



Dhat Syndrome – Revisiting the Phenomenology and Related Psychiatric Co-Morbidities

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Abstract

Background: Dhat syndrome is a culture bound syndrome found quite commonly in men from India (and other South Asian countries), leading to a number of psychiatric problems

Aim: The study is aimed at studying the 1) socio-demographic correlates of patients with dhat syndrome 2) The occurrence of comorbid neurotic, stress related and somatic symptoms 3) The severity of comorbid anxiety and depressive symptoms.

Materials and Methods: 50 patients were recruited from consecutive outpatients attending the psychiatry department and assessment was carried out using a semi-structured proforma, Dhat Syndrome Questionnaire and Depression, Anxiety and Stress scale (DASS). The data thus collected was analysed using SPSS version 20.

Results: Most patients were found to be in the second decade of life, hailed from urban background and lower socio-economic status. Media and peer group were the source of information for three-fourth of the patients. A majority of the patients reported with somatic symptoms. Mild to moderate anxiety and depression scores were most commonly observed.

Conclusion: The current study has illustrated that dhat syndrome is associated with a lot of misinformation and leads to mild-moderate depression and anxiety symptoms. Hence, making its awareness and treatment extremely important.

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Keywords: Dhat syndrome; Culture bound syndromes; Depression anxiety; Somatic symptoms.



Introduction

Ayurveda mentions about the formation of semen by the process of purification and condensation through several steps (from food, through blood, flesh, and marrow) [1]. In other Asian countries of Sri Lanka and China, the effects of semen loss are described under the names of “Prameha” and “Shen K’uei,” respectively [2].

Dhat syndrome is a clinical entity recognized both by general public as well as medical practitioners in which nocturnal emissions lead to severe anxiety and hypochondriasis, often associated with sexual impotence [3]. Patient usually presents with various somatic, psychological and sexual symptoms. Patient attributes it to the passing of whitish discharge, believed to be semen (Dhat), in urine [4]. Current evidences suggest that Dhat syndrome is common among poorly educated males in their second to third decade of life [5]. Although such studies have been conducted in the Northern part of India, the number of such studies is very limited in Southern India.

Materials and methods

Design: This cross-sectional descriptive study was conducted at the Department of Psychiatry, Sri Ramachandra Medical College and Research Institute, Porur, Chennai. Before the commencement of the study, the Institutional Ethical Committee (IEC) approval was obtained. Our IEC adheres to Indian Council of Medical Research (ICMR) guidelines for biomedical research in human beings.

Participants: The sample was comprised of 50 patients diagnosed with dhat syndrome. The samples were inducted through consecutive sampling method.

Inclusion Criteria: The inclusion criteria were as follows: patients more than 18 years of age who were diagnosed to have dhat syndrome as per ICD-10 criteria. Patients gave consent.

Exclusion Criteria: Patients suffering from psychotic illness, dementia, substance use disorder (except nicotine use) or organic brain syndrome were excluded. Patients with intellectual disability were also excluded.

Assessments

The sample was chosen from the population of patients attending the outpatient unit of the Department of Psychiatry at Sri Ramachandra Medical College & Research Institute, Porur, Chennai. Sampling was carried out over a period of 14 months from April 2016 to July 2017. During this period, 60 patients were approached of which 4 patients did not fulfill the inclusion and exclusion criteria. About 3 participants did not give consent to participate in the study. Three participants gave consent but did not complete the study. Thus the final sample comprised of 50 patients who were diagnosed according to ICD-10 criteria for Dhat syndrome with or without sexual dysfunction.

A semi structured profoma was used to collect the socio-demographic details like name, age, marital status, education, occupation, family type, religion, monthly, income, socioeconomic status, localtity and the source of information about Dhat

Syndrome. Assessing the source of information regarding Dhat to the patient such as through media, friends, Relatives, Faith healers, Homeopathic practitioners, Ayurvedic practitioners, allopathic doctors, Local sex specialists or registered medical practitioners.

Dhat Syndrome Questionnaire was used. It has multiple choice questions with yes/no responses and specific responses in various other rating formats, and open-ended questions covering various aspects of Dhat syndrome. This questionnaire is reported to have adequate face validity. Test–retest reliability of the Hindi and English version is good.

Depression and Anxiety Stress Scale (DASS) was also used to study the severity of anxiety and depression scores. The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. The DASS was constructed not merely as another set of scales to measure conventionally defined emotional states, but to further the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states usually described as depression, anxiety and stress.

Statistical analysis

The data was analyzed using the Statistical Package for Social Scientists, version twenty (SPSS-20). Discrete variables were computed as frequency and percentage. Mean and standard deviation was calculated for all the continuous variables. Karl Pearson’s correlation was used for computing correlations of parametric variables. Significance was compared using two-tailed p values. The significance level was set at <0.05 .

Results

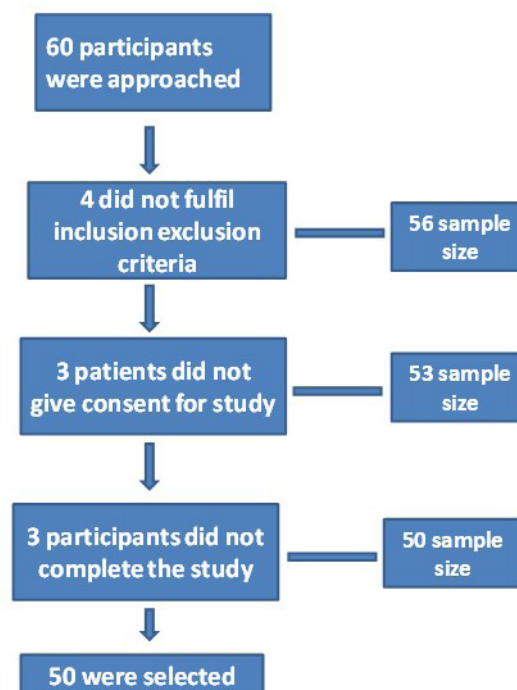


Figure 1: Socio Demographic Profile of Patients

Table 1: Socio Demographic Profile of Patients

Socio demographic variables	n = 50 N= No. of patients(frequency %), mean ± SD
Age (years)	24.20± 5.17
Marital status	
1. Married	28 (56%)
2. Single	17 (34%)
3. Others	5 (10%)
Educational qualification	
1. Illiterate	16 (32%)
2. Primary school	13 (26%)
3. Matriculation	11 (22%)
4. Higher secondary	8 (16%)
5. Graduate	2 (4%)
Occupation	
1. Unemployed	11(22%)
2. Unskilled labour	21 (42%)
3. Skilled labour	15 (30%)
4. Professional	3 (6%)
Family type	
1. Nuclear	21 (42%)
2. Joint	17 (34%)
3. Others	12 (24%)
Religion	
1. Hindu	22 (44%)
2. Muslim	19 (38%)
3. Christian	9 (18%)
Socio economic status	
1. Upper Middle	4 (8%)
2. Lower Middle	13 (26%)
3. Upper Lower	15 (30%)
4. Lower	18 (36%)
Locality	
1. Urban	30 (60%)
2. Rural	20 (40%)

Table 2: Source of Information About Dhat Syndrome

SOURCE OF INFORMATION	n = 50 N= No. of patients (frequency %)
1. Media	37 (74%)
2. Friends	39 (78%)
3. Relatives	31(62%)
4. Faith healers	20 (40%)
5. Homeopathic practitioners	22 (44%)
6. Ayurvedic practitioners	28 (56%)
7. Allopathic doctors	16 (32%)
8. Local sex specialists	14 (28%)
9. Registered medical practitioners	30 (60%)

Table 3: Dhat associated symptoms experienced by the patient

SYMPTOMS	n = 50 N= No. of patients(frequency%)
1. Bodily weakness	33 (66%)
2. Mental weakness	10 (20%)
3. Stomach ache	31 (62%)
4. Back Pain	30 (60%)
5. Pain in arms, legs, joints	36 (72%)
6. Pain during sexual IC	22 (44%)
7. Headache	31 (62%)
8. Chest Pain	21 (42%)
9. Dizziness	21 (42%)
10. Feeling your heart race	24 (48%)
11. Shortness of breath	25 (50%)
12. Constipation, loose bowels	27 (54%)
13. Nausea, gas, indigestion	27 (54%)
14. Little interest or pleasure	24 (48%)
15. Feeling down	28 (56%)
16. Trouble sleeping	26 (52%)
17. Tired, low energy	22 (44%)
18. Poor appetite or overeating	24 (48%)
19. Feeling bad about self	10 (20%)
20. Trouble concentrating	15 (30%)
21. Moving or speaking slowly or opposite	9 (18%)
22. Death wishes	10 (20%)
23. Burning micturation	8 (16%)
24. Excessive strain while micturating	6 (12%)
25. Itching around genitals	6 (12%)
26. Lesions	4(8%)
27. Weight difficulties	26 (52%)
28. Excessive worrying	18 (36%)
29. Restlessness	16 (32%)
30. Anger, irritability	18 (36%)

Table 4: Severity of depressive symptoms

Severity of Depressive symptoms	n = 50 N= No. of patients (frequency %), mean ± SD
Depression	10.0± 4.65
1. Normal depression	22 (44%)
2. Mild depression	18 (36%)
3. Moderate depression	10 (20%)

Table 5: Severity of anxiety symptoms

ANXIETY SYMPTOM SEVERITY		NO. OF PATIENTS n = 50, frequency (%),mean ± SD
Anxiety		8.8± 4.75
1.	Normal anxiety	22 (44%)
2.	Mild anxiety	12 (24%)
3.	Moderate anxiety	10 (20%)
4.	Severe anxiety	6 (12%)

Socio Demographic Profile of Patient: As shown in the Table 1, the mean age of the patients participating in the study is 24 years (Mean ± SD: 24.2 ± 5.17) and the age range extends from 18 to 31 years.

More than half of the participants were married (56%), while 34% were single and 10% belonged to the other category (separated, divorced). Nearly one-third of the patients were illiterate, about one-fourth were educated upto primary school, 22% had completed matriculation, 16% had passed higher secondary and only a minority (4%) were graduates.

More than two-thirds of our study sample were unskilled labours (42%), while 30% were skilled labours, 22% were unemployed and only 6% were professionals (including those working as clerks or in shops). Most of our participants belonged to nuclear families (42%), while (34%) came from joint families and 24% hailed from other backgrounds. In our study, the participants belonging to Hinduism was the highest (44%), 38% muslim participants constituted 38% and 24% Christian patients were present. About 90% of our study sample belonged to lower socioeconomic to middle socioeconomic group. In the study of residential backgrounds, 60% belonged to urban background and 40% from rural areas.

Source of information about Dhat Syndrome: As shown in table 2, majority of the persons with dhat syndrome received their information from friends (78%). Media sources (television, newspapers) contributed provided the same for 74% of patients. Relatives and family members provided information for 62% of patients. In 32% of patients allopathic practitioners provided the information. Additionally, various alternative medicine specialists such as ayurvedic doctors in 56%, homeopathic specialists in 44%, faith healers in 40%, registered medical practitioners in 58% and traditional sex specialists provided information in rest of the patients.

Dhat associated symptoms experienced by the patients: Table 3 depicts the various symptoms as experienced by the individual due to discharge of dhat. In the last two weeks before the assessment, 66% of the patients had felt bodily weakness, 20% had felt mental weakness, 62% had felt stomach ache and 60% had felt back pain. 72% had pain in joints and arms whereas 44% had problem during intercourse. 62% had headaches, 42% (each) had chest pain and dizziness. 48% felt their heart pound or race. 50% had shortness of breath. 54% had gartic symptoms like constipation, loose bowels or diarrhea whereas 54% had nausea, indigestion and gas. 48% felt little interest in doing pleasurable things. 56% felt depressed, 52% had trouble sleeping, 44% felt tired, 48% had trouble with appetite and 20% felt bad about themselves.

30% people felt that they weren't able to concentrate on anything, 18% had psychomotor agitation or retardation and 20% had death wishes or suicidal ideas. 16% presented with

burning micturation and 12% with straining during micturation. 12% complained of itching around the genitals while 8% had lesions around/on the genitals.

52% had trouble with weight, 36% felt that they were worrying excessively 32% felt restless to the extent of being unable to sit still while 36% felt angry and irritable due to loss of dhat.

Severity of depressive symptoms: As shown in table 4, majority of the persons in the sample came with normal depression symptoms (44%). Whereas almost a third (36%) had mild depressive symptoms and one-fifth (20%) had moderate depressive features. The mean score of the patients participating in the study is 10.0 (Mean ± SD: 10.0 ± 4.65) and the score range extends from 2 to 19.

Severity of anxiety symptoms: Table 5 represents the severity of anxiety symptoms in the sample of 50 persons with dhat syndrome. Majority of the people came with normal level of anxiety (44%), almost one-fourth came with mild anxiety symptoms (24%), one fifth (20%) had moderate anxiety and only 12% has severe anxiety symptoms. The mean score of the patients participating in the study is 8.8 (Mean ± SD: 8.8 ± 4.57) and the score range extends from 2 to 19.

Discussion

Dhat syndrome remains a concern for mental health professionals and researchers in India and other south Asian countries [6]. Thus, it becomes essential to look into the distress and psychiatric co morbidities that it leads to. It is also essential to look into the misconceptions that exist in the society as these factors are often exploited while the patient goes to various consultants looking for the right information and treatment and often ends up in wrong hands.

Nature of the sample of patients: Of the 50 patients studied, most belonged to age group of 18-31, with the mean age being 24 years. This reflects the fact that the majority of the population belongs to sexually active group where it is easier to get influenced by peer pressure and concerns about marriage and children in the future is paramount. This was in concordance with the study done by Grover *et al.* [7], where the mean age was found to be 23.9.

Dhat syndrome has been most commonly reported in young males of low or medium socioeconomic status [8]. Typically, patients with dhat syndrome reported to be are unmarried or recently married [9], come from rural background and have a conservative attitude towards sex [10]. In our study, these findings were consistent as almost half of the participants were married. Almost 60% of the patients we had were illiterate or had studied only upto primary school. Though most of our subjects came from urban background vast majority of them belonged to lower class to lower middle income group. This is probably due to the rapid expansion of the city with migrant from adjacent town.

Source of information about Dhat Syndrome: Grover *et al.*, reported that majority of the persons with Dhat syndrome received their information from their peers while other sources such as media and practitioners of alternative medicine also played a significant role in providing the information. Our study was consistent with the above findings. Almost three-fourths of the participants had received the information from their friends and relatives. Ayurvedic practitioners and registered medical practitioners also played an important role in providing the in-

formation.

Mental health care remains a neglected issue in most developing countries. Negative attitudes towards psychiatrists are not restricted just to the general population in India. Gupta *et al.* [11] (2014) found that medical students and interns in medical schools were discouraged from family members and peers from taking up psychiatry as a subject in post graduation. Mun-gree *et al.* correlated strong religious beliefs and low education correlate with negative attitudes towards psychiatry in India.

Somatic symptoms associated with Dhat: Grover *et al.* [7], reported a prevalence of 20.5% for comorbid neurotic, stress-related and somatoform disorders. In our study, most patients presented with somatoform symptoms related to the gastrointestinal and musculoskeletal system. Most common complaints were of pain and indigestion, which in turn led to loss of weight and disinterest in doing work. Around half the patients were found to be preoccupied with their somatic symptoms to the extent that they found it difficult to concentrate and presented with comorbid anxiety symptoms. Raguram *et al* [8]. in their study on 'Stigma, somatization and depression in South India' concluded that the social meaning of somatic symptoms is less distressing because they closely approximate experiences that one has from time to time. Patients feel more comfortable expressing these symptoms rather than discuss about their sexual problems culturally.

Anxiety and depression symptoms associated with dhat syndrome: Most researchers report psychiatric comorbidities in cases of dhat syndrome rather than direct correlation with DSM-IV diagnosis. Depression is by far the most common reported co-morbidity with prevalence varying between 40-66% in various studies [9,10,11,12]. Anxiety disorders were found in 21-38% of patients [13,14,15,16]. In our study, mild depression was found in only one-third of the patients, while only one-fifth suffered with moderate depression. As shown by Raguram *et al.*, Depressive symptoms as considered socially disadvantageous in India as they diminish one's self esteem and and social status.

Almost half of the participants in our study were found to have mild to moderate anxiety symptoms. Patient's initial anxiety results from seeing the passage of dhat and recognizing that it is something not normal. Not surprisingly, one-tenth of our patients presented with severe anxiety symptoms.

Limitations

Though our study found mild to moderate anxiety and depression symptoms, the following limitation has to be kept in mind while interpreting the results such as limited sample.

Conclusion

The present study found that Dhat Syndrome was present in younger patients with lower socio economic and educational status. Most of the information was received from media and peer groups, while non-allopathic practitioners also played a significant role. Most participants were clear about the con-

stituent of dhat, however it was associated with numerous somatoform symptoms and misconceptions about it's treatment and consequence. There were mild to moderate anxiety and depressive symptoms present in the patients with dhat syndrome. Therefore it is important to assess and evaluate these symptoms while providing the patient with accurate information.

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