ORIGINAL ARTICLE:

PSYCHOSOCIAL FACTORS AND ASSOCIATED SYMPTOMS IN PATIENTS WITH FUNCTIONAL NEUROLOGICAL SYMPTOM DISORDER

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ABSTRACT

OBJECTIVE

To investigate the symptom type, sociodemographic factors and preceding events in patients with Functional Neurological Symptom Disorder.

STUDY DESIGN

Cross-sectional study

PLACE AND DURATION OF STUDY

The study was conducted at Nishtar Medical University, Multan in a period of three months from 1st January 2024 to 1st March 2024.

METHOD

Data has been collected through purposive sampling technique from a sample of N=50. The Conversion Disorder Questionnaire Australian Paediartic Surveillance Unit has been used in the study as the main tool.

RESULTS

Results showed that symptoms of FNSD were more likely to exhibit in patients who are unmarried, females, with joint families, have lower socioeconomic status or less education. It is also observed that the duration of illness is acute in most of the patients.

CONCLUSION

Female gender, less education, lower socioeconomic status, joint family, rural living and single marital status are sociodemographic factors more prevalent in FNSD.

KEYWORDS

Symptom type, sociodemographic factors, Functional Neurological Symptom Disorder.

INTRODUCTION

Functional neurological symptom disorder presents in an impairment that cannot be described by a medical context, rather symptoms are produced by conflict or definite stressors as interpreted in DSM-5 in majority of the cases. Well-known psychoanalyst Sigmund Freud postulated that unresolved childhood conflicts complicates in unconscious mind and are converted into physical symptoms hence giving it the name, conversion disorder. There are some conditions for developing functional neurological symptom disorders such as excessive pervasiveness of drug abuse, poverty and inadequate infrastructure can produce different types of exertion in families[1].

Conversion disorder (CD) is retitled as Functional Neurological Stress Disorder in the Diagnostic and Statistical Manual of Mental Disorder (FNSD). FNSD is categorized as a dissociative disorder including dissociative motor disorder in the International Classification of Disease (ICD). CD or FNSD is a situation that exerts influence on the motor or neural working of the sufferer. This situation influences patients in numerous ways like gait disruptions, muscle feebleness, trembling, unconsciousness, blindness, pseudo seizures, paraparesis and paralysis[2].

FNSD remained most familiar impairments introduced in the psychiatry departments of Pakistan's tertiary care hospitals[3]. South Asian cultures such as Pakistan have a high widespread presence of inexplicable neural symptoms but the exploration in this area is very modest[4]. The reported worldwide existence of FNSD fluctuates widely

depending on the population. Among grown females and males disorder ratio is 2:1-10:1. Moreover, widespread extensiveness of FNSD has been seen in married and young females. The role of displeasure in the progress of functional neurological symptom disorder has been highlighted. Studies have approximated that 20% to 25% of patients in public hospitals have symptoms of FNSD[5].

The subcultural viewpoint of FNSD states that this is prone to be more frequent in developing countries, in rural areas and in the illiterate population. The social perspective continued that FNSD symptoms have been reinforced by the environment. In each culture, family plays an important role in the prognosis as a crucial factor, but it differs across societies. The family has been recognized as a key contributing element to the progress of various psychological health issues[6]. Families play a vivacious role throughout the life of individual in Pakistan. Thus, whatever happens to one person in the family impacts the psychological and social well-being of the other members of the family. Bowen gave the family systems theory (FST) that emphasized the family role and indicated that families so extremely affect their members' thinking, feelings and behaviors that this seems as if people live under the corresponding “emotional skin.” Bowen's theory suggested the eight concepts that center on the assured states of acute anxiety that lives inside the family and is the root of family ailment[7].

Unpleasant life events antecede the presentation of functional neurological Symptom disorder (FNSD) more often than the other neuropsychiatric symptoms; but the etiological role of these adverse life events is vague[8].

Functional neurological symptom disorders are perceived to be more prevalent in these days in Pakistani culture. This study aimed to see the association of psychosocial factors with symptoms of functional neurological symptom disorder in both gender male and female. The objective of the study is to investigate the psychosocial factors related to FNSD and their association with type of symptoms.

METHOD

Procedure

After formal approval from ethical review committee, already diagnosed patients were accessed and informed consent was taken from sample. After informed consent they were asked provide information as per demographic sheet and specified scales. While conducting the research, ethical considerations were followed. Patients were informed about the nature of the study and were ensured that their confidentiality would remain private. The participants were allowed to leave the study anytime in case they want to.

Participants

The sample has been selected through purposive, convenient, and non-probability sampling technique from targeted population. Participants of the study are consisted of diagnosed patients with functional neurological symptom disorder with obvious symptoms of sensory or motor impairment. N=50 patients from Nishtar Hospital Multan were included in the study. Patients having the comorbid diagnosis of substance dependence or critical situation were excluded.

Instruments

The Conversion Disorder Questionnaire Australian Paediartic Surveillance Unit has been used to record type of the symptoms from the patients of Functional Neurological Symptom Disorder (FNSD). The Life stressors of patients was used to obtain information on life stressors. Demographic variables were recorded on a demographic sheet.

RESULTS

Table 1

Sociodemographic characteristics of the participants

Demographics	**Frequency (Percentage)**	**Demographics**	**Frequency (Percentage)**
Gender		**Marital status**	
Male	14 (28.0%)	Married	18 (36.0%)
Female	36 (72.0%)	Unmarried	30 (60.0%)
Socioeconomic class		Divorced	2 (4.0%)
Lower	20 (40.0%)	**Education**	
Lower middle	18 (36.0%)	Illiterate	4 (8.0%)
Middle	12 (24.0%)	Primary to middle	27 (54.0%)

Residential area		Matric to intermediate	17 (34.0%)
Urban	12 (24.0%)	Graduation to masters	2 (4.0%)
Rural	38 (76.0%)	**Family System**	
Duration of illness		Joint	30 (60.0%)
Acute	40 (80.0%)	Nuclear	20 (40.0%)
Persistent	10 (20.0%)		

Table 1 showed the demographic characteristic of the participants. Out of 50 patients majority were females 36 (72%), unmarried patients were 30 (60%), 27 (54%) patients were educated between primary to middle standard. 20 (40%) patients were from lower class, 18 (36%) patients were from lower middle class, 38 (76%) lived in rural areas while family system of 30 (60%) patients were joint and 40 (80%) patients were presented with acute symptoms (see table 1 for details).

22 (44%) patients were last child, 20 (40%) patients were middle child while only 8 (16%) patients were first child

Table 2

Frequency of patients as per type of symptom

Symptoms	**Frequency (percentage)**
Paralysis	22 (44.0%)
Anesthesia	18 (36.0%)
Abnormal movement	23 (46.0%)
Abnormal gait	15 (30.0%)
Hearing disturbances	16 (32.0%)
Visual disturbances	13 (26.0%)
Loss of speech	23 (46.0%)

Psychogenic cough	22 (44.0%)
Labelle indifference	7 (14.0%)
Pain	38 (76.0%)
Fatigue	31 (62.0%)
Dizziness	15 (30.0%)

Table 2 showed that symptoms like pain and fatigue were observed in majority of the patients (f = 38 (76%) and f = 31 (62%) respectively, followed by abnormal movement and loss of speech each presented in 23 patients accounting for 46 % of the sample. Psychogenic cough and paralysis both were presented by 22 patients (44 %), see table 2 for details.

Table 3

Frequency of the factors preceding symptoms

Contributing Factors	**Frequency (Percentage)**
Parental separation	4 (8.0%)
Prolonged absence of parents	3 (6.0%)
Victim of bullying	8 (16.0%)
Victim of abuse	5 (10.0%)
Academic pressure	17 (34.0%)
Breakup	18 (36.0%)
Confusion regarding sex orientation	1 (2.0%)
Other events	30 (60.0%)

Table 3 showed that in majority of the cases the factor that preceded the symptoms of functional neurological symptom disorder was break up (f = 18, 36%) or academic pressure (f = 17, 34 %). In 30 patients (60 %) events other than listed in the scale preceded the symptoms (see table 3 for details).

DISCUSSION

Results showed that ratio of female participants was higher than males. Similar research on has shown indications of provider bias in the evaluation of somatic symptoms, with female patients receiving a higher diagnosis of somatic symptom and related disorder than male patients[9]. The frequency of unmarried patients was higher than married and divorced. The proportion of primary to middle 27(54%) standard education was seen greater than illiterate 4(8%), matric to intermediate 17(34%) and graduation to masters 2(4%). Additionally, patients with lower socioeconomic status 20(40%) were in higher proportion in the sample of Functional Neurological Symptoms Disorder as compared with lower middle class 18 (36%) and middle class 12(24%) patients. More patients reported from rural areas 38(76%) than urban areas 12 (24%). Furthermore, large number of patients reported to be living in joint family system 30 (60%) as compared with nuclear family system 20(40%). More patients had been observed with acute illness 40(80%) than persistent illness 10(20%).

Pain, fatigue, loss of speech, abnormal movement and psychogenic cough were the most prevalent symptom. One previous study explained that customized formulation and therapy are crucial because to the prevalence of co-morbid symptoms like pain, fatigue, exhaustion, cognitive problems, mood disorders and PTSD, as well as a range of FNSD subtypes[10].

The most prevalent preceding factors in sample of FNSD breakup 18(36%) and academic pressure 17(34%). As earlier research is comparable to this, it illustrated how to treat hospitalized patients whose psychological reactions to physical symptoms result in pathological discomfort, abnormal behaviors and impairment, or whose physical symptoms may develop as a result of psychological processes. It draws attention to a few psychological variables that could influence how one experiences and reacts to physical symptoms as well as certain difficult interpersonal interactions that take place in a hospital environment[11].

CONCLUSION

Data from the present study pointed out that gender, economic factors, family system, marital status and educational level may be risk factors of the Functional Neurological Symptom Disorder.

In future, researches on these topics should focus on the mechanisms through which the said preceding factors interact and cause the symptoms in patients with FNSD. Lastly, culturally congruent interventions must be put in place and health infrastructure should be strengthened in order to yield better results.

LIMITATIONS AND FUTURE RECOMMENDATIONS

Unfair distributions of healthcare resources especially in the mental health services between regions create influence on the patients who were diagnosed with FNSD in terms of how much they can afford and how they receive treatment. These differences should be kept in mind while interpreting these findings.

Having a relatively small number of FNSD patients might possibly be the reason for a narrow scope of the generalization of the results. Retrospective self-reporting methodologies particularly in functional neurological symptom disorder research are the main reliance of researchers making it prone to recall bias. Patients may find it difficult to recall correctly the signs and symptoms in detail or the onset and progression of the illness as a whole. Inaccurate recalling may negatively influence the reliability of the data that is gathered.

It is important to investigate the effect of cultural norms and beliefs of the society in Pakistan on presentation of FNSD symptoms. To illustrate this, the negative judgment and discrimination associated with mental health conditions often cause patients to transform their psychological discomfort into physical symptoms which then resemble FNSD symptoms. Impacts of the limited accessibility to mental health facilities and the negative attitude of the public towards getting psychiatric help for Functional Neurological Symptom Disorder (FNSD) may have altered the picture of the results as only specific patients reached the facility and got a chance to be part of the study.

CONFLICT OF INTEREST

None

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DISCLOSURE

None

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