Original Articles

CLINICAL PATTERN OF DHAT SYNDROME

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Abstract :

In order to determine the various socio-demographic factors, attitude and clinical findings of Dhat syndrome, a prospective study of 116 consecutive male patients with Dhat syndrome were carried out in psychiatric outpatients department of a teaching hospital. The majority of the patients were younger in age, middle or low income group, literates, unmarried or recently married with urban background. The most frequent complains were generalised weakness, urinary complains, lack of energy and sleep disturbances. Majority of the patients attributed early masturbation or any type of physical illness as causative factors for this syndrome. All the patients believed it to be harmful and almost all the patients believed it required some type of medications. Most of the patients contacted traditional healers for the first time and took endogenous medicine of different forms. Common consequences of the syndrome described by the patients were sex difficulties, marital disharmony, impairment of functioning and fear of marriage. Except five, all the patients received associated diagnosis other than Dhat syndrome according to DSM III-R and most two common diagnosis were depressive disorder (54.31%) and anxiety disorder (27.59%). This study reveals the existence and extent of these culture-bound syndrome in our country.

Introduction:

Dhat syndrome is a culture-bound sex neurosis quite common in the South-East Asia, mainly in the Indian sub-continent. Passage of a whitish discharge with urine is described as the word 'Dhatu' believed to be semen by the patient, although there is no objective evidence of such discharge.

The word 'Dhat' has been derived from the snaskrit word 'Dhatu' meaning the elixir that constitutes the body. Semen is considered as the most important Dhatu which means

bravery, power or strength. Therefore loss of semen in any manner is considered to lead to depletion of physical and mental energy.¹⁻⁷ This believe is deeply ingrained in sub-continental culture and is responsible for the symptoms of Dhat syndrome.⁷ Usually these patients consult with the traditional hearlers who exploit them for their own profit and reinforce this believe. The believe may be perpetuated by their friends and relatives who had suffered from the syndrome.⁸

A large number of Indian studies reported that a range of 20-65% patients of male potency disorders was found to be suffering from Dhat syndrome. 4.9.10 Most of the cases of Dhat syndrome were younger in age, recently married or unmarried, of average or low socio-economic status, came from rural area and illiterate or educated upto primary level. 4.6,7,9-11 The family history was found positive in a large proportion of patients of Dhat syndrome. 10

In Bangladesh, no work has yet been reported on Dhat syndrome but in one study, sexual dysfunction was reported 3.13% of the male outpatients in a psychiatric institute and all these cases presented themselves with the passage of whitish discharge with urine described as Dhatu. The present study was designed to identify the various socio-demographic factors, attitude and clinical findings of Dhat syndrome. The different observations of the study will provide the information about the pattern and extent of Dhat syndrome which will ultimately be helpful in motivation and treatment of this major culture-bound syndrome in our country.

Materials and Methods:

A consecutive series of 116 male patients of Dhat syndrome, attending the psychiatric outpatients department of Sir Salimullah Medical College & Mitford Hospital, Dhaka, either directly or referred from the skin VD or medicine

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outpatients departments over one year (January-December, 1993) were included in the study. In addition to detailed physical and psychiatric assessment patients were interviewed by one of the investigators with a semistructured questionnairs consisted socio-demographic characteristics, duration and frequency of passage of 'Dhatu' complains (verbatim), cause and effects in patients opinion and attitudes towards Dhat syndrome. Routine and microscopic urine examination was done in all cases and other investigation were also performed whenever required. Dhat syndrome was defined as 'undue concern about the debilatiting effects of the passage of semen. 13 Associated psychiatric disorders were diagnosed clinically according to DSM III-R operational criteria.14 The collected data were processed and statistical analysis was done whenever applicable.

Results:

One hundred and sixteen patients were included in the study. Table-I shows the socio-demographic characteristics of the patients. Their age ranged between 16-36 years with a mean of 24.46 (SD=5.41) years. Seventy five (64.65%) were between 16-25 years. One hundred and two cases (87.93%) were Muslims, Hindus and Christians were 11 and 3 cases respectively. Nineteen patients were illiterate. Of the 81 (83.62%) literates, highest number was found 31, educated higher secondary level and 19 were graduates. Only two were postgraduates. Among the subjects, 35 (30.17%) were students, 29 were service holders, 21 were businessmen, 13 were cultivators and the rest were of other occupations. Urban rural distributions were 68 (58.62%) and 48 (41.38%) cases respectively. They were predominantly of middle or lower income group with 72 (62.07%) and 43 (37.07%) cases respectively and only one case was of higher class. Sixty six (57%) were unmarried, 45 were married, 3 were divorced and the rest 2 were separated.

The duration of Dhat syndrome ranged from 15 days to 10 years with a mean of 3.04 (SD=1.95) years. Five (4.31%) had duration of 3 months or less, 24 (20.69%) had 1 year, 35 (30.17%) had 2 years, 19 (16.38%) had 3 years, 16 (13.79%) had 4 years and the rest had 5 years and above. Frequency of passage of Dhatu varied from 7-9 per day to 1-2 per month and the mean frequency was 2.4 (SD=1.92) per day although in majority of the cases 65 (56%), it was 1-3 per day and next common frequency was 1-4 per week in 24 (20.69%) cases. Only 2 (1.72%) had the frequency of 1-4 per month.

Table-II shows the presenting complaints expressed by the patients of Dhat syndrome. Most frequent complaints were: generalised weakness (74.14%), urinary complaints (71.55%), lack of energy (67.29%), sleep disturbances (53.45%) and lack of interest & pleasure (49.14%). Other frequent complaints were: loss of appetite (47.41%), headache (38.79%), sexual problems (36.21%) retracted or deformed penis (34.48%), unhappiness (34.48%), lack of attention and concentration (33.62%), palpitation (32.76%), forgetfulness (31.9%), headache (31.9%), vertigo (30.17%) and guilt feelings (29.31%). Suicidal idea was

found in 18.10% of the patients.

Table-III reveals the believe of the patients about the cause of Dhat syndrome. Early masturbation was the most frequent cause believed by the 63 (54.31%) patients. Thirty six (31.03%) believed it to be veneral disease, 35 (30.17%) night emissions, 30 (25.86%) premarital sexual relationship and 20 (17.24%) believed it to be some type of unknown physical illness. Only 2 (1.72%) patients failed to express any cause believed by them.

TABLE-I Socio-demographic characteristics of the patients

Characteristics	Number	%
Age:		
16-20	29	25.00
21-25	46	39.65
26-30	24	20.70
31-35	12	10.34
36-40	5	4.31
Mean=24.46±5.41 years		
Range=16-38 years		
Religion:		
Islam	102	87.93
Hinduism	11	9.48
Buddhism	0	0.00
Christianity	3	2.59
Education :		
Illiterate	19	16.38
Primary	18	15.52
Secondary	16	13.79
SSC	11	9.48
HSC	31	26.72
Graduate	19	16.38
Postgraduate	1	1.72
Occupation:		
Student	35	30.17
Service	29	25.00
Business	21	18.10
Cultivator	13	11.21
Manual worker	2	1.72
Self employed	7	6.03
Unemployed	9	7.76
Social background :		
Rural	48	41.38
Urban	68	58.62
Economic background :		00.02
Higher	1	
Middle	72	0.86
Lower	43	62.07
Marital Status	40	37.07
Unmarried		
Married	66	56.90
Separated	45	38.79
Divorced	2	1.72
	3	2.59

TABLE-II
Frequency of presenting complaints in Dhat syndrome

Complain	Number	%
Generalized weakness	86	74.14
Lack of energy, fatiguability	78	67.24
Loss of appetite	55	47.41
Sleep disturbances	62	53.45
Urinary problems (burning micturition,		
frequency, urgency)	83	71.55
Headache	45	38.79
Backache	37	31.90
Pain in the neck	26	22.41
Pain/compression in the chest	17	14.65
Vertigo	35	30.17
Tingling sensation/hotness or heaviness		
in the head	26	22.41
GI complains (dryness of mouth, lump in		
the throat, constipation, excessive		
gas formation)	21	18.10
Palpitation	38	32.76
Burning sensation of hands and feet	26	22.41
Retracted or deformed penis	40	34.48
Abnormal/unequal size of scrotum	15	12.93
Sexual problems	42	36.21
Lack of interest and pleasure	57	49.14
Forgetfulness	37	31.90
Lack of attention and concentration	39	33.62
Unhappiness/sadness	40	34.48
Feeling of tension/anxiety/fearful	23	19.83
Guilt feelings	34	29.31
Suicidal idea	21	18.10
Loss of self confidence/worthlessness	22	18.96
Helplessness and hopelessness	28	24.14

TABLE-III
Belief about the causes of Dhat syndrome

Believed cause	Number (n-116)	%
Early masturbation	63	54.31
Night emissions	35	50.17
Premarital sexual relationship	30	25.86
Extramarital sexual relationship	17	14.65
Homosexuality	10	8.62
Bestiality	1	0.86
Excessive sex power	6	5.17
Sexual abstinence	3	2.59
Weakness/Liquification of Dhatu	5	4.31
Abnormal sex organ	4	3.45
Veneral disease	36	31.03
Urinary tract infection	9	7.76
Diabetes	3	2.59
Unknown physical illness	20	17.24
Overeating of egg/onion	2	1.72
Not known	2	1.72

Among the attitude towards Dhat syndrome, all the patients believed it to be harmful. Eighty (68.97%) patients believed it caused physical harmfulness and rest 36 (31.03%) thought it caused both physical and mental harmfulness. One hundred and four (89.66%) believed that it required some type of medicine for treatment. Only 9 (7.76%) thought it required both medicine and psychological treatment and the rest 3 (2.59%) could not be able to tell any type of treatment believed by them (Table-IV).

TABLE-IV
Attitudes of patients towards Dhat syndrome

Attitude	Number (n-116)	%
Towards harmfulness :	The same	
Physical	80	68.97
Mental	0	0.00
Physical and mental	36	31.03
Not known	0	0.00
Towards treatment :		
Medicine	104	89.66
Psychological	0	0.00
Medicine and Psychological	9	7.76
Not known	3	2.59

Table-V reveals the pattern of treatment received by the patients of Dhat syndrome. Eightly one (69.83%) contacted traditional healers and 41 (35.34%) contacted quacks for the first time. Sixty seven (57.76%) consulted general practitioners while 5 (4.31%) consulted skin and veneral

Pattern of treatment received by the patients

Pattern of treatment	Number (n-116)	%
Treatment given by :	sa's heriolitanis	J. Billion
Traditional healers	81	69.83
Quacks	41	35.34
G.P.	67	57.76
Skin & V.D. specialist	5	4.31
Not treatment	2	1.72
Medicine received :		
Endogenous medicine	87	75.00
Antibiotics	65	56.03
Sedative-hypnotics	40	34.48
B-blocker	24	20.69
Antidepressants	21	18.10
Hormones	11	9.48
Vitamins	68	58.62
Irons	28	24.14
Calcium	10	8.62
No medicine	2	1.72

disease specialists. Regarding medication, 87 (75%) received different forms of endogenous medicine, 68 (58.62%) received vitamins, 65 (56.03%) received antibiotics. Others received sedative-hypnotics 40 (34.48%), irons 28 (24.14%) B-blockers 24 (20.69%), antidepressants 21 (18.10%), hormone therapy 11 (9.48%), calcium injections 10 (8.62%), and 2 (1.72%) patients received no medication as they did not receive any type treatment.

Thirty eight (32.76%) patients admitted sex difficulties secondary to the disorder, 38 (32.76%) professional incompetency or trouble, 35 (30.17%) global impairment of functioning, 26 (22.41%) marital disharmony, 20 (17.76%) fear of marriage, 2 (1.72%) marital separation and the rest 2 (1.72%) admitted divorce as the secondary effects of the illness (Table-VI).

TABLE-VI
Secondary effectsf of Dhat syndrome

Effect	Number (n-116)	%
Million on Line at the court hou	(11110)	BALTILY 67
Marital disharmony	26	22.41
Marital separation	2	1.72
Divorce	2	1.72
Fear of marriage	20	17.76
Sex difficulties	38	32.76
Professional incompetency/trouble	38	32.76
Global impairment of functioning	35	30.17

No abnormality was found in urine examination in 23 (19.83%) patients. Though phosphate and oxalate in excess were seen in 31 (26.72%) and 22 (18.97%) cases respectively and a few pus cell, epithetial cell and RBC were found in 45 (38.79%), 28 (24.14%) and 2 (1.72%) cases respectively, that did not exceed the limit what was considered normal in practice, Trace amount of albumin were found in 5 (4.31%) cases. No abnormalities were detected in other type of examinations.

Associated psychiatric diagnosis in patients of Dhat syndrome is given in Table-VII. According to DSM III-R criteria, depressive disorder was the commonest with 63 (54.31%) patients of which major depression and dysthymia were 45 (38.79%) and 18 (15.52%) respectively. Second commonest diagnosis was generalized anxiety disorder with 32 (27.59%) cases. Of the other associated diagnosis hypochondriasis, obsessive-compulsive disorder, panic disorder, social phobia and bipolar depressive disorder were found 6 (5.17%), 4 (3.45%), 1 (0.86%), 1 (0.86%) respectively. Sexual disorders were found after any of the schizophrenia. Sexual disorders were found after any of the associated diagnosis. Only 5 (4.31%) had no associated diagnosis other than Dhat syndrome.

TABLE-VII
Associated diagnosis of Dhat syndrome

Diagnosis Manual Control of the Cont	Number (n-116)	%
Major depression	45	38.79
Dysthymia	18	15.52
Bipolar Disorder, depressed	. seleda	0.86
Schizophrenia	mud 3 isld	2.59
Generalized Anxiety Disorder	32	27.59
Obsessive Compulsive Disorder	4	3.45
Panic Disorder	1	0.86
Social Phobia	1loan	0.86
	6	5.17
Hypoactive Sexual Desire Disorder	3	2.59
Male Erectile Disorder	17 620	14.66
Premature Ejaculation	26	22.41
No diagnosis, Dhat syndrome only	5	4.31

Discussion:

The findings of the present study revealed that patients of Dhat syndrome were younger adults with a mean age of 24.46 years. Similar age incidence was reported in several Indian studies. 4.7.9-11 Majority of the cases were Muslims and came from urban background which reflect the population on religion and locality. Interestingly, most of the patients (83.62%) of the present study were literate. About 45% were educated at higher secondary level or above. Only 15% patients were educated at primary level. These figures compare well with other studies. 4,7,9,10 As found in other reports, 6,11 most cases were of average or low income group and student by occupation. In our study, 56.9% were unmarried. In an Indian study, 54.2% of patients of Dhat syndrome were unmarried. 10 The preponderance of unmarried patients could be because they had first become worried about the success of their sexual life and thus presented themselves with sexual and other complaints. The mean duration of Dhat syndrome was found 3 years and in majority of the cases it was 2 years or more. These findings are well consistent with the report of other surveys.9,11

The presenting complaints of the patients of Dhat syndrome are more or less similar with other reports what were found in our studies. 1.2,4-,10 Generalized weakness (74.14%), urinary complains (71.55%), lack of energy (67.14%) and sleep disturbances (53.45%) were frequent. Similarly, somatic symptoms like weakness (70.8%), fatigue (68.7%), palpitation (68.7%) and sleeplessness (62.4%) were reported in one prominent Indian study. 10

In our study, most of the patients (54.31%) believe that early masturbation was the main cause of Dhat syndrome which is similar to those in other studies. 4,7,10,11 Interestingly as a group, 58.62% patients believe the passage of Dhatu was due to some type of physical illness. This might be the reflection of our people's tendency of somatisation to express their problems and of their believe about the

value and importance of semen. As found in other reports^{7,9,10} all the patients in our study thought that Dhat syndrome was positively harmful and 68.97% viewed it as physically harmful and almost all believed that it required some medication. These attitudes certainly reflect people's believe about physical causes of Dhat syndrome, the value of semen and the effect of its loss and also reflect the strong desire of the patients for some medications.

In the present study, majority of the patients contacted with traditional healers at the first instance and took endogenous medicine. This again reflects pattern of believe and attitudes towards Dhat syndrome in our culture and great ignorance about this illness among our people. Moreover, the traditional believe about semen as well as about the syndrome could be reinforced or perpetuated by these so-called 'sex healers' by their false interpretation and treatment.

The common consequences of Dhat syndrome described by the patients were sex difficulties (32.76%), professional trouble (32.76%), global impairment of functioning (30.57%), marital disharmony (22.41%) and fear of marriage (17.76%). Even marital separation and divorce were described as consequences by 1.72% patients for each. These indicate the wide extent of the effect of Dhat syndrome in patients life and reflect the views of patients and other concerned people about the passage of Dhatu.

Except five, all the cases received associated psychiatric diagnosis (second psychiatric diagnosis) other than Dhat syndrome in our study. Depressive disorder was found to be the commonest illness (38.79% with major depression and 15.52% with dysthymia) followed by generalized anxiety disorder (27.6=59%). These findings are well consistent with those of Indian studies. 4,7,10,11 Though the syndrome is considered as specific neurotic disorders, unexpectedly 3 (2.59%) cases were schizophrenics in our study. This was not found in other report except in a review where the author mentioned that the patients of Dhat syndrome are often found to be suffering from schizophrenia.6 One or more of the sexual disorders were found in considerable amount of patients as additional third diagnosis and most of them were of either premature ejaculation or erectile disorder with 22.41% and 14.66% respectively. This association indicates the existence of psychopathological interplay between Dhat syndrome and male potency disorder.

The five patients who received the diagnosis of Dhat syndrome only, did not differ from the rest in any significant way except they simply failed to fulfil all the required criteria to reach a particular diagnosis. So the question arises that whether there is existence of primary/pure Dhat syndrome or not which needs further investigation.

This study reveals the extent of Dhat syndrome in our country which is similar to pattern of Dhat syndrome in Indian culture. Overvalued idea about the semen constitute an organized believe system which interplays with somatisation and thus creates complex psychopathology of Dhat syndrome. The ignorance about this illness exists widely in different levels of our population. There is a great need of awareness amongst medical professional so as to recognise this common syndrome and adopt the therapeutic approach of choice.

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HIGHLY SELECTIVE VAGOTOMY: A PRELIMINARY REPORT

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Abstract:

Highly selective vagotomy (HSV) was done on 24 patients with chronic duodenal ulcer or prepyloric ulcer and the

patients were followed up for 1 to 8 years. There was no postoperative mortality. There were no incidence of dyspepsia, early fullness, dumping and diarrhoea. In one

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