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Original Article

Psychiatry Section

Is 'Pure' Dhat Syndrome a Stable Diagnostic Entity? A Naturalistic Long Term Follow Up Study from a Tertiary Care Centre

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ABSTRACT

Background: Very little is known about the long term diagnostic stability of Dhat (semen loss) syndrome owing to a dearth of follow up studies on this condition.

Aim: The aim of the study was to assess the diagnostic stability and naturalistic long term outcomes in a group of pure Dhat syndrome cases.

Materials and Methods: The study was carried out in the outpatient psychiatry department of a tertiary care hospital in South India, using a retrospective cohort design. Forty one cases of 'pure' Dhat syndrome (with no other concurrent diagnosis) were selected by a chart review of patients attending the outpatient Psychiatry department. Out of this initial cohort, follow up interviews were held for 36 patients. Direct clinical interviews were held with all participants to assess change in diagnosis. Those who no longer qualified for Dhat syndrome were interviewed with the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) to generate other diagnoses.

For analysis, the patients were divided into two groups – those who positively endorsed symptoms of Dhat syndrome at follow up (DSP group) and those who no longer did (DSN group). These groups were compared using chi-square test for categorical variables and student t-test for continuous variables to look for significant differences. Frequencies and percentages were used to depict socio-demographic data and the follow up diagnoses.

Statistical Analysis: Data was analysed using SPSS for Windows, Version 16.0 (Chicago, SPSS Inc.)

Results: The mean duration of follow up was 6±3.5 years. Nearly two-thirds of the sample no longer fulfilled criteria for Dhat syndrome in follow up. The most common revisional diagnosis in these patients was somatoform disorders. Age, marital status and literacy distinguished the two groups. About a quarter of the sample (26.07%) was in complete remission.

Conclusion: Even the purest variety of Dhat syndrome is not a stable diagnosis in the majority of patients. The condition may be better conceptualized as a subtype of somatoform disorder with culturally determined explanation for somatic symptoms. Clinicians should look at explanations of semen loss as fluid cultural idioms of distress rather than as a standalone diagnostic entity.

Keywords: Diagnosis, Semen loss, Outcome

INTRODUCTION

Dhat (semen loss) syndrome is described as a culture-bound neurotic disorder. Typically, the sufferers attribute their symptoms to the debilitating effects of passage of semen through nocturnal emissions, urine and/or masturbation though direct evidence for semen loss is often lacking. This condition was given the label of "Dhat Syndrome" by Wig as semen was believed to be one of the seven important elixirs or 'Dhatus' constituting the human body [1]. The nosological status of Dhat syndrome remains unclear. Many studies have found high rates of co-morbidity with somatoform disorders [2], depression and anxiety [3] leading to propositions that it may be a culturally determined symptom of depression, and not a separate illness [4]. Contrastingly, researchers investigating the illness behaviour profile of Dhat syndrome have argued that the disorder is a distinct entity with distinct illness behaviour characteristics [5]. To summarize, whether Dhat syndrome should be described as a separate diagnostic entity continues to be a controversial issue. One of the important methods to establish construct validity of a diagnostic entity is the conduct of systematic follow up studies, to understand if the disorder persists in individuals as such or changes its character and presentation to other well established syndromes [6].

However, the dearth of long term follow up studies on Dhat syndrome patients has limited our understanding of the condition. Researchers have suggested that there may be three presentations of Dhat syndrome – Dhat syndrome alone, Dhat with co-morbid depression and anxiety, Dhat with sexual dysfunction [7]. It is quite intuitive that the first category must represent the purest form of Dhat syndrome. This category would include patients who present with symptoms of "semen loss" induced physical debilitation but do not meet the criteria for depression and anxiety and have no problems with psychosexual functioning. It would be illuminating to look at the natural course of these "pure" Dhat syndrome patients in order to improve our clinical understanding of culture bound syndromes.

AIM

This naturalistic long term follow up study was undertaken with the aim of exploring the stability of diagnosis and determination of outcome in a group of cases diagnosed with only Dhat syndrome and had no co-morbidities at initial presentation.

MATERIALS AND METHODS

The present study was carried out in the Department of Psychiatry at a teaching cum tertiary care hospital in Southern India during the period from January 2007 to June 2007. The clinical charts of consecutive patients attending the walk-in psychiatry outpatient clinic who had received a diagnosis of Dhat syndrome between the years 1998-2001 were reviewed. This period was chosen for selecting the cases because the Department of Psychiatry, at the time, was running a special clinic dedicated to the needs of patients with psychosexual disorders and their exhaustive case files were available with the authors.

One hundred eighty four case files were identified of which 9 had to be excluded due to incomplete documentation. Of the remaining 175, only those patients were selected who reported semen loss as their primary complaint and received no other concurrent diagnostic labels. In case of ambiguous documentations, records were independently scrutinized by two qualified psychiatrists (MS

and RC) and a consensus was arrived at. Forty one (41) such 'pure' Dhat syndrome cases were identified to begin with. These patients were contacted through letters to visit the hospital on a pre-specified date and time during which they were clinically interviewed to assess persistence of Dhat syndrome or change in diagnosis. A second letter was sent to those who did not respond to the first letter.

The study had the approval of the institutional ethics committee and written informed consent was obtained from those who volunteered to participate in the study. We were able to conduct follow up interviews for 36 out of the initial cohort of 41 patients. Those who no longer endorsed features of Dhat syndrome were assessed on the following instrument in order to assess change in diagnosis:-

- Structured Clinical Interview for DSM-IV Axis I Disorders patient edition (SCID-I/P) [8] - This is a semi-stuctured interview for making the major DSM-IV Axis I diagnoses. We applied it to all the patients – to elicit other diagnoses in those who no longer fulfilled the criteria for a diagnosis of Dhat syndrome in follow up and to elicit co-morbid diagnoses in those who continued to endorse symptoms of Dhat syndrome. Researchers have previously used SCID-I as the "gold standard" for determining the accuracy of clinical diagnosis indicative of its high validity [9].

STATISTICAL ANALYSIS

All follow up interviews were conducted by a single psychiatrist (MS). Data was analysed using using SPSS for Windows, Version 16.0 (Chicago, SPSS Inc.). For analysis, the patients were divided into two groups – those who retained their diagnosis of Dhat syndrome (DSP group) and those who no longer fulfilled criteria for Dhat Syndrome (DSN group) at follow up. Chi-square test was used to compare the categorical data between the groups while the independent samples t-test was used for continuous data. All statistical analysis was carried out for two tailed significance and p-value<0.05 was taken as significant.

Variable	Dhat syndrome negative (DSN) (n=23)	Dhat syndrome positive (DSP) (n=13)
1. Age of onset (years)		
15-19	2	2
20-24	7	4
25-29	6	3
30-34	4	2
35-39	2	1
40-44	1	1
45-49	1	0
2. Duration of illness (years)		
0-2	1	3
>2-4	6	4
>4-6	8	2
> 6-8	6	3
>8-10	1	1
>10	1	0
3. Marital Status		
Unmarried	13	8
Married	10	5
4. Educational status (completed years)		
Illiterate	8	5
0-7	7	4
8-12	5	3
>12	3	1

[Table/Fig-1]: Comparison of baseline characteristics between groups

RESULTS

The follow up sample comprised 36 subjects. The mean age at the time of index evaluation was 23.5 ± 5.8 years. The mean duration of Dhat syndrome was 6 ± 3.5 years.

It was observed that 23 patients (63.88%) no longer endorsed the criteria for Dhat syndrome at follow up. This group was compared with those who continued to retain the diagnosis on the distribution of socio-demographic variables and duration of illness. The results are shown in [Table/Fig-1]. In the DSN group, 16 (69.5%) reported symptoms of Dhat syndrome for more than 4 years from onset. The DSN group were significantly older than DSP group (32.8±4.2 vs 26.7±3.1, p<0.001) and were more likely to be married (71.2% vs 28.3%, χ^2=11.2, df=1, p<0.001). Majority of those in the DSN group were literate as in the DSP group (65.7% vs 61.5%, df=1, χ^2= 0.049, p=0.8253).

The DSN group (n=23) was then administered SCID-I/P instrument for other psychiatric morbidity and the results are shown in [Table/Fig-2]. Nearly half of the group (n=11, 47.8%) qualified for somatoform disorders which was the single largest category of diagnosis made. None of them attributed any of their symptoms to semen loss. Among those diagnosed with somatoform disorders in follow up (n=11), anxiety disorders were also found to be co-morbid in 3 patients (27.27%) and depressive disorders in 2 patients (18.18%). Six patients (26.07%) did not qualify for any diagnosis and were in complete remission. When the SCID-I/P was administered to the DSP group (n=13), we found that 30.77% (n=4) qualified additionally for depressive disorders and 15.38% (n=2) for anxiety disorders.

Diagnosis	n (%)
Generalized Anxiety Disorder	4 (17.39%)
Somatoform Disorder	11 (47.8%)
Depressive Disorder	2 (8.69%)
None	6 (26.07%)

[Table/Fig-2]: Follow up diagnosis among Dhat syndrome negative (DSN) group (n=23)

DISCUSSION

The demographic data indicate that the syndrome is more prevalent among young adults with mean age of onset of symptoms being 23.5±5.8 years and mean duration of illness of 6±3.5 years. These findings are comparable to those reported by previous investigators from India [10]. In our study, the majority of subjects (58.3%) were unmarried as in other similar works [11]. Educational status did not distinguish the two groups.

The major finding of the present study was that a majority (63.8%, n=23) of the patients no longer met the criteria for their original diagnosis of Dhat syndrome during the follow up interviews. This raises questions about the construct validity of a diagnosis of Dhat syndrome. There are no comparable follow up studies of pure Dhat syndrome cases. Most researchers have evaluated psychiatric co-morbidities in Dhat syndrome than direct associations with established diagnostic classes. While some have favored a somatoform status for the syndrome [12], others using a factor analytic approach have concluded that the syndrome closely resembles depression [4]. Some evidence for a possible genetic link between Dhat syndrome and depression have also been found recently by investigators who studied the relationship between Dhat syndrome and depressive spectrum disorders using a retrospective design [13]. In a case control study design, Chaddha, however, found a unique illness behaviour profile for Dhat syndrome, supporting a separate diagnostic status for the condition [5]. De Silva and Dissanayake, in a cohort of patients who presented with semen loss induced sexual dysfunction, reported that these individuals continued to report concerns about semen loss for a period ranging from 6 months to 20 years [14]. More than a quarter of our sample had achieved full

remission in follow up. This implies that a subset of patients tend to outgrow these cultural explanations for their somatic distress.

The most common diagnosis at follow up among the DSN group was somatoform disorders. Our findings, which resonate with the conclusions of Perme et al., suggest that, atleast in a significant minority, Dhat syndrome may be better considered as a type of somatoform disorder which is a cluster of related syndromes characterized more by symptoms and suffering than by disease-specific, demonstrable abnormalities of tissue structure or function [12]. We observed that DSN group was significantly older than the DSP group. Malhotra and Wig, in their influential paper on Dhat syndrome, have explained this differential age related clustering of the condition as a function of shared knowledge among social classes and groups [15]. Whether Dhat syndrome should be considered as a separate diagnostic entity is a matter of much debate [16]. Our results show that even the purest variety of Dhat syndrome lacks diagnostic stability and either recasts itself over time into other diagnostic categories or just fizzles out. These findings could have possible classificatory implications for International Classification of Diseases (ICD) – 11. Specifically, the evidence from this work argues against an independent diagnostic category status for Dhat syndrome.

LIMITATIONS

The limitations of the study include a purposive sample which was selected from a single tertiary care hospital. The lack of a suitable control group is another valid limitation. The strength of the study is that it tries to address a critical gap in literature as very few long term follow up studies have been conducted on patients with Dhat syndrome and certainly, none on those who had no other diagnosis at intake or the 'pure' variety of Dhat syndrome. The long duration of follow up and its naturalistic design is another advantage of the present study.

CONCLUSION

The diagnosis of Dhat syndrome does not remain stable in the majority of patients at follow up. About a half of them convert to somatoform disorders and more than a quarter of them go into complete remission. Clinicians would be better served by considering explanations of semen loss as cultural idioms of distress that may be fluid and dynamic in nature. We hope this pilot study renews debate about the construct validity of a diagnosis of Dhat syndrome and propels further research with better design and larger samples to clarify the same.

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