Original Research Article

EVALUATION OF SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MALE DHAT SYNDROME PATIENTS WITH THEIR SEXUAL QUALITY OF LIFE: AHOSPITALBASED STUDY

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ABSTRACT

Background: Dhat syndrome is a culture-bound syndrome characterized by various debilitating symptoms like loss of desire, low self-esteem, loss of interest in any activity, feelings of guilt, and lack of pleasure.

Aims:

1. To evaluate Sociodemographic profile of in patients of dhat syndrome
2. To evaluate pattern of Sexual Quality of life in patients presenting with signs and symptoms of Dhat syndrome.

Place and Duration of Study: The study was conducted in the Department of Dermatology and Department of Psychiatry, Shri Ram Murti Smarak, Institute of Medical Sciences, Bhojipura, Bareilly. It was a time-based study and we enrolled 153 individuals in our study over a period of 1 year (March 2021 – February 2022).

Methodology: The study was conducted in the Department of Dermatology and Department of Psychiatry, Shri Ram Murti Smarak, Institute of Medical Sciences, Bhojipura, Bareilly. SQOL-M questionnaire was used and findings were evaluated.

Results: This study yielded data for 153 patients with Dhat syndrome. Most of the patients belonged to younger age groups, belonging to rural backgrounds with lower socioeconomic classes.The mean SQOL-M score was 34.72 ± 5.38. There was significant variation amongage, marital status but no significant variation amongeducation.Among patients between age group 16 - 35 years, 94.59% were anxious and 98.20% were worried, while 90.48% of the patients between 36 – 65 years felt like they have lost something.

Conclusion: Dhat syndrome has been prevalent in the world for a long time, especially in the Indian subcontinent. This study is an effort in evaluating the effect of Dhat syndrome on patients' life.The sexual quality of life of most of the patients fell under good class.

Keywords: [dhat syndrome; culture bound syndrome; sexual quality of life; SQOL-M]

1. INTRODUCTION

Dhat syndrome is a culture-bound syndrome described by the core belief of loss of semen accompanied by general weakness, lack of energy and concentration, impaired sexual functions, and vague somatic troubles, often associated with an anxious or dysphoric mood state. [1] The concept of 'culture-bound syndromes, was initially introduced by Yap [2] in the 1950s and 1960s, referring to psychopathological entities having a geographically defined prevalence, and largely determined by the beliefs and assumptions common in the native society. [3]Dhat syndrome was shown to account for 76.7% of patients with culture-bound syndromes in one review of these conditions. [4,5]

The term 'Dhat' stems from the Sanskrit word 'Dhatus,' which means 'elixir that comprises the body' in the old writings of Ayurvedic medicine (Sushruta Samhita). [1] The term "Dhat syndrome" was originally used in scientific literature by Indian psychiatrist Prof. N. N. Wig, who defined it as a particular syndrome that is fostered by culturally-related ideas.Patients with Dhat syndrome find it troubling when they lose semen, regardless of the mechanism (during urination, bowel movements, masturbation, nocturnal emission, or even during sexual intercourse). [6,7]

Dhat syndrome had struggled to find a place in the classification system in the beginning. Its existence as a discrete diagnostic entity has been called into question. In Dhat syndrome, a distinct pattern of symptoms was assigned to a distinct cause in a distinct culture, establishing it as a distinct culture-bound syndrome. Research on Dhat syndrome may exhibit eccentricities for a variety of reasons. [6,7] Dhat syndrome is included in the ICD-10 as a culture-specific disorder brought on by "undue anxiety over the debilitating effects of the passage of semen" as well as a neurotic disorder (code F48.8). It is a clinical entity that is frequently recognized in the Indian Subcontinent. [8]

The most common symptoms of patients with Dhat syndrome are the belief of loss of semen, weakness, fatigue, palpitation, and insomnia. [8,9] It is more prevalent in young, recently married, of average or low socioeconomic status (perhaps a student, laborer, or farmer by occupation), comes from a rural background, and belongs to a family with a conservative attitude towards sex. [1,10,11,12,13]

Despite being a frequently diagnosed condition in the South Asian community, there is a dearth of high-quality research on Dhat syndrome.[14]In past, there are no studies available to evaluate the sexual quality of life in patients of DHAT syndrome using SQOL-M. SQOL-M has been previously used in patients presenting with complaints of premature ejaculation and/or erectile dysfunction as a sole entity or sequelae of other disorders. The SQOL-M score for erectile dysfunction was 45.56 ± 8.00 [15] while for premature ejaculation was 38.2 ± 8.0.[16]

2. MATERIAL AND METHODS

The study was conducted in the Department of Dermatology and Department of Psychiatry, Shri Ram Murti Smarak, Institute of Medical Sciences, Bhojipura, Bareilly. It was a time-based study and we enrolled 153 individuals in our study over a period of 1 year (March 2021 – February 2022).The study was done after clearance from the institutional ethical committee.

Inclusion Criteria - Patients with whom Dhat syndrome was diagnosed clinically by a Qualified Dermatologist or Psychiatrist and Patients were willing to give written informed consent.and able to read english

Exclusion Criteria - Patients not willing to give consent or having other systemic comorbidities.

Patients were screened for inclusion and exclusion criteria. The data regarding basic demographic characteristics of patients with presenting complaints and history was collected in a pre-determined Proforma. Updated modified B.G. Prasad scales (revised in 2020) were used to assess socioeconomic status.[17]

SQOL-M (English)was used in all patients. (Permission to use SQOL-M was obtained). Data collected from the questionnaire was evaluated.

The SQOL-M is a short, self-report questionnaire with 11 items, each scored using a six-point Likert-type scale (1 = completely agree; 6 = completely disagree). Thus, total scores range from 11 to 66, with higher scores indicating a better sexual quality of life.

A score of 11–22 was considered a poor class, a score of 23–33 was considered a middle class, and a score of 34 and above was considered a good class. [18]

Comment [AV1]: Why was questionnaire not translated into Hindi?

Comment [AV2]: Specify the comorbidities. Also mention the reason to exclude them

Comment [AV3]: Why the questionnaire in English was used? Why was it not translated into Hindi, which is commonly used and understood in the study area.

One way ANOVA test was used for variation among the groups. https://www.statskingdom.com/ was used for the calculation of the same.

3. RESULTS

3.1 Socio-demographic profile of respondents

The age of the population ranged from 18 years to 65 years with the mean age being 30.97 ± 9.78 years.79.74% of the study population belonged to a rural area, and 20.26% belonged to an urban area.45.10% of individuals had education up to High school, followed by 21.60% Graduates, 20.90% Undergraduates, and 12.40% Illiterates. Farmers, students, or unskilled workers comprising 29.41%, 26.14%, and 15.03% respectively formed a major portion of the study population. Unmarried Males (56.21%) and Married (42.48%) were present in the study population. Most of the individuals were from lower socioeconomic classes (Modified BG Prasad Scale (2020)) comprising Class IV (32%) AND Class V (17%). (TABLE 1)

Table 1. Sociodemographic Aspects

Options	Frequency (%)
Age Group (Mean – 30.97 ± 9.78 years)	
18 - 25	55 (35.95%)
26 - 35	56 (36.60%)
36 - 45	32 (20.92%)
46 - 55	6 (3.92%)
56 - 65	4 (2.61%)
Area Of Residence	
Rural	122 (79.74%)
Urban	31 (20.26%)
Education Status	
Illiterate	19 (12.42%)
5th	2 (1.31%)
8th	6 (3.92%)
10th	39 (25.49%)
12th	22 (14.38%)
Under Graduate	32 (20.92%)
Graduate	33 (21.57%)
Profession	
Unemployed	7 (4.58%)
Unskilled	23 (15.03%)
Skilled	18 (11.76%)
Student	40 (26.14%)
Clerical	6 (3.92%)
Farmer	45 (29.41%)
Shop Owner	9 (5.88%)
Professional	5 (3.27%)
Marital Status	
Married	65 (42.48%)
Unmarried	86 (56.21%)
Widower	2 (1.31%)
BG Prasad Scale	
I	8 (5.23%)
II	30 (19.61%)
III	40 (26.14%)
IV	49 (32.03%)
V	26 (16.99%)

3.2 Evaluation of sexual quality of life by

3.2.1 Mean scores of SQOL-M according to age, marital status and socio-economic status

The mean SQOL-M score was 34.72 ± 5.38 which falls under good class (>34), the mean scores according to age group are as follows 16 - 30 (34.06 ± 5.05), 31 – 45 (34.54 ± 5.27) and 45 – 65 (41.60 ± 4.22), p value = 0.0000882406 (significant)(TABLE 2). While the mean scores according to marital status are married (34.77 ± 5.59), unmarried (34.37 ± 4.89) and widower (48.00 ± 0), p value = 0.001548 (significant) (TABLE 3) And the mean scores according to education are 10th and below (35.48 ± 5.96), 12th (33.68 ± 4.43), under graduate (34.00 ± 4.38) and graduate (34.58 ± 5.58), p value = 0.4348 (non-significant) (TABLE 4)

Table 2.Variation of Score According to Age Group

Age Group	Mean Score	
18 - 30	34.06 ± 5.05	***P value* = 0.000088***
31 - 45	34.54 ± 5.27	
45 - 65	41.60 ± 4.22	

*****One way ANOVA test

Table 3. Variation of Score According to Marital Status

Marital Status	Mean Score	
Married	34.77 ± 5.59	***P value* = 0.0015***
Unmarried	34.37 ± 4.89	
Widower	48.00 ± 0	

*One way ANOVA test

Table 4. Variation of Score According to Education

Education	Mean Score	
$10^{th}$and below	35.48 ± 5.96	***P value* = 0.43***
12^{th}	33.68 ± 4.43	
Under Graduate	34.00 ± 4.38	
Graduate	34.58 ± 5.58	

*One way ANOVA test

3.2.2 Frequency of occurrence of feelings and thoughts that can occur in a patient with Dhat syndrome.

39.87%, 49.67%, 32.68%, and 31.37% of the patients completely agreed to be anxious, worried, feeling that their partner feels hurt or rejected or they have lost something respectively, and 32.03% moderately agreed to be depressed. 28.76%, 26.80% of the patients slightly agreed to be frustrated, and embarrassed respectively. Among which 94.59% and 98.20% of the patients between 16 - 35 years were anxious and worried respectively while 90.48% of the patients between 36 – 65 years felt like they have lost something. (TABLE 5)

Table 5. Thoughts And Feeling (SQOL-M Questionnaire)

SQOL-M	AGREE/DISAGREE	FREQUENCY	%
Frustrated	Completely Agree	8	5.23%
	Moderately Agree	29	18.95%
	Slightly Agree	44	28.76%
	Slightly Disagree	30	19.61%
	Moderately Disagree	42	27.45%
	Completely Disagree	0	0.00%
Depressed	Completely Agree	35	22.88%
	Moderately Agree	49	32.03%
	Slightly Agree	28	18.30%
	Slightly Disagree	30	19.61%
	Moderately Disagree	11	7.19%
	Completely Disagree	0	0.00%
Less Of A Man	Completely Agree	11	7.19%
	Moderately Agree	16	10.46%
	Slightly Agree	26	16.99%
	Slightly Disagree	42	27.45%
	Moderately Disagree	28	18.30%
	Completely Disagree	30	19.61%
Lost Confidence as A Sexual Partner	Completely Agree	9	5.88%
	Moderately Agree	9	5.88%
	Slightly Agree	22	14.38%
	Slightly Disagree	46	30.07%
	Moderately Disagree	29	18.95%
	Completely Disagree	38	24.84%
Anxious	Completely Agree	61	39.87%
	Moderately Agree	48	31.37%
	Slightly Agree	32	20.92%
	Slightly Disagree	12	7.84%
	Moderately Disagree	0	0.00%
	Completely Disagree	0	0.00%
Angry	Completely Agree	0	0.00%
	Moderately Agree	4	2.61%
	Slightly Agree	36	23.53%
	Slightly Disagree	8	5.23%
	Moderately Disagree	52	33.99%
	Completely Disagree	53	34.64%
Worry	Completely Agree	76	49.67%
	Moderately Agree	46	30.07%
	Slightly Agree	22	14.38%
	Slightly Disagree	9	5.88%
	Moderately Disagree	0	0.00%
	Completely Disagree	0	0.00%
Embarrassed	Completely Agree	9	5.88%
	Moderately Agree	26	16.99%
	Slightly Agree	41	26.80%
	Slightly Disagree	39	25.49%
	Moderately Disagree	35	22.88%
	Completely Disagree	3	1.96%
Guilty	Completely Agree	17	11.11%
	Moderately Agree	33	21.57%
	Slightly Agree	17	11.11%
	Slightly Disagree	41	26.80%
	Moderately Disagree	45	29.41%
	Completely Disagree	0	0.00%
Partner Feels Hurt or Rejected	Completely Agree	50	32.68%

	Moderately Agree	31	20.26%
	Slightly Agree	10	6.54%
	Slightly Disagree	38	24.84%
	Moderately Disagree	12	7.84%
	Completely Disagree	12	7.84%
Lost Something	Completely Agree	48	31.37%
	Moderately Agree	44	28.76%
	Slightly Agree	34	22.22%
	Slightly Disagree	19	12.42%
	Moderately Disagree	8	5.23%
	Completely Disagree	0	0.00%

4.Discussion

4.1 Socio-demographic profile of respondents

The mean age of the 153 participants in the current research, whose ages ranged from 16 to 65, was 30.97 years. Because this was a hospital-based study, the prevalence in the population could not be determined.

In a study by Behereet al. [2] the age group ranged from 16 – 45 years with 68% of the patient from 16 - 25 yearswhile in our study it was 35.95%. According to Khan [15] study on DHAT syndrome patients in Pakistan, the age range was wide, ranging from 12 to 65 years old, with an average age of 24 yearswhile in our study the average 31 years.

In the sample group, single men (56.21%) outnumbered married men (42.48%) and widowers (1.31%). While in a study by Khan et al. [19] Single (75%), Married (21.8%), Widowed (1.3%), and divorced (0.8%) were found. Contrary to findings by Behere and Nataraj [2] majority (52%) of patients were married while 48% were unmarried.

In our study Modified B.G. Prasad Scale Classes IV (32%), and V (17%), comprised the majority. 31 (20.26%) were from urban areas, and 122 (79.74%) were from rural locations. This matches with the study by Grover et al. [20] that patients from rural localities were 63.8%. It was also noted that similarly to prior Indian research by Carstairs [21,22,23], the bulk of the cases (52%–66.7%) were from rural regions, belonged to "conservative families, and posed rigid views about sex" (69%–73%).

In the sample group, there were 12.40% illiterates, 21.60% graduates, 20.90% undergrads, and 45.10% high school graduates. This was reported similarly in a study by Grover et al. [24] patients receiving formal education for 10 years or more were 78.3%. Priyadarshi and Verma [25] conducted research on 110 male Dhat Syndrome patients, which they found to be in conflict with our findings. A significant prevalence of DHAT syndrome was observed in educated patients, with roughly 50% of patients having a graduate degree or above, yet the majority of patients (49% of patients) were either unemployed or students.

The study population was dominated by farmers, students, and unskilled laborers, who made up 29.41%, 26.14%, and 15.03% of the total. The other occupations were Clerical (3.92%), Professionals (3.27%), Shop Owner (5.88%), Unemployed (4.58%), Skilled (11.76%), and Clerical (3.92%). In a study by Shakya et al., [26] the subjects were mostly students (50%) and the rest were in service (26%), farmers (14%), laborers (6%), and business (4%), respectively.

Malhotra and Wig Study [27] reported that higher social class respondents were more open to discussing sex and were less worried about the harmful impacts of semen loss on their health.Respondents from lower socioeconomic strata had less understanding of usual sexual functions and were more likely to believe nocturnal emission was abnormal because sex was taboo to talk about.

Kendurkar et al.'s [13] study of 1242 Dhat syndrome patients claimed that it happens regardless of education level or place of residence, which is inconsistent with our results. Still, there is a roadblock in the way of sexuality acceptance. As a result, there are many myths and misconceptions about sexuality in India. Although the seemingly overestimation in the importance of semen as a component of the human body does contribute towards the development of Dhat syndrome as an ailment, it is disheartening that both an increased awareness of sexual health and overall health literacy levels are still not able to convince the general public of the inorganic origins for the clinical manifestations of Dhat syndrome.

We found that Dhat syndrome is usually observed in young, single, or recently married rural males with a traditional view of sex, and they usually fall into the lower or middle socioeconomic and educational brackets, the majority of those coming from conserved families.

~~Singh et al., [8] correctly noted that a wide range of symptoms have been described in prior research. Many bodily, psychological, sexual, and cognitive problems are listed. The most prevalent symptoms included a generalised feeling of being unwell, fear, and the belief that treatment won't lead to improvement, as well as tension, fatigue, weakness, and anxiety. The most frequent sexual complaints were premature ejaculation, erectile dysfunction, and loss of masculinity.~~

~~Patients frequently express nebulous complaints of weakness, weariness, palpitations, and sleeplessness, according to Sumathipala et al. [9], which was also observed in recent studies.~~

4.2 Sexual Quality of life of patients

To the best of our knowledge there are no studies available for evaluation of SQOL-M in patients of Dhat syndrome from Indian subcontinent but SQOL-M has been used in few dermatological, metabolic and psychiatric conditions to evaluate sexual quality.

The relationship to other psychiatric comorbidities was not investigated. The mean score of the SQOL-M felled under the good class category. While there was significant variation among the age, marital status but no significant variation among education of the patients.

For psychometric validation Lucy Abraham et al. conducted a study Psychometric Validation of a Sexual Quality of Life Questionnaire for Use in Men with Premature Ejaculation or Erectile Dysfunction, and discovered that all groups showed high internal consistency, with a Cronbach's alpha of 0.82. The SQOL-M demonstrated good test-retest reliability in men who reported no change in their symptoms: the intraclass correlation value was 0.77 for men with PE and 0.79 for men with ED. Also, convergent validity was beneficial. The Index of Premature Ejaculation's pleasure and distress domains showed a correlation with the SQOL-M in males with PE. The SQOL-M and the IIEF's overall satisfaction category showed a correlation in males with ED. Additionally, the measure showed good discriminant validity ($P < 0.0001$) between men with ED or PE and men without sexual dysfunction. [28]

'Sexual function and sexual quality of life in men with genital warts: a cross-sectional study' study conducted by Marzieh Hosseini Nia et al. with 105 male participants the mean total SQOL-M score was 38.36 ± 14.47, indicating that 56.2% of participants had a score of 34 or higher, placing them in the good SQOL categorywhich was similar to our study. A third of the men had a moderate SQOL, and over half of the men had a good SQOL. It was evident that the degree of sexual dysfunction affected the men's SQOL. Reduced SQOL was linked to erectile dysfunction. [18]

Similar to our study a study by chawla et al 'Sexual relationship, self-esteem, dysfunction, and sexual satisfaction in treatment naïve men with heroin dependence' concluded that mean SQOL-M was 34.1 ± 16.7, compared to the general population, men with heroin use frequently experience sexual dysfunctions, which may be linked to continued or relapsed opioid use. They could be influenced or influenced by a number of things, such as their personal sense of sexual satisfaction and their partner's sexual relationship. [29]

In study by Owiredu et al. 'Sexual dysfunction among diabetics and its impact on the SQoL of their partners', evaluated 130 complete questionnaires of male diabetic patients, the age range for those who responded was from 29 to 89 years, with a mean age of 63.04 ± 10.85 years and the mean SQOL recorded for the diabetic males was 42.29±30.88. [30]

On the contrary to our study another study on 'Sexual function and pelvic floor function in men with systemic sclerosis compared to healthy controls: a cross-sectional study' by Barbora Heřmánková et al. concluded that in patients with systemic sclerosis the mean SQOL-M (scoring adjusted out of 100) was less 88.2 (50.0–96.4) compared to healthy controls 98.0 (63.8–100.0) but it was not statistically significant (p = 0.1286). [31]

Unlike our study a study on 37 males of alopecia areata by Sara J Li et al., Men strongly identified with statements such as "I feel anxious" (46.7%) and "I worry about the future of my sexual life" (43.8%) with mean SQOL-M (scoring adjusted out of 100) of 62.7 ± 33.9. [32]

4. CONCLUSION

We found that the majority of the study participants were younger, from rural backgrounds, employed as students or farmers, and belonged to lower socioeconomic levels supporting the fact of categorizing Dhat syndrome as a culture-bound syndrome. This study concludes that the SQOL-M of the Patients felled under good class whereas there was significant variation among age, marital status but no significant variation among education of the patients. This study is an attempt to advance the field of knowledge regarding Dhat syndrome. To investigate and develop this topic, more research is needed and future multicentric comparative studies may be planned.

5. Limitations

Female Dhat was not taken into account.Our limited sample came from a tertiary center's treatment-seeking population who could understand English language. Consequently, our findings have limited generalizability. Since this is a cross-sectional study, it is not possible to determine which way comorbidities and Dhat syndrome are related.

CONSENT

"All authors declare that 'written informed consent was obtained from the patient (or other approved parties) for publication of this article. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal."

ETHICAL APPROVAL

The authors have obtained all necessary ethical approval from suitable Institutional or State or National or International Committee.

Disclaimer (Artificial intelligence)

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1.

2.

3.

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