychotic symptoms [41].

Various sexual dysfunction syndromes co-exist with the concern of semen loss [24]. Among the sexual dysfunction syndromes, psychogenic premature ejaculation is the commonest followed by psychogenic erectile dysfunction [23,35]. Patients also report the feeling of "loss of masculinity" implying a wide range of sexual dysfunction [31]. In addition, studies argue that sexual dysfunction in Dhat syndrome get compounded by the presence of substance use disorder especially nicotine use. Factors such as childhood adversities also seem to be associated with adult-onset sexual dysfunction in patients with Dhat syndrome [42].

The effects of psychiatric comorbidities on Dhat syndrome can be manifold. The presence of comorbidities tend to influence the illness perception of the patient by inducing alexithymia and hypochondriacal ideas [39]. The presence of comorbidities influence the treatment decisions such as prescription of more number of psychotropics and concurrent psychotherapy [23,29,33,40].

#### Course and outcome

The onset of Dhat syndrome seems to be acute [26]. Complete recovery can be observed in a subset of patients ranging from 22% to 64% [26,43,44]. One study has analyzed the outcome of patients with 'pure' Dhat syndromes and the diagnostic conversion rates over the course of the illness. Over a period of six years, around 64% patients no longer fulfilled the criteria for

Dhat syndrome. Over a period of time, most patients were diagnosed as having somatoform disorders. The researchers postulated that the patients with culturebound syndromes tend to realize the cultural explanations and comprehend acceptable illness models [44]. The findings need to be considered with caution as there were significant drop-out rates noted in patients with Dhat syndrome. The common causes for drop-outs being lack of adequate knowledge of symptoms, stigma, not able to allocate time for consultation, and prescription of psychotherapy rather than medications [43]. The description of the disorder is mainly restricted to Asian and associated regions. However, recent studies across the globe indicate the problem of semen loss concern can be widespread due to the effects of acculturation and migration [30].

## Concept of female Dhat syndrome

Akin to the clinical picture seen in males with Dhat concerns, females also have reported loss of virility and vitality through vaginal discharge [12]. The women tend to report that the fluid was thick yet transparent, non-foul smelling and intermittent, leading to deleterious effects on body energy levels and cosmetic side-effects [12]. Nevertheless, the patients report significant anxiety, obsessions, and depressive symptoms secondary to vaginal discharge [12,45,46]. Additionally, the affected women may attribute the psychosomatic fatigue and pain symptoms to the loss of vitality through vaginal discharge [45]. The management protocol falls in line with that executed with male Dhat patients: pharmacotherapy with preferably anti-anxiety agents such as Selective Serotonin Reuptake Inhibitors (SSRIs) combined with psychotherapy [12,41].

### Interventions

The comprehensive treatment plan of 'Dhat syndrome' includes pharmacotherapy and psychotherapy. Verbal reassurance [24] and systematic sex education [21,24] can be used as simple yet effective counselling strategies. Structured CBT, insight-oriented psychotherapy, and occasionally, acceptance and commitment therapy have shown promising results in Dhat syndrome

[33,40]. Pharmacotherapy includes administration of anti-anxiety agents with Selective Serotonin Reuptake Inhibitors (SSRIs) being chosen in most of the studies [12,34] followed by Selective Norepinephrine Reuptake Inhibitors (SNRIs)[27]. The knowledge on the efficacy of the comprehensive model may be limited because of the high drop-out rates noted with Dhat syndrome patients [26].

A multi-disciplinary model to treat Dhat syndrome has been proposed, which incorporates the following steps:

- 1. Intake and assessment
- 2. Socializing the patient to Cognitive Behavioural Therapy (CBT)
- 3. Basic sex education
- 4. Cognitive restructuring
- 5. Relaxation exercises
- 6. Imaginal desensitization
- 7. Masturbation as homework
- 8. Kegel's exercises and other specific techniques like 'stop-start' technique

The above model was feasible, effective and well received by patients.

Traditional medicine practitioners (ayurveda, homeopathy, etc.) can often reinforce the patient's beliefs about the debilitating effects of passage of semen. Here, an integrated approach in liaison with traditional healers can be used to dispel myths about semen loss and encourage scientifically valid explanations. Incorporation of sex education and health programs in educational



Figure B Multi-Disciplinary model for approach of Dhat syndrome

curriculum in high schools and colleges may help to tackle maladaptive thoughts and encourage alternate explanations for bodily symptoms.

Figure B depicts all the stakeholders who would need to participate for effective management of people suffering from 'Dhat syndrome'. The felt need is to provide integrated explanations that are scientifically sound, while at the same time, factoring in the explanations given by the traditional practitioners can go a long way in enhancing patient satisfaction and outcomes.

One of the limitations of the Dhat syndrome literature landscape is that majority of the published evidence on 'Dhat syndrome' come from case reports and there is a lack of systematic research into this area. This renders the process of drawing firm conclusions a rather arduous task.

## Conclusion

The nosological status of 'Dhat syndrome' continues to

References

- [1] American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-IV-TR. Washington, DC: American Psychiatric Association.; 2000.
- [2] American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.; 2013.
- [3] MacLachlan M. Culture and Health: A Critical Perspective Towards Global Health (second ed.). Chichester, West Sussex: John Wiley & Sons, Ltd.; 2006
- [4] World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva: World Health Organization; 1992.
- [5] Paris J. Dhat: The Semen Loss Anxiety Syndrome. Transcult Psychiatr Res Rev 1992;29:109–18.
- [6] Prakash O, Kar S, Tss R. Indian story on semen loss and related Dhat syndrome. Indian J Psychiatry 2014;56:377–82.
- [7] Raguram R, Jadhav S. Historical perspectives on Dhat syndrome. 1994;12:117–24. NIMHANS Journal 1994;12:117–24.
- [8] From Aristotle's "The Generation of Animals" [Internet]. [cited 2018 Sep 8]. Available from: http://www2.ivcc.edu/gen2002/ Aristotle\_Generation.htm
- [9] Bhaskar M. Impact on Society Due to DhatSyndrome. IOSR J Dent Med Sci 2016;16:7–10.

be unclear. While phenomenological studies, based on the concept of illness behaviour or belief systems, argue for a separate diagnostic status for 'Dhat syndrome', studies assessing co-morbidity patterns suggest a close relationship with depression, but not anxiety. Certainly, the DSM-5 stand of bringing 'Dhat syndrome' under the rubric of 'cultural concepts of distress' seems to suggest that evidence for a separate diagnostic status for 'Dhat syndrome' is lacking. This position is also supported by the few follow-up studies available which points to the longitudinal instability of a diagnosis of 'Dhat syndrome'. Perhaps, owing to the increasing social, economic and cultural transitions, both in India and elsewhere globally, the presentation and help-seeking behaviors in culture bound syndromes like 'Dhat syndrome' have also undergone parallel changes. Nosologic researchers need to factor in these considerations and undertake a periodic revaluation of the beliefs and behaviours underlying culture bound syndromes as they are likely to be dynamic.

- [10] Prakash O. Lessons for postgraduate trainees about Dhat syndrome. Indian J Psychiatry 2007;49:208–10.
- [11] Wig NN. Problems of mental health in India. J Clin Soc Psychiatry 1960;17:48–53.
- [12] 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.
- [13] So H-W, Cheung FM. Review of Chinese sex attitudes and applicability of sex therapy for chinese couples with sexual dysfunction. J Sex Res 2005;42:93–101.
- [14] Kodagoda N. Some psychosexual problems of Asian adolescents. J Biosoc Sci 1978;10:227-233.
- [15] Kulanayagam R. Semen losing syndrome. Journal of Ptychologo Association of Thailand 1979;24:152-8.
- [16] Okasha A, Demerdash A. Arabic Study of Cases of Functional Sexual Inadequacy. Br J Psychiatry 1975;126:446-448.
- [17] WHO International Classification of Diseases, 11th Revision (ICD-11). https://www.who.int/classifications/icd/revision/en/ [Last accessed on 03-10-2018].
- [18] Kogan CS, Stein DJ, First MB. The classification of anxiety and fear related disorders in ICD-11. Depress . Anxiety 2016;33:1141 -1154
- [19] 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.
- [20] Prakash S, Mandal P. Is the DSM-5 position on dhat syndrome justified? Asian J Psychiatr 2014;12:155-7.
- [21] Mumford DB. The "Dhat syndrome": a culturally determined symptom of depression? Acta Psychiatr Scand 1996;94:163–7.
- [22] Balhara YPS, Goyal R, Goel R. An unusual presentation of dhat syndrome. J Neuropsychiatry Clin Neurosci 2012;24:E19-20.
- [23] Prakash S, Sharan P, Sood M. A qualitative study on psychopathology of dhat syndrome in men: Implications for classification of disorders. Asian J Psychiatry 2018;35:79–88.
- [24] Behere PB, Natraj GS. Dhat syndrome: the phenomenology of a culture bound sex neurosis of the orient. Indian J Psychiatry 1984;26:76–8.
- [25] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Comorbidity in patients with Dhat syndrome: a nationwide multicentric study. J Sex Med 2015;12:1398–401.
- [26] Ranjith G, Mohan R. Dhat syndrome as a functional somatic syndrome: developing a sociosomatic model. Psychiatry 2006;69:142–50.
- [27] Darshan MS, Sathyanarayana Rao TS, Manickam S, Tandon A, Ram D. A case report of pornography addiction with dhat syndrome. Indian J Psychiatry 2014;56:385–7.
- [28] Kar SK, Singh A. Per-anal discharge: A new face of Dhat syndrome. J Hum Reprod Sci 2015;8:245.
- [29] Kar SK, Garg K. Recurrent brief depressive disorder in Dhat syndrome: A biological or psychological phenomenon! Aust N Z J Psychiatry 2016;50:291–2.
- [30] Menéndez V, Fernández-Suárez A, Placer J, García-Linares M, Tarragon S, Liso E. Dhat syndrome, an emergent condition within urology in Spain. World J Urol 2013;31:941–5.
- [31] 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.
- [32] Kattimani S, Menon V, Shrivastava MK. Is semen loss syndrome a psychological or physical illness? A case for conflict of interest. Indian J Psychol Med 2013;35:420–2.
- [33] MacFarland AS, Al-Maashani M, Al Busaidi Q, Al-Naamani A, El-Bouri M, Al-Adawi S. Culture-Specific Pathogenicity of Dhat

- (Semen Loss) Syndrome in an Arab/Islamic Society, Oman. Oman Med J 2017;32:251–5.
- [34] Mitra S, Singh M, Sinha V, Anwar Z. "Dhat syndrome" How a man lost his bones! Asian J Psychiatry 2017;28:181–2.
- [35] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Phenomenology and beliefs of patients with Dhat syndrome: A nationwide multicentric study. Int J Soc Psychiatry 2016;62:57– 66.
- [36] Dhikav V, Aggarwal N, Gupta S, Jadhavi R, Singh K. Depression in Dhat Syndrome. J. Sex. Med. 2008; 5, 841-844.
- [37] Rajkumar RP, Bharadwaj B. Dhat syndrome: evidence for a depressive spectrum subtype. Asian J Psychiatry 2014;9:57– 60.
- [38] Perme B, Ranjith G, Mohan R, Chandrasekaran R. Dhat (semen loss) syndrome: a functional somatic syndrome of the Indian subcontinent? Gen Hosp Psychiatry 2005;27:215–7.
- [39] Grover S, Gupta S, Avasthi A. Psychological correlates and psychiatric morbidity in patients with Dhat syndrome. Indian J Psychiatry 2015;57:255–61.
- [40] Chowdhury AN, Brahma A. A Case of Dhat Syndrome with Borderline Personality Disorder. Indian J Psychiatry 2004;46:373–4.
- [41] Kar SK, Shahi MK, Tripathi A. Dhat syndrome as the prodrome of schizophrenia: Understanding the cultural distress. Asian J Psychiatry 2017;25:203–4.
- [42] Rajkumar RP. Distinctive clinical features of Dhat syndrome with comorbid sexual dysfunction. Asian J Psychiatry 2016;19:1–2.
- [43] Grover S, Gupta S, Avasthi A. A follow-up study of patients with Dhat syndrome: Treatment pattern, outcome, and reasons for dropout from treatment. Indian J Psychiatry 2016;58:49–56.
- [44] Sameer M, Menon V, Chandrasekaran R. Is "Pure" Dhat Syndrome a Stable Diagnostic Entity? A Naturalistic Long Term Follow Up Study from a Tertiary Care Centre. J Clin Diagn Res 2015;9[8]:VC01–3.
- [45] Kar SK, Singh A. Where Lies the Fault in Diagnosing Dhat Syndrome among Females? Understanding through a Case Study. Indian J Psychol Med 2017;39:506–8.
- [46] Singh G, Avasthi A, Pravin D. Dhat syndrome in a female- a case report. Indian J Psychiatry 2001;43:345–8.

## Pathways to Care for Dhat Syndrome

## Dr. Amit Singh

Senior Resident, National Drug Dependence Treatment Centre & Department of Psychiatry, All India Institute of Medical Sciences, New Delhi

## Abstract

Treatment-seeking patterns of patients with 'Dhat syndrome' is highly diverse. They often make multiple visits with various types of health care providers in search of help. Usually, consultations are made with several indigenous healers, vaids, hakims, sex specialists and practitioners of alternative medicine for relief, before reaching a psychiatric health facility. As an enormous time gets wasted in finding the appropriate care provider for the problem, there is a need for incorporating an efficient and effective referral mechanism to speed up access to psychiatric care in patients with 'Dhat syndrome'.

## Introduction

In ancient Indian medicinal texts, conservation of semen has been given immense importance. Ayurveda describes human body to be made of seven vital elements or the 'Dhatus'. Of these, 'Shukradhatu' or semen is considered to be the most valuable and powerful bodily substance, and is equated with the fluid of life [1]. Thus, its loss is perceived to drain the human body of its vitality and is associated with various morbidities, loss of sexual vigour and even early death. Similar beliefs related to preciousness of semen could be traced in several other cultures around the world at different point of time in history [2]. However, this belief remained widely prevalent in Indian subcontinent, leading to distress of varying severity in persons with perceived excessive semen loss. To account for this entity, N.N. Wig coined the term 'Dhat syndrome' in 1960 [3].

The typical presentation of the patient with 'Dhat syndrome' is an illiterate or lesser educated adolescent or young adult male from lower socioeconomic status and rural background [4]. Young people often lack clear knowledge about various phenomenon related to sexuality. The ignorance, unclear information or misinformation leads to development of excessive concern related to the loss of semen [5]. Consequently, any whitish discoloration of urine, which is usually due to high oxalate and phosphate content or secretions from bulbourethral glands, get misinterpreted as

semen loss by the patients [6]. Often several other factors such as masturbation, nocturnal emissions, premarital sexual intercourse, excessive sexual drive & excessive sexual intercourse are perceived by the patients to cause semen loss [7].

The clinical presentation emanating out of the stress and worries about passage of semen is myriad. The intensity and severity may escalate enough to qualify for specific clinical disorders. The symptoms predominantly lie in the following spectrumdepression, anxiety, sexual, and somatic [8]. Their worries and apprehensions are further heightened by repeated consultations with unqualified practitioners, advertisements in mass media and magazines, and hearsay information. The information received from various sources in the pursuit of knowledge and help influences the person's distress, thereby shaping the clinical presentation further. The treatment-seeking patterns in patients with 'Dhat syndrome' are diverse and similar to other psychiatric problems they follow a variety of pathways before reaching mental health professionals [9,10].

## Pathways to care

Various factors are known to influence the help-seeking pathway of the patients with mental illness to reach mental health professionals for consultation. It includes socio-demographics of the patient, availability and accessibility of mental health services, referral practices, and the liaison and coordination between health care providers. The 'pathway to care' refers to the sequence of contacts with individuals and organisations induced by the efforts of distressed person, and their significant others, while seeking appropriate help [11]. Goldberg and Huxley proposed the 'filter model' to describe the pathway of care followed by patients. This model consisted of five levels and four filters that ought to be progressed through to access specialist health care. The filters include initial decision to seek help and initiation of consultation by the patients for their problem followed by identification of the problem as psychiatric disorder, and subsequent referral to specialist services [12].

Accordingly, pathway studies in patient in Dhat syndrome help in understanding the way in which people seek healthcare. Moreover it helps in planning and effectively executing health care services through proper referrals to psychiatrists from other agencies and providers of health and social care.

## Types of healthcare provider

Multiple types of healthcare providers are consulted in search of help for the problem. Those with state recognized valid qualifications include allopathic doctors and practitioners of alternative medicine (such as Ayurveda, Unani, Siddha, Homeopathy, and Naturopathy). In India, various unqualified care-providers also claim to provide treatment for 'Dhat syndrome', including traditional healers- vaids, hakims and 'sex specialists' [9,10]. However, the mental health specialists are considered as main treatment providers, delivering evidence-based psychological interventions such as sex education, reassurance, correction of erroneous beliefs and cognitive-behavioural therapy, as well as psychotropic medications, if required. But, delay in consultation with a psychiatrist is usual for this condition owing to poor awareness and identification of the nature of the problem.

Behere and Nataraj studied 50 consecutive outpatients who presented with principal complaint of discharge of Dhat and found that unqualified 'sex specialists' were the most common first care-providers (50%), followed by skin and venereal disease specialists (30%) and general practitioners (20%) [13]. De Silva and Dissanayake reported that the majority of their patients had sought treatment from practitioners of Ayurveda and Homeopathy [14]. Khan also reported almost 50% of the patients consulting hakims, followed by homeopathic practitioners (23.6%) and general physicians (18.6%); psychiatrists were consulted by only 1.6 % of the patients [15]. Recent researches have also shown similar pattern of consultation [9,10]. Grover et al. reported that the commonest first contact was with indigenous (mostly Ayurvedic) practitioners (36.2%), followed by help sought from friends or relatives (31.9%), allopathic doctors (23.4%), and

traditional faith healers or pharmacists (8.5%). Allopathic doctors consulted include general physicians, urologists, and surgeons [10]. Similarly, Singh et al. showed that as first health care provider, 49.1% patients consulted unqualified practitioners, another 18.2% patients consulted alternative medicine practitioners; around 25% consulted general medical practitioners, while less than 10% consulted psychiatrists. Moreover, at some point in the pathway of care, unqualified practitioners or general medical practitioners were consulted by more than 60% of the patients, while alternative medicine practitioners were consulted by about half of the patients [9]. Overall, unqualified practitioners or alternative medicine practitioners are preferably consulted by patients; atleast initially. A plausible explanation for this help-seeking pattern is that these practitioners often advertise treatment for sexual disorders, even claiming definite cure from the ailment. This potentially influences the help-seeking behaviour of patients from developing countries of Indian subcontinent where the societies are usually conventional. The other reasons include the wide availability as well as easy accessibility and affordability of these care providers [15]. The widespread cultural beliefs about 'Dhat syndrome', lack of awareness on psychosexual disorders, and the scarcity of mental health care facilities are other major contributors to these findings [16].

## Help seeking delay

Although the Dhat syndrome is associated with significant morbidity and distress; due to the stigma accompanying it, lack of sex education and proscribed discussions over sexual issues, most of the patients do not reveal their problem to others until late. A lot of time get wasted in this dilemma about whom and when to consult. Often the family members and relatives are equally misinformed about the illness and could not help the patient find appropriate ways out of the problem. This leads to a considerable delay in help-seeking by patients. Singh et al. reported the mean duration of illness before any treatment was sought to be 1.85±2.14 years. Moreover, there was 4.63±5.35 years

delay between first help-seeking and consultation with a psychiatrist depicting a considerable time misspent during the pathway to appropriate health care [9]. Two recent studies reported a delay of about 6 years before a psychiatrist was consulted [9,10]. One possible reason is that non-allopathic practitioners might reinforce myths and beliefs related to Dhat syndrome, heightening the fear and anxiety in patients [17]. This leads to help-seeking with multiple care providers, and repeated visits, with the patients often incurring huge loss of time, and resources, with almost no relief in symptoms. Grover et al. reported declining preference to visit indigenous practitioners gradually at each stage [10].

## Referral pattern of patients

Various sources provide information to the patients about 'Dhat Syndrome' and many of these agencies also inspire them to consult health care providers for help. In several cases the perceived problem of 'Dhat' may make the patients to look for help on their own and reach the caregivers guided by billboards, advertisements, hearsay information etc. This self-referred group of patients constituted the majority (about 58%) of those consulting the first care provider for help [9]. Family members, friends, co-workers, neighbours, relatives, etc. are other important sources of referral. On average, about 3 care givers are consulted before contacting a psychiatrist [10]. Singh et al. reported that more than 50% patients consulted 3 or more care providers before consultation with a psychiatrist. The final referral to a psychiatrist in this study were from various agencies. 40.0% of the patients were self-referred and 23.6% were referred by family members. Only 20% referrals were made by another healthcare provider [9]. Often friends and colleagues, elders, relatives or unscientific sex literature or unqualified health care providers are first approached for guidance and help rather than qualified practitioners of modern medicine [5]. Knowledge among the various care providers is also probably poor about the nature of problem, when one looks at the pattern of referrals to psychiatrist.

## Conclusion

The patients first seek the help of various sources prior to attending a psychiatric health facility. As an enormous time gets wasted in finding the appropriate care provider for the problem, speeding up the access to psychiatric

care in patients with 'Dhat syndrome' through efficient and effective referral mechanism is extremely needed. Also, there is a need to increase the awareness in vulnerable population about 'Dhat syndrome' and psychosexual disorders for better help-seeking behaviour.

#### References

- [1] Prakash O, Kar SK, Sathyanarayana Rao TS. Indian story on semen loss and related Dhat syndrome. Indian J Psychiatry 2014;56:377–82. doi:10.4103/0019-5545.146532.
- [2] Sumathipala A, Siribaddana SH, Bhugra D. Culture-bound syndromes: The story of dhat syndrome. Br J Psychiatry 2004;184:200–9. doi:10.1192/bjp.184.3.200.
- [3] Kar S, Sarkar S. Title: Dhat syndrome: Evolution of concept, current understanding, and need of an integrated approach. Source J Hum Reprod Sci 2015;83. doi:10.4103/0974-1208.165143.
- [4] Udina M, Foulon H, Valdés M, Bhattacharyya S, Martín-Santos R. Dhat Syndrome: A Systematic Review. Psychosomatics n.d.;54:212–8. doi:10.1016/j.psym.2012.09.003.
- [5] Grover S, Gupta S, Mehra A, Avasthi A. Comorbidity, knowledge and attitude towards sex among patients with Dhat syndrome: A retrospective study. Asian J Psychiatr 2015;17:50–5. doi:10.1016/j.ajp.2015.07.002.
- [6] Bhatia MS, Malik SC. Dhat syndrome A useful diagnostic entity in Indian culture. Br J Psychiatry 1991;159:691–5. doi:10.1192/ bjp.159.5.691.
- [7] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Phenomenology and beliefs of patients with Dhat syndrome: A nationwide multicentric study. Int J Soc Psychiatry 2016;62:57– 66. doi:10.1177/0020764015591857.
- [8] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Comorbidity in Patients with Dhat Syndrome: A Nationwide

- Multicentric Study. J Sex Med 2015;12:1398–401. doi:10.1111/jsm.12899.
- [9] Singh A, Tripathi A, Gupta B, Agarwal V. Pathways to Care for Dhat (Semen Loss Anxiety) Syndrome: A Study from North India. Int J Ment Health 2016;45:253–61. doi:10.1080/002074 11.2016.1238741.
- [10] Grover S, Gupta S, Mahajan S, Avasthi A. Pathway of care among patients with Dhat syndrome attending a psychosexual clinic in tertiary care center in North India. Ind Psychiatry J 2016;25:72. doi:10.4103/0972-6748.196040.
- [11] Rogler LH, Cortes DE. Help-seeking pathways: A unifying concept in mental health care. Am J Psychiatry 1993;150:554– 61. doi:10.1176/ajp.150.4.554.
- [12] Goldberg DP, Huxley P. Mental Illness in the Community: The Pathway to Psychiatric Care. London: Tavistock Press; 1980.
- [13] Behere PB, Natraj GS. Dhat syndrome: the phenomenology of a culture bound sex neurosis of the orient. Indian J Psychiatry 1984;26:76–8.
- [14] De Silva P, Dissanayake S. The loss of semen syndrome in Sri Lanka: A clinical study. Sex Marital Ther 1989:195–204.
- [15] Khan N. Dhat syndrome in relation to demographic characteristics. vol. 47. 2005. doi:10.4103/0019-5545.46077.
- [16] Balhara YPS. Culture-bound Syndrome: Has it Found its Right Niche? Indian J Psychol Med 2011;33:210–5. doi:10.4103/0253-7176.92055.
- [17] Kar GC, Varma LP. Sexual Problems Of Married Male Mental Patients. vol. 20. 1978.

## Approach to A Case of Dhat Syndrome

## Dr. Jai Singh<sup>1</sup> | Dr. Adarsh Tripathi<sup>2</sup>

- 1. Senior Resident, Department of Psychiatry, King George's Medical University, Lucknow, UP
- 2. Associate Professor, Department of Psychiatry, King George's Medical University, Lucknow, UP

## Abstract

'Dhat syndrome' has been labeled as a culture-bound syndrome as it is most commonly found in South-east Asian countries. It is often considered as a syndrome of the Indian sub-continent. In 'Dhat syndrome' core belief and preoccupation lies in semen loss by various ways other than sexual intercourse. Symptoms presentation of any entity is very much influenced by culture and countries in which it present. Dhat syndrome has a vast variety of presentation and inter-individual variations. Numerous works have been done in the past few decades, but still little is known about approach to Dhat syndrome. This article attempts to discuss about, the approach to 'Dhat syndrome' through elicitation of adequate sexual history, physical examination considering cultural perspectives.

#### Introduction

The term 'Dhat' has been taken from the Sanskrit term 'Dhatus' and according to Sushruta Samhita, it means 'elixir that constitutes the body' [1]. Traditional Hindu culture considers it an essential vital fluid and its loss from any measures leads to serious bodily consequences. This belief is not only prevalent in Hinduism but other religions such as Buddhism, Christianity, and Islam, also sanction semen as a vital fluid [1,2]. This concept has been carried through centuries by traditional healers as well [1]. 'Dhat syndrome' has a syndromic presentation as it is characterized by non-specific complaints like depressed mood, easy fatigability, loss of weight and appetite [1,3]. In 'Dhat syndrome', there is preoccupation of loss of semen through various modes like masturbation, nocturnal emission, and in urine or feces [4]. 'Dhat syndrome' is most prevalent in South-East Asian countries including India, Bangladesh and Pakistan [1]. However, it has also been reported in varied geographical regions of China, United States, Russia and central Asian countries in various literature with different names [5,6]. The term 'Dhat syndrome', first time came into light in 1960 after its description in 'psychosomatic attribution related to semen loss' by Professor N.N. Wig [7].

Professor N.N. wig described it as a culture-bound sexual neurosis for patients who were preoccupied with the loss of semen [7]. Multiple studies have been conducted till now - specifically in the past decade, pointing out 'Dhat syndrome' as a widely recognized problem of the Indian subcontinent that is associated with loss of semen. A similar entity is also being reported among females with physiological vaginal discharge [8]. Although because of nosological invalidity, this entity is debatable.

'Dhat syndrome' is widely recognized as problem since it was categorized in ICD-10. The International classification of diseases classifies it under 'other specified nonpsychotic neurotic disorder' (F48.8); later, revised version of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-R) classifies it as a 'culture-bound syndrome' [9]. In recent, DSM-5 lists Dhat syndrome under the category of 'glossary of cultural concepts of distress', where a patient presents with distress and anxiety about the loss of semen in the absence of any identifiable physiological dysfunction [10]. DSM-5 further clarifies that despite the name, it is not a discrete syndrome but rather a cultural explanation of anxiety and distress [10,11]. It was a complete deviation from what was earlier described in DSM-IV-TR. According to DSM-IV-TR, it is a condition where a individual presents with distress, anxiety and hypochondriacal concerns associated with semen loss, and feelings of exhaustion and weakness [9].

Presentation of Dhat syndrome is very vague. It presents in a range of symptoms like body ache immediately after loss of semen, excessive worries, generalized body weakness, loss of interest, sadness of mood, headache, palpitation, and dizziness [1]. Recently, Grover and his colleagues revealed its presentation in range of psychological to somatic symptoms, that include fatigue, low energy, depressed or hopeless, feeling down, loss of interest in doing activities, mental weakness, irritability, excessive anger, excessive worry, pain in joints and extremities, loss of appetite and disturbed sleep. A recent study by Dhungana et al., in Nepalese context explained a range of psychological and somatic symptoms associated with Dhat syndrome. Most common symptoms found in

study were excessive worries (96%), tingling sensation of body (86%), weakness (80%), decrease interest (80%), fatigue (76%), depressed mood (74%), and generalized body ache (72%) [12].

Many researchers consider it as an unusual presentation of depression because of its presentation of depression, anxiety, easy fatigability and asthenia [13]. In most cases, patient with Dhat syndrome does fulfill diagnostic criteria for clinical depression [13].

In today's scenario psychiatrist have to see patients from various cultures, religions, society and countries who present with a different kind of presentation of the identical illness. Thus, assessment of these kind of patients requires contemplation that patients might have divergent beliefs due to upbringing with different traditions and experience difficulties with conveyance of symptoms, which may result in delay in diagnosis. Cultural factors may influence beliefs about individual health and complaints as well as established diseases. Consequently, an individualized approach is necessary to ensure that symptoms, complaints and sexual myths of these patients are correctly interpreted.

## The approach

In an increasingly globalized world with a wide range of cultures across countries, there is a need to acquire adequate competence to properly diagnose and treat patients with Dhat syndrome. For a better understanding of psychiatric symptoms, it is important to understand the patient's cultural context. This is a prerequisite for successful clinical management of patients with Dhat syndrome. However, there is a scarcity of literature about culture-bound syndromes; out of them, most are observational studies or case reports [2]. Evidences regarding approach and management of patients with Dhat syndrome are also scarce. Hence, this review aims to develop a better understanding of how to approach a case of Dhat syndrome.

Various approaches have been developed for the better understanding of diagnosis and management of psychosexual disorders. In psychiatry, various models have been developed to take right approach including psychosomatic approach, person-centered approach, step-by-step model and collaborative model approach [2].

Comprehensive assessment and an integrated approach are a necessity in the cases with 'Dhat syndrome' due to its diverse nature and vague presentation of symptoms. A detailed understanding of phenomenology related to 'Dhat syndrome' and its cultural context is important for detailed comprehensive assessment.

A patient has multiple interacting domains of well-being including physical, socio-cultural, psychological, spiritual, environmental and financial – all of which determines the totality of health [14]. If a problem arises in one of these domains, the health of a person suffers. During the assessment, there is a need to address all these issues rather than focusing only on illness-related parameters. A person-centered and holistic approach is needed for a better understanding of all these domains [14].

Assessment of a case of 'Dhat syndrome' needs to be enhanced by taking socio-demographic factors into consideration. Among socio-demographic factors, age is very important as most of the patients with Dhat syndrome are adolescents and young adults [3,4]. They often carry extreme worry about their semen loss and apprehension related to their future sexual performance. Although this entity is also common in adults and elderly, but their concerns are related to a decline in their sexual functioning [14]. Marital status should also be taken into consideration as unmarried individuals carry apprehension related to their future sexual performance. Lower educational status and orthodox socio-cultural beliefs also influence their understanding about concerns related to semen loss [3].

According to Malhotra and Wig's socio-somatic model for Dhat syndrome (1975), a person from lower socioeconomic class who hesitates to discuss sexual issues openly, are very much predisposed to develop physiological causes of semen loss [4]. Occupational background also needs

to be assessed as it influences the knowledge related to sexual functioning.

Several questionnaires have been tried and developed to assess 'Dhat syndrome'. A validated and comprehensive questionnaire was developed by Grover and his colleagues [15]. It was validated and has been used in multiple studies across India [16].

## History taking

The assessment comprises detailed history taking (including sexual history, medical history, and psychosocial history), evaluation of current illness, assessment comorbid condition, physical examination, laboratory testing and positive aspects of the existing health status of the patient. Careful attention is always given to underlying psychiatric or medical comorbidities.

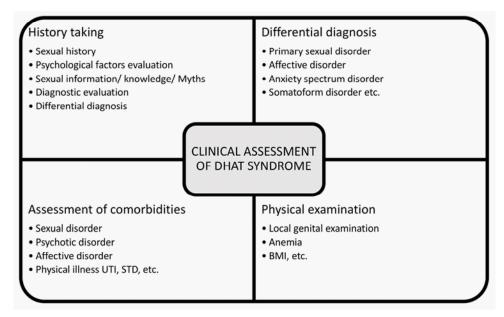
Basic principles of history-taking include conducting the interview in favorable surroundings of the patient while ensuring privacy, while being empathetic and non-judgmental, preferably using local language or language in which patient is comfortable. It is always better to use natural terms as opposed to vulgar terms and reassure the patient about the problem and explain in simple, clear and specific terms.

Adolescents with Dhat syndrome usually do not have good communication skills to adequately present their concerns and problems related to sexuality [17]. Therefore, health professionals have to take responsibility and take a lead by initiating queries in these areas. Questions should be presented with proper confidentiality and proper explanation as to why they are required. When an adolescent or youth reports a problem of sexual dysfunction, it is often necessary for the psychiatrist to acknowledge that the topic related to sexuality may be difficult to discuss but that a detailed history is mandatory for the better understanding of patient's distress and management [17,18].

A reflective listening may be more useful during eliciting the clinical history. Reassurance can be given validating the concerns and familiarizing the client with the facts. Exploring about previous sexual experiences is also important and should include homosexual, heterosexual experiences and masturbation. The psychiatrist should remain sensitive to the patient's level of comfort and acknowledge discomfort, if it is present [17,19].

Patients suffering from Dhat syndrome are very much

culturally influenced, socially stimulated and often have several myths related to semen loss [14,20]. Direct confrontation of these beliefs can breach the therapeutic relationship. Hence, it needs to be handled in a non-confrontational manner and at the same time information based on empirical studies.



UTI: Urinary Tract Infection; STD: Sexually Transmitted Diseases; BMI: Body Mass Index Figure 1: Model showing the clinical assessment of Dhat syndrome

Detailed history is taken in terms of onset, duration, evolution of symptoms over time, its current status, frequency, and associated medical and psychological problems.

## Illness assessment

Illness assessment includes the clinical presentation, mode of onset, course, duration of illness, antecedent events, if present as well as level of impairment in functioning. The duration of the illness, the circumstances surrounding its onset, the patient's perspective of the causes, or what might be contributing to the illness are important as it shapes the illness behavior pattern. Previous treatment, relatives or friends consulted regarding the problem, and others, especially partner's perceptions are also important areas needs to addressed.

Evaluation of any patient requires a thorough

understanding of the type of dysfunction, factors associated with or contributing to dysfunction and factors maintaining sexual dysfunction. Psychological factors evaluation is mandatory in case of 'Dhat syndrome' or any other psychosexual disorder as these factors influence its onset and course very much. A medication, drug, and substance use (especially alcohol) history is also important. History of organicity should also be taken into consideration as it may mimic the picture of 'Dhat syndrome'.

The current psychological status needs to be assessed by focusing on symptoms of anxiety, depression, low selfesteem and coping skills, previous and current partner relationships, history of sexual abuse, educational level, occupational and social stresses, and socioeconomic status. The sexual problem may affect patients coping abilities, self-esteem, social relations, and occupational functioning. Another important aspect of psychosocial evaluation is patient's perspective and knowledge about semen loss as it is significantly influenced by culture, social, ethnic and religious perspectives. It is also important to assess the patient's personality, as 'Dhat syndrome' patients often have traits of anxious /avoidant personality. Personality factors in a patient need to be assessed thoroughly as it influences how patient sees or accepts the changes in scenario. There is a need to assess peer and family members' influence on patients as it may influence the outcome. Patients in the Indian context has wide access to incorrect sexual information through their peers and family members. Hence, assessment of all these factors are necessary to be considered during evaluation.

Apart from the history of the patient's illness, assessment of similar complaints and other psychiatric illness in the family members of the patient needs to be addressed.

## Assessment of comorbidities

Dhat syndrome may or may not be comorbid with other psychiatric illnesses. However, most studies have pointed out that comorbidity is common with 'Dhat syndrome'. A recent study by Grover et al., revealed depression as the most common comorbidity followed by premature ejaculation [21,22]. Depression is most common reported comorbidity with prevalence ranging 40-66% in various studies. Anxiety disorder was found in 21-38% [22]. Somatoform disorder, obsessive compulsive disorder, body dysmorphic disorder, hypochondriacal disorder, stress reaction, various phobias, and delusional disorder can be found along with Dhat syndrome [23]. The focus needs to be given on these disorders while assessing for 'Dhat syndrome'. Many a time 'Dhat syndrome' may be a primarily or secondary comorbidity with other psychosexual disorder including Premature ejaculation and erectile dysfunction [24]. These sexual disorders should be taken into consideration while assessment and needs to be treated. Often, patients with 'Dhat syndrome' attribute semen loss to masturbation, excessive involvement in sexual activities, pornographic internet addiction, exposure with prostitutes, various venereal sexually transmitted diseases including urinary tract infections chyluria etc. [15,20,25]. History related to sexually transmitted diseases including detailed local examination and laboratory investigation is mandatory in such cases.

## **Physical examination**

Every effort should be made to ensure the privacy, confidentiality and personal comfort of the patient while conducting the physical examination. A detailed general physical examination and genito-urinary examination is necessary after taking consent [16]. It helps to delineate other physical causes of discharge of fluids. In many cases, discharge other than semen due to local pathology (recurrent UTI, STDs) might be misinterpreted by the patient. Physical examination also helps in building rapport with patients, which may facilitate comprehensive evaluation.

Relevant laboratory investigations, including urine examination, is necessary to assess any organic cause. Presence of oxalate or phosphate crystals in alkaline urine of those consuming a vegetarian diet may give the urine a whitish tinge [20,26,27]. According to Barsky and Klerman (1983), stressful situations lead to an emotionally aroused state, which can alter normal physiological phenomenon [17,28]. In Dhat syndrome, there is excessive worry, anxiety and high aroused state may cause a change in turbidity of urine and this might be misinterpreted as being due to illness [28].

## Conclusion

A proper approach in case of 'Dhat syndrome' is need of time as it has cultural, social and individual variability. Proper approach is also necessary and needs to be person centered as many a time diagnosis of 'Dhat syndrome' is missed or ignored if present with other psychiatric or psychosexual disorders. A cultural understanding about the client often helps the clinician in dealing with 'Dhat syndrome' more effectively.

#### References

- [1] Prakash O, Kar SK, Rao TS. Indian story on semen loss and related Dhat syndrome. Indian J Psychiatry. 2014;56(4):377.
- [2] Kar SK, Sarkar S. Dhat syndrome: Evolution of concept, current understanding, and need of an integrated approach. J Hum Reprod Sci. 2015;8(3):130.
- [3] Mehta V, Abhishek De CB. Dhat syndrome: a reappraisal. Indian J Dermatol. 2009;54(1):89.
- [4] Malhotra HK, Wig NN. Dhat syndrome: A culture-bound sex neurosis of the orient. Arch Sex Behav. 1975;4(5):519–28.
- [5] Balhara YPS, Goel R. Culture bound syndromes: Need to relook, relabel and include? Asian J Psychiatry. 2011;4(1):75.
- [6] Sumathipala A, Siribaddana SH, Bhugra D. Culture-bound syndromes: the story of dhat syndrome. Br J Psychiatry. 2004;184(3):200–9.
- [7] Wig NN. Problems of mental health in India. J Clin Soc Psychiatry. 1960;17:48–53.
- [8] Chaturvedi SK. Psychaesthenic syndrome related to leukorrhoea in Indian women. J Psychosom Obstet Gynecol. 1988;8(1):67–72.
- [9] Udina M, Foulon H, Valdes M, Bhattacharyya S, Martin-Santos R. Dhat syndrome: a systematic review. Psychosomatics. 2013 Jun;54(3):212–8.
- [10] Prakash S, Mandal P. Is the DSM-5 position on dhat syndrome justified? Asian J Psychiatry. 2014;12:155–7.
- [11] Rajkumar RP, Bharadwaj B. Dhat syndrome: evidence for a depressive spectrum subtype. Asian J Psychiatry. 2014;9:57– 60
- [12] Dhungana M, Ghimire S, Thapa M. A Study of Dhat Syndrome-A Culture Bound Syndrome in Nepalese Context. http://www.iiip.in.
- [13] Chadda RK. Dhat syndrome: Is it a distinct clinical entity? A study of illness behaviour characteristics. Acta Psychiatr Scand. 1995;91(2):136–9.
- [14] Kar SK, Singh A. Person Centered Management Approach for the Dhat Syndrome. Int J Pers Centered Med. 2017;6(4).
- [15] Grover S, Avasthi A, Aneja J, Shankar G, Mohan M R, Nehra R, et al. Comprehensive Questionnaire for Assessment of D

- hat Syndrome: Development and Use in Patient Population. J Sex Med. 2014;11(10):2485–95.
- [16] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Phenomenology and beliefs of patients with Dhat syndrome: A nationwide multicentric study. Int J Soc Psychiatry. 2016;62(1):57–66.
- [17] Ranjith G, Mohan R. Dhat syndrome as a functional somatic syndrome: Developing a sociosomatic model. Psychiatry Interpers Biol Process. 2006;69(2):142–50.
- [18] Farrow JA. An approach to the management of sexual dysfunction in the adolescent male. J Adolesc Health Care. 1985;6(5):397–400.
- [19] Levine L, Valle S. Counseling the adolescent about sexuality. In: Adolescent health care. Elsevier; 1982. p. 167–77.
- [20] Bhatia MS, Malik SC. Dhat syndrome—a useful diagnostic entity in Indian culture. Br J Psychiatry. 1991;159(5):691–5.
- [21] Grover S, Avasthi A, Gupta S, Dan A, Neogi R, Behere PB, et al. Comorbidity in Patients with D hat Syndrome: A Nationwide Multicentric Study. J Sex Med. 2015;12(6):1398–401.
- [22] Grover S, Gupta S, Mehra A, Avasthi A. Comorbidity, knowledge and attitude towards sex among patients with Dhat syndrome: A retrospective study. Asian J Psychiatry. 2015;17:50–5.
- [23] Deb KS, Balhara YPS. Dhat syndrome: A review of the world literature. Indian J Psychol Med. 2013;35(4):326.
- [24] Behere PB, Natraj GS. Dhat syndrome: The phenomenology of a culture bound sex neurosis of the orient. Indian J Psychiatry. 1984;26(1):76.
- [25] Jhanjee A, Bhatia MS, Kumar P. P01-456-A study on comorbidities, knowledge and attitudes among patients of dhat syndrome. Eur Psychiatry. 2011;26:460.
- [26] Bhatia MS. An analysis of 60 cases of culture bound syndromes. Indian J Med Sci. 1999;53(4):149–52.
- [27] Singh G. Dhat syndrome revisited. Indian J Psychiatry. 1985;27(2):119.
- [28] Barsky AJ, Wyshak G, Klerman GL. The somatosensory amplification scale and its relationship to hypochondriasis. J Psychiatr Res. 1990;24(4):323–34.

## Management of Dhat Syndrome: An Overview

## Dr. Rekha H.G<sup>1</sup> | Dr. Sameer Belvi Mangalwedhe<sup>2</sup>

- 1. Junior Resident, Department of Psychiatry, KIMS, Hubli, Karnataka
- 2. Assistant Professor, Department of Psychiatry, KIMS, Hubli, Karnataka

## Abstract

'Dhat syndrome' is a culture-bound syndrome characterized by preoccupation with semen loss and attribution of physical and psychological symptoms to the same. The patient attributes the symptoms to loss of semen in urine or through masturbation or excessive sexual activity. Patients with 'Dhat syndrome' experience somatic, anxiety and depressive symptoms and often present with sexual dysfunction. It is commonly seen in young, newly married or unmarried males of low socio-economic status of rural background. They usually belong to families with conservative attitude towards sex. Thus, identifying and treating this syndrome becomes crucial and needs serious attention. Important steps in management of 'Dhat syndrome' include integrated collaborative approach between health professionals, patient centered psychoeducation, reassurance to patient, correction of sexual myths, empathetic listening, non-confrontational approach, pharmacotherapy which involves the use of placebo, antianxiety and antidepressant medications with supportive psychotherapy.

#### Introduction

'Dhat syndrome' is a culture-bound syndrome, characterized by the presence of anxiety, somatic, depressive and sexual symptoms, all of which are attributed to loss of semen [1]. The myth prevalent among people of the Indian subcontinent is that "it takes 40 days for 40 drops of food to be converted to one drop of blood, 40 drops of blood to make one drop of bone marrow and 40 drops of bone marrow form one drop of semen" [2]. In the individuals' mind, semen becomes an important factor. Thus, semen loss creates anxiety in individuals' mind resulting in somatic symptoms [3]. 'Dhat syndrome' has been found to be prevalent in different geographical regions of the world [4]. The patients presented with 'Dhat syndrome' were young, recently married or unmarried males, mostly belonged to rural background and who had conservative attitude towards sex [5 - 7]. The most common reported mode of passage of Dhat is - Dhat mixed with urine [8, 9].

## Management of Dhat syndrome

Majority of the patients with 'Dhat syndrome' do not seek professional psychiatric help as the first step. They approach unqualified medical practitioners, faith healers and others, due to a lack of awareness about available health services and associated stigma. Most of the patients with 'Dhat syndrome' are resistant to treatment. Indian studies on pathway of care showed that, mean time to first seek psychiatric help was about 4 to 5 years and most patients first contacted indigenous health practitioners like ayurvedic doctors, followed by asking help from friends or relatives, faith healers or pharmacists and allopathic doctors. Majority of them presented or referred late to psychiatrists or psychosexual clinics [10, 11].

Kar et al.,(2016) in their article discussed about the management models of 'Dhat syndrome' which included the conventional medical model, which is centred in relieving the symptoms of Dhat and existing models of treatment for the Dhat syndrome include various relevant pharmacological, psychotherapeutic and educational interventions. A person-centred care model comprises of attention to clinical characteristics as well as preferences of the patient, evidence-based techniques and characteristics of the therapist [12]. 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 that is, collaborative approach of psychiatrists, other medical disciplines such as – general medicine, dermatology, venereology, urology, neurology and also, collaborative approach with alternative systems of medicine and traditional faith healers helps in managing patients with 'Dhat syndrome' [13].

Randomized treatment trials suggest that most effective management of this condition includes a combination of pharmacotherapy with psychotherapy including cognitive behaviour therapy. Pharmacotherapy include antidepressants and anti-anxiety drugs, which have been found to be effective in the management of Dhat related symptoms. Placebo can be used in certain situations

and also addressing mood, anxiety and other stress related disorders with pharmacotherapy and supportive psychotherapy plays a vital role in management. In a study, Bhatia et al.,(1991) evaluated treatment in144 patients with sexual complaints, including 93 (65%) who presented with Dhat syndrome with or without another sexual problem. This study showed high drop rate and poor response with counselling alone and response to treatment improved with the use of placebo, imipramine and lorazepam. Although it should be noted that this study included no statistical analysis [14]. In another study by N Aggarwal et al., (2008) showed that 30 patients with Dhat syndrome started fluoxetine (20-40 mg/daily) showed a beneficial response but with drawback of lack of control group for comparison purposes [15]. Thus, SSRIs are most effective than psychotherapy alone and are more superior to placebo.

Chavanet al., (2009), in their study developed 3 session psycho-education model keeping 'Dhat syndrome' under limited information (LI) level [16]. The content of three sessions targeted cultural, anatomical, physiological and psychological aspects of sexuality. The first session focused on anatomy of sex organs using models and diagrams. The aim of the session was to alleviate fears and apprehensions associated with masturbation and night emission. This session also addressed the concern regarding small size of penis. The second session focused on the physiological aspect of sexuality. The session dealt with erogenous zones, production, and storage of semen. Specific emphasis was laid on the fact that urine and semen have separate sources of production and storage and thus passage of semen (Dhat) in urine is not possible. Patients were explained with diagram that the whitish material perceived as Dhat is in fact dried up secretion from certain glands which are associated with lubrication of sex organs which is mandatory for sexual activity. This session also focused on orgasm, both in males and females, the capacity of females to have multiple orgasms as well as inability to achieve orgasms on all the occasions. The refractory period in males after discharge was also discussed. The third session was an open session where patients were encouraged to express

their opinion regarding explanation provided in earlier two sessions. Patients were also asked to discuss any other concern which had not been discussed in earlier session. The concerns included fear of catching HIV and AIDS, fear of impotency, infections in urine etc. The findings of the study reveal that misconception associated with sex and sexuality are very common. 71% patients reported improvement in attitude and knowledge [16]. Salam et al., (2012) developed Cognitive – Behaviour Therapy module for patients with Dhat syndrome [17]. In this CBT model, cognitive restructuring forms an important framework. Cognitive restructuring helps the patient to modify these cognitive distortions and dysfunctional beliefs. The principal aim is to make the client understand the core symptoms of anxiety, depression, somatisation or sexual dysfunction. This component is based on patients' belief that one's personal worth and self-esteem was directly related to one's 'sexual power'. The study confirmed that the schema related to 'masculinity' and 'sexual power' was important to bring about any therapeutic change. Sexual schema has been postulated to precipitate sexual dysfunctions. These men perceived themselves to be sexually weak due to loss of semen. This view about oneself being weak gives rise to emotions such as anxiety and sadness which further complicates the picture. Jacobson's Progressive Muscle Relaxation (JPMR) procedure, a component of this module, it helps the patients with Dhat syndrome to bring down their general level of arousal [17]. The study found that images of loss of semen itself were distressing to the patients. Such imageries are known to produce anxiety. Imaginal desensitization has been used to combat such imageries and has been found to be an effective technique in reducing anxiety [17]. Specific techniques from cognitive - behavioural sex therapy like Kegel's

exercise helps them manage their symptoms in a better way and thus give them a better sense of control over their symptoms, without readily attributing them to loss of 'Dhat'. It is helpful then to make patients understand that there are ways to handle this. At this point, patient with Dhat syndrome is taught various ways of handling premature ejaculation and erectile dysfunction, like startstop technique and squeeze technique. The number of sessions ranged from 11 to 16 sessions for the patients with Dhat syndrome. The duration of the session was 45 minutes on the average. Findings of the study revealed improvement in sexual knowledge, anxiety, depressive and somatic symptoms [17]. Thus, overall the important steps in management of Dhat syndrome include patient cantered psycho-education and correction of myths associated with it. So, focus of management in Dhat syndrome should emphasize on psycho-education, correction of myths and structured psychotherapies like cognitive behavioural intervention may be considered with pharmacotherapy.

## Conclusion

Dhat syndrome being cultural related neurosis, it requires integrated collaborative approach between mental health and other health professionals. Management aspect involves pharmacotherapy which includes well-judged use of antidepressant, antianxiety and nonpharmacological treatment includes giving reassurance, individualized care, patient centred psychoeducation, correction of erroneous beliefs about sex, non-confrontational attitudes and empathetic listening. Cognitive restructuring with addition of relaxation technique also sown to have a beneficial role in treatment of Dhat syndrome. Thus, organising sex education information campaigns within community would be of great help in preventing psychosexual disorders and in promoting health.

#### References

- [1] Avasthi A, Grover S, Jhirwal OP. Dhat syndrome: A culture-bound sex related disorder in Indian subcontinent. Sexually Transmitted Infections. 2012;2:1225-30.
- [2] Akhtar S. Four culture-bound psychiatric syndromes in India. International Journal of Social Psychiatry. 1988 Mar;34(1):70-4.
- [3] Chadda RK, Ahuja N. Dhat syndrome: A sex neurosis of the Indian subcontinent. The British Journal of Psychiatry. 1990 Apr;156(4):577-9.
- [4] Sumathipala A, Siribaddana SH, Bhugra D. Culture-bound syndromes: the story of Dhat syndrome. The British Journal of Psychiatry. 2004 Mar;184(3):200-9.

- [5] Wen JK, Wang CL. Shen-kui syndrome: A culture-specific sexual neurosis in Taiwan. In: Kleinman A, Lin TY, editors. Normal and abnormal behaviour in Chinese culture. D Reidel Publishing Co: Dordrecht, Holland; 1980. p. 357-69.
- [6] Behere PB, Natraj GS. Dhat syndrome: The phenomenology of a culture bound sex neurosis of the orient. Indian Journal of Psychiatry. 1984 Jan;26(1):76.
- [7] Bhatia MS, Malik SC. Dhat syndrome—a useful diagnostic entity in Indian culture. The British Journal of Psychiatry. 1991 Nov;159(5):691-5.
- [8] Jadhav S. Dhāt syndrome: a re-evaluation. Psychiatry. 2004 Aug 1;3(8):14-6.
- [9] Malhotra HK, Wig NN. Dhat syndrome: A culture-bound sex neurosis of the orient. Archives of Sexual Behavior. 1975 Sep 1;4(5):519-28.
- [10] Grover S, Gupta S, Mahajan S, Avasthi A. Pathway of care among patients with Dhat syndrome attending a psychosexual clinic in tertiary care center in North India. Industrial psychiatry journal. 2016 Jan;25(1):72.
- [11] Singh A, Tripathi A, Gupta B, Agarwal V. Pathways to Care for Dhat (Semen Loss Anxiety) Syndrome: A Study from North India.

- International Journal of Mental Health. 2016 Oct 1;45(4):253-61
- [12] KAR SK, Singh A. Person Centered Management Approach for the Dhat Syndrome. International Journal of Person Centered Medicine. 2017 Feb 2;6(4).
- [13] Kar SK, Sarkar S. Dhat syndrome: Evolution of concept, current understanding, and need of an integrated approach. Journal of human reproductive sciences. 2015 Jul;8(3):130.
- [14] Bhatia MS, Malik SC. Dhat syndrome—a useful diagnostic entity in Indian culture. The British Journal of Psychiatry. 1991 Nov;159(5):691-5.
- [15] Dhikav V, Aggarwal N, Gupta S, Jadhavi R, Singh K. Depression in Dhat syndrome. The journal of sexual medicine. 2008 Apr;5(4):841-4.
- [16] Chavan BS, Kaur J, Singla M, Sharma A. Non pharmacological treatment of Dhat syndrome. Journal of Mental Health and Human Behaviour. 2009;14(2):69-73.
- [17] Salam KA, Sharma MP, Prakash O. Development of cognitive-behavioral therapy intervention for patients with Dhat syndrome. Indian journal of psychiatry. 2012 Oct;54(4):367.

## **Dhat Syndrome among Females: Is There Enough Evidence?**

Dr. Mukesh Kumar Swami

Assistant Professor, Department of Psychiatry, AIIMS, Jodhpur, Rajastan

## Abstract

In last few decade researchers have emphasized that non-pathological vaginal discharge has important psychosomatic components and it may represent an entity similar to 'Dhat syndrome' among females. Despite this, there is very limited research addressing validation of this entity. Literature is mostly limited to small studies among clinical population or case series and case reports. This article intends to highlight current understanding about 'Dhat syndrome' among females and lacunae in the existing body of research.

### Introduction

Dhat syndrome is a well-known entity among south Asian males since long [1]. There is sufficient literature to establish it as an important clinical entity. Over the years, tools and specific psychotherapeutic interventions targeting 'Dhat syndrome' have been developed and successfully used. Though further research is warranted to explore its dimensions, validity of this entity is well recognised. Further, recognising it as a separate entity or a specifier for other diagnostic entities is still debatable. Over last few decade idea of presence of similar entity among female was also proposed by some researchers. Although the research in this area is still sparse and inconclusive [2].

## **Evidences**

Conceptualisation of Dhat syndrome among females is similar to males, revolving around the central theme of loss of vital fluids through genital secretions. This culturally prevalent belief stems from Ayurvedic concept of seven physiological elements (Dhatu) and genital secretions represent most important element essential for energy and strength [3].

Among South-Asian females excessive vaginal discharge is a common presentation, known as Leucorrhoea in medical terms. Prevalence among Indian population is reported from 13 to 30 % in

different settings (lower in community based studies than clinic based studies) [4]. It was earlier associated with infections, but now it is recognised that in large number of cases it is non-pathological [5]. Studies have shown that presentation of vaginal discharge is frequently associated with psychiatric morbidity especially somatic symptoms. Chaturvedi in a small study, examined association of somatic symptoms with complaint of vaginal discharge [6]. The study reported that 30 % of those experiencing excessive vaginal discharge believe that their somatic symptoms are due to white discharge and suggest a possibility of 'Dhat syndrome' among females. In another study Chaturvedi et. al. examined this attribution of somatic symptoms to vaginal discharge in clinical setting and compared them with healthy controls [7]. The study found that complaint of vaginal discharge was slightly more among patient group but mis-attribution of somatic symptoms to vaginal discharge was 3.5 times more common among patient group. The study highlights that normal females do harbour similar beliefs though less frequently.

In a more recent study Grover et. al. examined possibility of Dhat syndrome among females presenting with vaginal discharge and psychiatric presentation [8]. They compared the presentation and characteristic feature with male patients with Dhat syndrome and concluded that clinical picture is similar and 'Dhat syndrome' among females should be recognised as a distinct entity. Apart from these studies few case reports and a case series also supported this concept [2,9,10].

Apart of these studies suggesting possibility of female 'Dhat syndrome', a study by Patel et. al. examined associations of vaginal discharge in large community based survey [11]. They found prevalence of 14.5% and stress as a most common causal attribution. Their finding suggests that psychological distress is probably cause of such complaint. So it is a cultural idiom of distress rather than a cause of development of psychological disorder. They also found that low literacy was associated with lower risk, which is also contrary to finding of other studies which suggest that women with lower education are more likely to present with complaint of leucorrhoea.

The available literature consistently suggest that complain of vaginal discharge is significantly associated with psychological distress. Though the direction of association is debatable. One theory suggest that vaginal discharge is an idiom of distress among females and stress is a causative factor. Other theory suggest that women develop psychological distress due to culturally prevalent belief regarding loss of genital fluids. Second hypothesis more directly support presence of a culture bound syndrome similar to 'Dhat syndrome' among females.

The existing literature is deficient in several aspects. There is dearth of epidemiological studies assessing knowledge and attitude among women regarding vaginal discharge. More qualitative studies are required to establish prevailing beliefs in the society regarding vaginal discharge as shared cultural beliefs are core to the concept of culture bound syndrome. It is required to establish that female who are not experiencing vaginal discharge also share same belief.

All the clinic based studies have excluded patients with pathological discharge or co-morbid gynaecological problems. Comparison of pathological versus nonpathological vaginal discharge can provide important information regarding cultural beliefs. Studies should examine that if there is any difference in presentation among these females. Theoretically the phenomenon should be present among both groups due to shared cultural belief. Studies among psychiatric patients should be interpreted cautiously as it is possible that patients with somatoform disorder, looking for an explanation of their symptoms attribute their symptoms to a co-existing non-pathological condition. Patients presenting with somatic symptoms may also have cognitive bias leading to misinterpretation of normal physiological experiences. Further studies should examine whether all form and frequency of vaginal discharge is considered abnormal. Characteristics of abnormal discharge like frequency, amount, or other physical characteristics should be established. Frequency and nature of psychiatric morbidity among patients presenting with vaginal discharge need to be evaluated in a larger sample.

Existing literature suggest a bi-directional association of vaginal discharge with psychological distress, it require clarification before validation of 'Dhat syndrome' among females as a distinct entity. Another area which need exploration is association of vaginal discharge with sexuality. If vaginal discharge is a way of expressing distress than it is possible that it reflects sexual problems among females.

Evidence in support of 'Dhat syndrome' in females, can also be garnered through studies using interventions in line with male patients with 'Dhat syndrome'. It would clarify, if targeting somatoform disorder as usual is sufficient or addition of psychological intervention in line with Dhat syndrome has some added advantage. Such benefit is unlikely to be substantial, if false

beliefs are not the underlying cause for development of psychopathology.

## Conclusion

Despite the supportive evidences, the literature regarding existence of 'Dhat Syndrome' among females is limited. Currently females presenting with such cultural beliefs are categorised under somatoform disorders or anxiety disorders, depending on presenting symptoms. Similar to Dhat syndrome among male, such females might also require unique management approach in form of specifically designed psychoeducation modules and other targeted psychotherapeutic interventions. So, even if Dhat syndrome is not recognised as a separate entity among females, proper evaluation of these associations is very important clinically to address needs of these subgroup of patients.

#### References

- [1] 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
- [2] Kar SK, Singh A. Where lies the fault in diagnosing dhat syndrome among females? Understanding through a case study. Indian J Psychol Med 2017;39:506 8.
- [3] Trollope-Kumar K1. Cultural and biomedical meanings of the complaint of leukorrhea in South Asian women. Trop Med Int Health. 2001 Apr;6(4):260-6.
- [4] Chaudhary V, Kumar R, Agrawal VK, Singh A, Narula R, Sharma M. Prevalence and determinants of vaginal discharge among women of reproductive age group in tertiary care hospital of northern India. National Journal of Community Medicine 2012; 3 (4): 661-65.
- [5] Zemouri C, Wi TE, Kiarie J, Seuc A, Mogasale V, Latif A, Broutet N. The Performance of the Vaginal Discharge Syndromic Management in Treating Vaginal and Cervical Infection: A Systematic Review and Meta-Analysis. PLoS One. 2016; 11(10):e0163365.

- [6] Chaturvedi SK. Psychaesthenic syndrome related to leukorrhoea in Indian women. J Psychosom Obstet Gynecol 1988;8:67 72.
- [7] Chaturvedi SK1, Chandra PS, Issac MK, Sudarshan CY. Somatization misattributed to non-pathological vaginal discharge. J Psychosom Res. 1993 Sep;37(6):575-9.
- [8] Grover S, Avasthi A, Gupta S, Hazari N, Malhotra N. Do female patients with nonpathological vaginal discharge need the same evaluation as for Dhat syndrome in males? Indian J Psychiatry 2016;58:61-9.
- [9] 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.
- [10] Singh G, Avasthi A, Pravin D. Dhat syndrome in a female A case report. Indian J Psychiatry 2001;43:345 8.
- [11] Patel V, Pednekar S, Weiss H, Rodrigues M, Barros P, Nayak B, et al. Why do women complain of vaginal discharge? A population survey of infectious and pyschosocial risk factors in a South Asian community. Int J Epidemiol 2005;34:853 62.

## **Ayurvedic Concept of Semen**

## Dr. Saroj Kumar Sahu

Guest Assistant Professor, Department of Yoga and Naturopathy, North Odisha University, Sir Ram Chandra Vihar, Baripada, Mayurbhanj, Odisha

## Abstract

The fetus (garbha) is the product of nutrient fraction of sukra or semen (sperm). The quantity of retas (semen) is one prasuta (96 ml approximately). Sukra (semen), which is white in color, heavy, unctuous, sweet, thick, more in quantity, resembling either ghee, honey or oil of sesame is suitable for producing the embryo. The function of sukra dhatu is garbhotpadana (getting pregnancy). A male child will be produced, when sukra (semen) is more. It is responsible for strength and steadiness in our body. Hasta maithuna (masturbation) and nocturnal emission, like all natural urges, should not be suppressed, according to Ayurveda. Mithyayoga (wrong utilization) and atiyoga (excessive utilization) of semen can precipitate loss of libido. Food prepared with ghee, milk, meat and soup are very useful for the treatment of vitiated sukra dhatu. The vitiated sukra dhatu is corrected by oleation therapy (snehana), sudation therapy (svedana) and medicated enema (vasti). Treatment of the vitiated semen is done by jivaniya-ghrta (ghee prepared by cooking with drugs belonging to jivaniya group of herbs. Treatment of the vitiated semen is also done by rasayana, valya and vajikara herbs, drugs used for yoni-vyapat (gynecology disorders), cyavanaprasa and silajatu etc.

#### Introduction

In Ayurveda, semen is described as sukra dhatu out of the seven dhatus (tissue elements of the body). The essence of majja (bone marrow) gives rise to sukra (semen). Porosity of bones is caused by vayu, akasa, etc., and through these porous holes, exudation of sukra takes place. This happens on the analogy of exudation of water through the porous walls of a new earthen pot. The entire body is pervaded by fine channels carrying semen. When a person gets excited of the sexual urge, determination and amorous mental attitude, then semen comes out from the entire body through pores to the testicle. The ejaculation of semen takes place because of the heat that is produced during the physical exercise involved at the time of sexual intercourse. This happens on the analogy of the melting of ghee by the application of physical heat. From the testicles, semen gets ejaculated as water flows from a higher altitude to a place of lower altitude [1, 2, 3].

## Characteristics of semen

The transformation of dhatus (from rasa to sukra) is effected in 6 days and nights. This process of transformation of the tissue elements requiring nourishment is a continuous one, like a moving wheel [1, 2, 3]. The quantity of retas (semen) in an young adult is one prasuta or ardha anjali (96 ml approximately) [4, 5].

## Tissue metabolism (Dhatu parinama)

The food taken is digested by pachakagni (digestive fire) and is converted to annarasa (the digested food). The annarasa is converted to rasa dhatu (plasma). From rasa, rakta dhatu (blood) is produced by rasadhatvagni. From rakta, mamsa dhatu (muscle tissue) is produced by raktadhatvagni. From mamsa, meda dhatu (fat) is produced by mamsadhatvagni. From meda, asthi dhatu (bone), is produced by medadhatvagni. From asthi, majjadhatu (bone-marrow) is produced by asthidhatvagni. From majja, sukra dhatu (semen) is produced by majjadhatvagni [1, 2, 3, 6,7,8].

## Availability of semen in the body

Juice is spread throughout the sugarcane plant, ghee is present in the curd and oil is present in all parts of the sesame seed. Similarly semen is present in the whole body. As water comes out of a wet cloth when squeezed, similarly, the semen trickles out from its site during copulation between man and the woman, because of sexual acts (chesta) and because of passionate attachment (sankalpa) and physical pressure (pidana). [1, 2, 3]. The foetus (garbha) is produced by sukra dhatu or semen (sperm) [1, 2, 3, 6,7,8].

#### Characteristics of pure semen (sudha sukra laksana)

Pure semen is thick, sweet, unctuous, sweet smell, heavy, slimy, white, dense, slimy, in large quantity and helps in reproduction [1, 2, 3, 4, 5].

The sukra dhatu has soma guna, predominant with jala mahabhuta (water element) [6, 7, 8]. The semen increases physical and mental strength [6, 7, 8]. The main function of sukra dhatu is garbhotpadana (getting pregnancy) [4, 5, 9, 10, 11].

## Characteristic of individuals having the excellence of semen (sukrasara purusa)

A sukrasara purusa (man with sufficient amount of sukra) has well developed bones, teeth and nails. He is blessed with children. He is strong, stout, gentle, handsome, having fair complexion and sweet voice, masculine body. He is always loved and attracted by females [1, 2, 3, 6, 7, 8].

## Formation of the embryo (garbhotpatti)

Satva (atma or soul) impelled by afflictions of his own past actions, entering into the union of pure (unvitiated by the dosas) sukra (semen-the male seed) and artava (menstrual blood- the female seed) gives rise to the formation of the embryo; in an orderly (predetermined) manner, just like the fire from two pieces of wood (rubbing together) [4, 5].

### Role of semen in determining sex

A male child will be produced when sukra (semen) is more, a female child will be produced when rakta (menstrual blood) is more and a eunuch when both are equal [4, 5].

#### Cause of vitiation of sukra dhatu

More sexual indulgence, more physical exercise, eating wrong food, sexual intercourse during day time and during menstrual cycle, sexual intercourse through tracks other than the female introitus such as anus, mouth etc., abstinence from sexual activities during night and spring season, sexual intercourse with women who have no interest in sex, old age, worry, grief and lack of confidence in the sexual partner, body emaciation by diseases, suppression of the manifested natural urges like urination, defecation etc., injury of dhatus and vitiation of dhatus are the main causes of vitiation of sukra dhatu [1, 2, 3, 12].

## Clinical manifestations of abnormalities of semen (sukra)

### Signs and symptoms of excess sukra

Sukrasmari (gravels made by semen) are seen in the bladder if there is excess amount of sukra is present in the body [6, 7, 8].

### Signs and symptoms of loss of sukra

Late ejaculation of semen, ejaculation mixed with blood, pain and burning sensation in penis [4, 5].

#### Sukradhara kala

Out of the seven kalas present inside the human body, the seventh kala is called Sukradhara (sukra-bearing layer), which extends throughout the entire body of all living creatures. Kalas are the outermost layer of dhatus [6, 7, 8].

### Signs & symptoms of vitiation of sukra dhatu

If sukra (semen) diminishes, the patient suffers from weakness, dryness of mouth, pallor, lassitude, exertion, impotency and non-ejaculation of semen [1, 2, 3, 12].

#### Abnormalities of sukra (vikruta sukra)

Retas (semen) that vitiated by vata, pitta and kapha, that having the smell of a dead body, that formed into balls (masses, pellets), that resembling pus, that decreased in quantity, that resembling the wastes – mutra (urine) and purisa (faeces) are incapable of producing the embryo [4, 5].

## Seminal morbidities caused by vata, pitta and kapha

Vayu vitiated sukra dhatu is frothy, thin, unctuous, reddish—black color, ejaculated in small amount and with pain and does not help in reproduction [1, 2, 3, 6, 7, 8, 12].

Pitta vitiated sukra smells putrid, blue or yellow colored, hot, ejaculated with pain and burning sensation[1, 2, 3, 6, 7, 8, 12].

Kapha vitiated sukra dhatu is slimy, white in color and produces the pain (itching sensation etc.) [1, 2, 3, 6, 7, 8 12].

## Seminal morbidities caused by vata and kapha

Sukra dhatu vitiated by vayu and kapha is clotted (granthila) [6, 7, 8].

#### Seminal morbidities caused by pitta and kapha

Sukra dhatu vitiated by pitta and kapha looks like putrid pus (putipuya) [6, 7, 8].

#### Seminal morbidities caused by tridosa

Sukra dhatu vitiated by vayu, pitta and kapha smells like urine or fecal matter [6, 7, 8].

## Semen associated with blood

Cause of rakta vitiated sukra dhatu is more sexual intercourse and injury. Blood mixed semen is ejaculated [1, 2, 3, 12]. Rakta vitiated sukra dhatu smells like a putrid corpse and is emitted in large quantities and produces pain [6, 7, 8].

## Infertility of polluted semen

When impaired by unseasonal implantation and when affected by microbes, insects and fire, a seed does not grow. Similarly the vitiated sukra dhatu does not help in reproduction [1, 2, 3, 12].

## Treatment of seminal morbidities in general

Food prepared with ghee, milk, meat and soup are very useful for the treatment of vitiated sukra dhatu [1, 2, 3, 12].

The vitiated sukra dhatu is corrected by oleation therapy (snehana), sudation therapy (svedana) and medicated enema (vasti) [6, 7, 8].

Treatment of the vitiated semen is done by jivaniyaghrta (ghee prepared by cooking with drugs belonging to jivaniya group of herbs. Jivaniya herbs like Jivanti (Ledtadenia reticulata), Mudgaparni (Phaseolus trilobus) and Masaparni (Teramnus labialis).

Treatment of the vitiated semen is also done by rasayana, valya and vajikara herbs, drugs used for yoni-vyapat (gynaecology disorders), cyavanaprasa and silajatu etc. [1, 2, 3, 12,13].

Valya herbs are Bala (Sida cordifolia), Atibala (Abutilon indicum), Mahabala (Sidar hombifolia), Bidari (Puraria tuberosa), Barahi (Diascorea bulbifera) and Tabakshira (Curcuma angustifolia) [13].

Rasayana herbs are Haritaki (Terminalia chebula), Amalaki (Emblica officinalis), Guduchi (Tinospora cordifolia),

Asvagandha (Withania somnifera), Brudhadaruka (Argyreia speciosa), Nagabala (Grewia hirsuta) and Nagadamana (Sans evieria) [13]

## Treatment of seminal morbidities caused by tridosa

Sukra dhatu if vitiated by vata, pitta and kapha should be treated with appropriate drugs and administration of purificatory therapies [4, 5].

#### Treatment of seminal morbidities caused by vata

Niruha vasti (medicated enema therapy with decoction etc.) and anuvasana vasti (medicated enema therapy with oil etc.) is given to the patient.

### Treatment of seminal morbidities caused by kapha

The patient is treated with medicines like Abhayamalakiyarasayana, Pippali rasayana, Amalaki rasayana, Loha rasayana and Bhallataka rasayana [1, 2, 3, 12].

Herbs used for sukra sodhana (for semen purification) are Kustha (Saussurea lappa), Katphala (Myricae sculenta). Herb used for sukra stambhana (not to allow

#### References

- [1] Sharma RK, Dash B.Charaka Samhita, Choukhamba Sanskrit Series Office, Varanasi, India, 2011.
- [2] Tripathi B.Charaka Samhita, Chaukhamba Surbharati Prakashan, Varanasi, India, 2007.
- [3] Acharya YT. Charak Samhita, Chaukhambha Surbharati Prakashan, Varanasi, India, 1941.
- [4] Murthy KRS. Vagbhata's Astanga Hridayam, Choukhamba Krishnadas Academy, Varanasi, India, 2011.
- [5] Paradkar H. Ashtangahridaya, Chaukhambha Orientalia., Varanasi, India, 1982.
- [6] Kaviraj K. Susruta Samhita, Choukhamba Sanskrit Series Office, Varanasi, India, 2012.
- [7] Shastri A. Sushruta Samhita (Ayurveda Tantra Sandipika Hindi commentary), Chaukhamba Publications, New Delhi, India, 2010.

semen ejaculation for longer duration) is Akarakarabha (Anacyclus pyrethrum).

## Treatment of vitiated sukra by other dhatus

Sukra dhatu if vitiated by other dhatus, the patient should be treated with appropriate samana therapies (palliative treatment) and sodhana therapies (purificatory methods like panchakarma) for the correction of the concerned dosas and dhatus [1, 2, 3, 12].

## Sukra Dhatu Kshaya (Loss of Semen)

Hasta maithuna (masturbation) and nocturnal emission, like all natural urges, should not be suppressed, according to Ayurveda. Mithyayoga (wrong utilization) and atiyoga (excessive utilization) of semen can precipitate loss of libido [1, 2, 3].

## Conclusion

Sukra or Retas (Semen) is the seventh dhatu of human body. It is responsible for strength and steadiness our body. The conservation of semen is the best possible way to remain healthy physically, mentally, socially and spiritually. Hence yogis conserve semen and enjoy healthy prolong life.

- [8] Acharya YT. Acharya NR. Sushruta Samhita with Nimbandha sangraha Commentary, Chaukhambha Orientalia, Varanasi, India, 2002.
- [9] Gupta A. Vagbhata Ashtanga Sangraha Samhita (Hindi commentary), Krishnadas Academy, Varanasi, India, 1993.
- [10] Vidyanath R. A Hand Book of Astanga Sangraha (Sutra sthana), Chaukhamba Surbharati Prahashan, Varanasi, India, 2006.
- [11] Shastri L. Ashtanga Sangraha, Baidyanath Ayurved Bhavan Limited, Nagpur, India, 1981.
- [12] Shukla B. Kaya Chikitsa, Chaukhamba Surabharati Prakasan, Varanasi,India, 2012.
- [13] Sharma PV. Dravyaguna Vijnana, Chauhkamba Bharati Academy, Varanasi, India, 1999.

## Therapeutic Implication of Associated Co-morbidities in Dhat Syndrome: A Case Report

Dr. Shubha Joshi<sup>1</sup> | Dr. Amardeep Patel<sup>2</sup>

- 1. Junior Resident, Department of Psychiatry, King George's Medical University, Lucknow
- 2. Senior Resident, Department of Psychiatry, King George's Medical University, Lucknow

## Abstract

Dhat syndrome is a culture bound syndrome. Patients with Dhat syndrome presents with various somatic, psychiatric and sexual complaints and attributes these problem to loss of semen. Loss of semen either due to 'swapn dosh' or 'hasth maithun' is perceived to be pathological by these patients. The myths regarding Dhat syndrome are further triggered by indigenous systems of medicine and erotic literature, which regard Dhat as a precious fluid. Patients with Dhat syndrome often have psychiatric co-morbidities, which adds to the level of distress of the individual. Management of Dhat syndrome includes correction of the core belief, alleviation of the symptoms as well as treatment of the co-morbidity. Non-pharmacological treatment is most commonly used which focuses on teaching the patient relaxation exercises and the actual reason of their symptoms.

#### Introduction

Dhat syndrome is a culture bound syndrome commonly reported in South East Asia [1]. Dhat syndrome is common among young recently married males from rural background, born in a family of low socio-economic status and having a conservative attitude towards sex [2].

In India, various beliefs exist regarding loss of semen. According to Charaka Samhita, semen is a precious body fluid (Dhatu). Any imbalance between 7 Dhatus, Sukra (semen) being one of them, can lead to various physical and sexual disorders. As Sukra or semen is nutritional in origin and is pervading within the body any wastage of semen either during ejaculatory orgasm or its loss due to any reason may result in physical and other sexual morbidities [3,4]. The physiological ejaculation (nocturnal emission), which occurs at night are described as pathological by these patients. Physiological ejaculation or 'swapn dosh' is considered as a cult [5]. Similarly, masturbation or 'hasth maithun' is also considered as a bad habit. Patients with Dhat syndrome believe that loss of semen often leads to thinning of semen and its related symptoms [6].

People having this syndrome are preoccupied with thoughts of loss of semen and its adverse

consequences. They attribute their physical and psychological symptoms to semen loss [7]. The most common reported symptoms are body aches, burning micturition and increase frequency of micturition, difficulty in micturition, hypochondriasis, anxiety and depression. Dhat syndrome may also manifest with sexual dysfunction. This may range from potency to frank impotence and pre-mature ejaculation. These two co-morbidities may be present alone or in combination [8].

Patients often attribute their symptoms to having watched pornographic movies in the past or any pre-marital or extra marital affair, homosexuality, intercourse with a woman during menstruation, black magic by his wife or habits such as alcoholism [9]. Any infection in genitalia, over eating, worm infestation, constipation and disturbed sleep pattern are also reported as the cause of dhat syndrome by these patients according to some studies.

## Case history

A 33 years old male presented with the chief complaints of loss of penile erection, early ejaculations of semen and worries related to semen loss for past 8 years. Patient described that he would not have adequate erection during sexual encounters with partner and often describe the rigidity of his erected penis to be very soft. As a result of which, vaginal penetration often remained unsatisfactory during intercourse. He reported about normal nocturnal erections. He was able to achieve erection 8 years back though he did not have any sexual intercourse before marriage but morning erections were present. Erection also occurred in presence of sexual stimulation. He also complaint of early ejaculation while having sexual intercourse. Ejaculation occurs just before penetration. These symptoms are present persistently and are not specific to particular situation or particular partner. This has been distressing to him as well to his wife. He is able to perform only after taking medicine Sildenafil.

Patient was married two and a half years back and has 8 months old daughter. He share a stable and cordial relationship with his wife. He had last sexual

intercourse with his wife was 1 week back, prior to psychiatric consultation. Patient had misconception regarding the volume and consistency of his semen as he felt that his semen is getting thinner and is decreasing in amount. He reported significant distress related to loss of semen and sexual dysfunction. He consulted for homeopathic treatment over past 8 years, without significant improvement. He consumes alcohol and tobacco occasionally, since last 10 years. His past and family history were non-contributory to his current illness. His general physical examination, systemic and local examination were within normal limit. On mental status examination, the patient was anxious and had preoccupations related to loss of semen and their possible sexual hazards.

He was diagnosed with Dhat syndrome with Premature ejaculation and Erectile dysfunction. He was prescribed escitalopram 10mg/day and sexual myths were resolved through psychoeducation. Relaxation techniques were also explained to him. He was also advised to continue sildenafil as and when required. In follow up, there was improvement in his symptoms.

## Discussion

Broadly, patients of Dhat syndrome with co-morbidities can be divided into two groups. The first group, where Dhat syndrome is the primary entity and sexual dysfunction are secondary to Dhat syndrome. Here, the sexual dysfunction mostly results from the catastrophizing beliefs related to Dhat syndrome. Sexual performance of the patient is compromised due anxiety and depression associated with Dhat syndrome. While the second group, where sexual morbidity is the primary entity and Dhat syndrome is an attribution of sexual morbidity. In the first group counselling regarding the Dhat syndrome is the primary goal and it is likely to improve the co-morbid sexual disfunction without any additional intervention. While the second group primary cause needs to be treated along with counselling of the patient regarding Dhat syndrome. In our patient, the sexual co-morbidity improved with resolution of sexual myths, which refers to the first group.

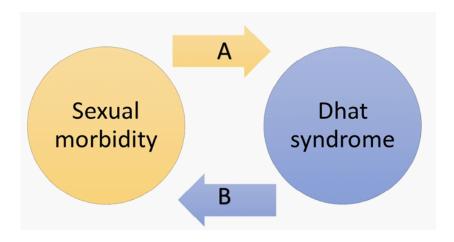


Figure 1: Association of Dhat syndrome and Sexual morbidity.

Arrow A indicates Sexual co-morbidity attributed to dhat syndrome, Arrow B refers to Sexual co-morbidity as a sequel of Dhat syndrome.

Sexuality is a taboo in India. Sexual matters and sexual problems are not paid much attention in Indian families. This makes the treatment of the sexual problems difficult [10]. Management of Dhat syndrome includes both pharmacological and non-pharmacological treatment. Non-pharmacological treatment mainly focuses on sex education and relaxation exercises. Patient are educated and made aware about the anatomy and physiology of sexual organ and their functioning, the process of

formation of semen and so called 'hasth maithun' and 'swapn dosh' are normal physiological phenomenon [11].

## Conclusion

Understanding the concept of Dhat syndrome and its comorbidities is important in clinical practice. Segregating the patients of Dhat syndrome with sexual co-morbidities by the nature of their association, will help in deciding the management plan for them.

#### References

- [1] Behere PB, Natraj GS. Dhat syndrome: The phenomenology of a culture bound sex neurosis of the orient. Indian J Psychiatry 1984;26:76-8.
- [2] Bhatia MS, Malik SC. Dhat syndrome--a useful diagnostic entity in Indian culture. Br J Psychiatry. 1991;159:691–5.
- [3] Prakash O. Lessons for postgraduate trainees about dhat syndrome. Indian J Psychiatry2007; 49:208-10
- [4] Prakash O, Meena K. Association between Dhat and loss of energy – A possible psychopathology and psychotherapy. Med Hypotheses 2008;70:898-9.
- [5] Khan SI, Hudson-Rodd N, Saggers S, Bhuiyan MI, Bhuiya A, Karim SA, et al. 'Semen contains vitality and heredity, not germs': Seminal discourse in the AIDS era. J Health PopulNutr 2006;24:426-437.
- [6] Verma RK, Sharma S, Rangaiyan KG, Singh R, Pelto PJ. Beliefs concerning sexual health problems and treatment

- seeking among men in an Indian slum community. Cult Health Sex 2003;3:165-73.
- [7] Deb KS, Balhara YP. Dhat syndrome: A review of the world literature. Indian J Psychol Med 2013;35:326-31.
- [8] Kulhara, P., &Avasthi, A. (1995). Sexual Dysfunction on the Indian Subcontinent. International Review of Psychiatry, 7(2), 231–239.
- [9] Wig NN. Problem of mental health in India. J Clin Social Psychiatry. 1960;17:48–53.
- [10] Ranjith G, Mohan R. Dhat syndrome as a functional somatic syndrome: Developing a sociosomatic model. Psychiatry 2006:69:142-50.
- [11] Avasthi A, Gupta N. Manual for standardized management of single males with sexual disorders. Marital and Psychosexual Clinic: Chandigarh. 1997.

## Prof. N. N. Wig & His Contribution to Understand Dhat Syndrome

## Dr. Sujit Kumar Kar<sup>1</sup> | Dr. Saumya Ranjan Mishra<sup>2</sup>

- 1. Associate Professor, Department of Psychiatry, King George's Medical University, Lucknow
- 2. Indian Institute of Sexology, Bhubaneswar



Professor N. N. Wig (1930-2018) is a pioneer of Indian psychiatry. He is a well-known figure in the field of psychiatry across the globe, over past five decades for his significant academic contributions. For his significant contributions and giving Indian psychiatry a new height, he is popularly known as the "Father of Indian Psychiatry". He carefully nurtured Indian psychiatry as a result of which Indian psychiatry become a powerful force in the international forum.

Professor Wig graduated (MBBS) from the prestigious King George's Medical College (now King George's Medical University), Lucknow

in 1953 and also obtained his postgraduate degree (MD) in medicine from the same institution in 1957. Thereafter, he got four months training on Psychiatry at All India Institute of Mental Health, Bangalore (now NIMHANS, Bengaluru) [1, 2]. After receiving training in psychiatry, he returned back to King George's Medical College, Lucknow as a lecturer of neuropsychiatry and started the psychiatry unit, which was the first general hospital psychiatric unit in India [1]. Later, he went abroad for fellowship training for two years, where he also completed diploma in psychological medicine from two institutes of England and Scotland. After returning India in 1963, he joined the Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh and stated the psychiatry unit there [1, 3]. He led the department of psychiatry of PGIMER till 1980 and there after led the psychiatry unit of All India Institute of Medical Sciences (AIIMS), New Delhi, before he become the regional advisor of mental health of World Health Organization (WHO) [1, 4].

Professor Wig, played a pivotal role in giving a structure to Indian mental health concepts. He contributed to the development of community mental health care delivery in India. He contributed to development of psychiatry in India through understanding the nosology of psychiatric disorders, psychiatric aspect of various physical disorders, initiating multidisciplinary collaborative research with other medical disciplines, culture-bound syndromes, evaluating the course and outcome of psychosis as well as psychotherapeutic interventions in Indian settings [1].

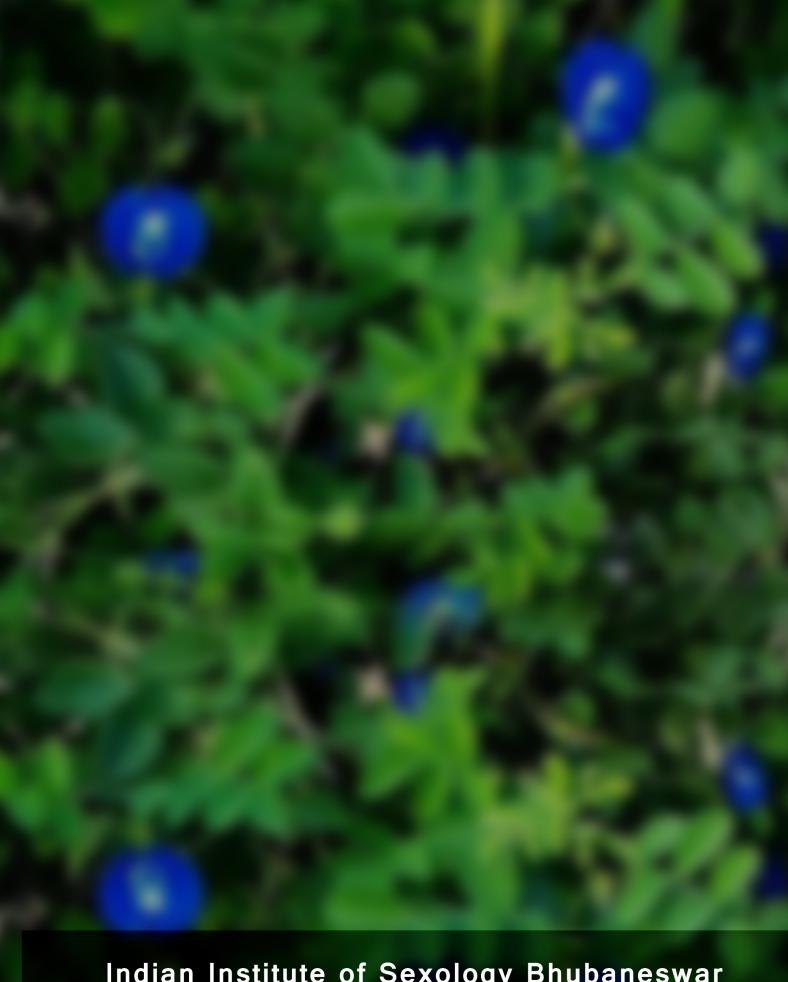
Prof. Wig, had coined the term 'Dhat syndrome', which refers to anxiety, somatic manifestations related semen loss [5–8]. Prof. Wig described 'Dhat syndrome' among young males, who presented with anxiety, depression and multiple non-specific somatic symptoms, attributing these symptoms to semen loss per urethra during defecation or micturition [6, 8]. In a study, Malhotra & Wig, described that people with 'Dhat syndrome' perceive their loss of semen to be excessive during nocturnal emission and they also harbour the belief that semen loss has detrimental effect on health as semen is the source of strength and stamina [6]. The misconceptions centred around semen loss is the major contributing factor to development of 'Dhat syndrome'. Resolving the sexual myths and misconceptions during treatment helps in resolution of the

symptoms of 'Dhat syndrome', as reported by Malhotra & Wig in their study in 1975 [6]. Prof. Vijoy K. Varma had proposed to include 'Dhat syndrome' under neurotic disorders in the classificatory system and finally 'Dhat syndrome' was included under ICD-10 category F48 [8]. Over past few decades, many researches were carried out in patients with 'Dhat syndrome'. The pioneering foundation work of Prof. Wig, helped in conceptualizing 'Dhat syndrome'.

Prof. N. N. Wig passed away at the age of 88 years, after prolonged medical illness on 12th July 2018. His demise is a great loss to world psychiatry. His contributions and teachings will be remembered for ever.

#### References

- [1] Avasthi A, Chakrabarti S. Prof. NN Wig... The Living Legend of Indian Psychiatry. J Postgrad Med Educ Res. 2018;52:164–5.
- [2] Wig NN. How I Became A Psychiatrist: An Autobiographical Account of Early Career. Delhi Psychiatry Journal. 2007;10:160–3.
- [3] Brief Biodata: Dr. N. N. Wig. Mens Sana Monogr. 2005;3:1–2.
- [4] Khandelwal SK. The joy of mental health: Some popular writings of Dr N.N. Wig. Indian J Psychiatry. 2006;48:207.
- [5] Udina M, Foulon H, Valdés M, Bhattacharyya S, Martín-Santos R. Dhat syndrome: a systematic review. Psychosomatics. 2013;54:212–8.
- [6] Malhotra HK, Wig NN. Dhat syndrome: a culture-bound sex neurosis of the orient. Arch Sex Behav. 1975;4:519–28.
- [7] 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.
- [8] Maj M, editor. Psychiatric diagnosis and classification. New York: John Wiley; 2002.



Indian Institute of Sexology Bhubaneswar Email: sexualityinfo@gmail.com Website: www.iisb.org