

Clinical Presentation and Life Events in Patients with Functional Neurological Symptom Disorder presenting to Psychiatric Emergency OPD - A Hospital based Study

Rehana Amin¹, Mohammad Maqbool Dar², Sumaira Maqbool³, Mohd Altaf Paul⁴, Yuman Kawoos¹, Waris Zargar⁵

ABSTRACT

Introduction: Functional neurological symptom disorder, a common psychiatric disorder is still being considered an important issue in the emergency department to avoid multiple diagnostic tests associated with unnecessary risk. The aim of this study was to examine clinical characteristics of patients with functional neurological symptom disorder.

Material and methods: Patients of age more than 10 years referred to Psychiatry OPD after detailed evaluation were diagnosed according to DSM-5 criteria and symptoms accordingly classified into motor, sensory, visceral, and mixed.

Results: The clinical features were predominantly psychogenic syncope, pseudoseizures, aphonia, and paralysis or muscle weakness.

Conclusion: The clinical presentation was mostly motor and visceral symptoms with acute onset of less than 2weeks.

Keywords: Functional Neurological Symptom Disorder, Clinical Phenomenology, Role Model.

College Srinagar. It was a cross-sectional, observational study. Consecutive patients of age more than 10 years of both sexes, without comorbid medical problems and intellectual disability referred to Psychiatric OPD participated in the study. It was a time bound study and total of 300 patients were studied. After detailed examination, investigation, and psychiatric assessment patients were diagnosed as functional neurological symptom disorder according to Diagnostic and Statistical Manual of mental disorders-5 Criteria¹. The life event checklist⁴ was used for assessing psychosocial factors preceding the illness. The life event checklist comprises of various traumatic life events. For each event we had asked patients to indicate whether, “it happened to you personally”, or “you witnessed it happen to someone else”, or “you learned about it happening to someone close to you”. All life events throughout patient’s entire life were considered. Written informed consent was obtained in the local language understandable to the patient. Patients were informed about the purpose of the interviewing. The presenting symptoms of all the patients were noted and classified into motor, sensory, visceral, or mixed⁵. In our study patients who presented with symptoms of internal organs were classified into visceral type and some symptoms which do not fit in above categories were called as unspecified type¹.

STATISTICAL ANALYSIS

Data was analysed and tabulated in frequency and percentages and was presented graphically as well. Chi-square tests were used for categorical variables and fishers exact tests were used in place of chi-square for independence when one or more cells in a table had an expected count less than 5. P-values less than 0.05 were taken as significant.

INTRODUCTION

Functional neurological symptom disorder is an illness of symptoms or deficits that affect motor or sensory functions which are not intentionally produced, not due to substance use, not limited to pain or sexual symptoms, suggest another medical condition but is caused by psychological factors preceding the illness and gain is primarily psychological but not social, monetary, or legal¹. It is a condition in which patients present with neurological symptoms of psychological origin. These symptoms have been variously named as Hysteria, Conversion, Dissociation, Functional, Non-organic, medically unexplainable and Psychogenic². Functional neurological symptom disorder presents with loss of physical function with a wide range of signs and symptoms and physical examination are not consistent with a known neurological, anatomical, or physiological pathology³. The diagnosis requires a necessary and critical association between the cause of neurological symptoms and psychological factors.

MATERIAL AND METHODS

The study was conducted in the Community General Hospital Unit, Institute of Mental Health and Neurosciences (IMHANS)-Kashmir, an associated Hospital of Government medical college Srinagar from April 2015 to March 2016. The study was approved by ethical board of Government Medical

¹Senior Resident, ²Professor, ⁴Lecturer Clinical Psychology, ³Postgraduate Scholar, Department of Psychiatry, Government Medical College Srinagar, Jammu and Kashmir, ⁵MBBS Student, A.S.C.O.M.S, Jammu, India

Corresponding author: Rehana Amin, Senior Resident, Postgraduate Department of Psychiatry, Government Medical College Srinagar, Jammu and Kashmir, India

How to cite this article: Rehana Amin, Mohammad Maqbool Dar, Sumaira Maqbool, Mohd Altaf Paul, Yuman Kawoos, Waris Zargar. Clinical presentation and life events in patients with functional neurological symptom disorder presenting to psychiatric emergency OPD - a hospital based study. International Journal of Contemporary Medical Research 2017;4(12):1-5.

	Groups	Frequency (n)	Percentage (%)	Chi-square value	P value
Type of conversion disorder	Motor	159	54.1	292.43	0.0001
	Visceral	97	32.3		
	Sensory	6	2.0		
	Mixed	26	11.3		
	Unspecified	12	0.3		
Duration of illness	<2weeks	147	49.0	3.23	0.0001
	2-4weeks	32	10.7		
	>1-3months	36	12.0		
	>3-6months	22	7.3		
	>6months-1year	4	1.3		
	>1-2year	13	4.3		
	>2year	46	15.3		
La belle indifference	Present	134	44.7	3.41	0.065
	Absent	166	55.3		
Role model	No	99	33.0	34.68	0.0001
	Yes	201	67.0		

Table-1: Clinical features of patients (N=300)

Life events	No. of patients (n)
Natural Disaster	276 (92.0%)
Physical Assault	170 (56.66%)
Road Traffic Accident	160 (53.33%)
Assault with a Weapon	107 (35.66%)
Sexual Assault	87 (29.0%)
Life Threatening Illness or Injury	67 (22.33%)
Sudden Death of close one	46 (15.33%)
Exposure to War-zone	10 (3.33%)
Others	87 (29.0%)

Table-2: Common Life Events Reported by Patients as per life event checklist

Traumatic Life events	No. of life events								Chi-square value	P value
	0		1		2		>3			
Life event Happened (n)	15	5.0%	69	23.0%	57	19.0%	159	53.0%	146.88	0.0001
Life event Witnessed (n)	108	36.0%	133	44.3%	52	17.3%	07	2.33%	128.08	0.0001
Life event Learned (n)	150	50.0%	144	48.0%	04	1.33%	02	0.67%	276.74	0.0001

Table-3: Distribution of no. life events

RESULTS

Sociodemographic details of patients (N=300)

In current study majority of patients were in the age group of 20-40 years (47.3%), females (78.4%), married (59.3%), unemployed (47.0%) followed by students (44.7%), illiterates (64.7%). Most of our patients were from rural background (62.33%), of class IV socio-economic status (43.7%) (as per Kuppuswamy's scale 2012).

The symptoms were distributed into motor, sensory, visceral, mixed and unspecified according to the system involved. The most common presentation was with motor type of symptoms (54.1%) followed by visceral (32.3%) and mixed (11.3%). While only 2.0% had sensory symptoms. The p-value was statistically significant (table-1, Figure-1).

Majority (49.0%) of patients in our study had symptoms for less than 2weeks followed by 15.3% also had symptoms for greater than 2years, 12.0% had symptoms for >1-3months, 10.7% had complaints for 2-4weeks, 7.3% had symptoms for

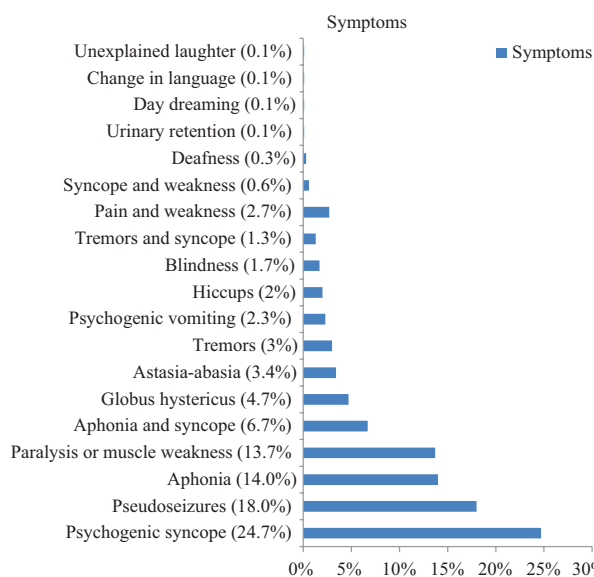


Figure-1: Clinical Phenomenology. Different types of symptoms presented by patients

>3-6months, 4.3% had symptoms for >1-2years, and 1.3% had complaints for >6months to 1 year. The chi-square value of 3.23 and p-value of 0.0001 and difference was statistically significant (table 1).

In our study majority of patients had experienced different traumatic life events during their life time. More than 3 life events had happened to 53.0% of patients, at least 1 life event was witnessed by 44.3% of patients and at least 1 life event was learned by 48.0% of patients (Table 2 and 3).

DISCUSSION

In our study, functional neurological symptom disorder was more often reported by patients of age less than 30yrs and results were supported by study of Ranjan and Pramod (2010)⁶. Our study revealed that females suffer more as compared to males with female: male ratio of 3.6:1 and significant preponderance in married patients. Such findings have been consistently reported in past studies in which prevalence of conversion disorder was predominant in females and married patients⁷. Married people get exposed to additional life event stressors like change of place, problems in relation, death of loved one, divorce, and trouble with in-laws, etc. which enhance their chances of developing stress related disorders⁸. All these findings were further supported by many other studies⁹. Most of the patients were from rural background¹⁰. The high occurrence of functional neurological symptom disorder in rural areas could be explained by the fact that majority of population lives in villages¹¹. It is also thought that more violent incidents happen in rural areas due to lack of oversight and media scrutiny. The situation is worsened by lack of services and accessibility to help¹². Majority of our patients belong to class IV socio-economic class of Kuppaswamy's scale. It was further seen in our study that such patients were more unemployed and illiterates. Similar results were reported by most studies which show that functional neurological symptoms are commonly seen in poorly educated people of low socioeconomic status¹³. One possible reason is their poor means of coping with precipitating life events and sickness might become the most feasible way of gaining relief from emotional strain¹⁴.

Conversion disorder presents with wide variety of symptoms classified into motor, sensory, visceral, mixed and unspecified. Patients with conversion disorder in the emergency department usually present with neurologic symptoms and undergo multiple diagnostic tests. Early psychiatric evaluation may assist in the diagnosis and evaluation of patients with suspected conversion disorder in the emergency department. Motor symptoms are dramatic enough to bring the patients early to hospital³. It is emphasised that reinvestigation of people with conversion disorder is expensive and can put them at unnecessary risk from complications associated with diagnostic procedures¹⁵. Nevertheless, conversion disorder for most patients is eminently treatable and rewarding for clinicians to treat with rapid symptom resolution and return to substantially improved functioning. A majority of our patients presented with motor symptoms in the form of pseudoseizures followed by aphonia and paralysis or muscle

weakness. In a similar study large no. of patients had motor symptoms or deficits followed by seizures or convulsions¹⁶. Kamala et al found motor symptoms were the commonest presentation, irrespective of the community status or literacy level, of which pseudo seizure was the commonest. Other motor symptoms included paresis aphonia/dysphonia, hyperventilation, dizziness, limb paralysis and astasia-abasia were also present¹⁰. Also consistent with other studies, in which majority of patients had presented with neurologic symptoms with classic symptoms like paresis, paralysis, aphonia, and coordination disturbance¹⁷. Roelofs et al found paresis/paralysis to be the commonest motor symptoms¹⁸. In our study among paralysis or muscle weakness, most had partial weakness. Results in other studies were comparable that moderate disability was more common than gross disability¹⁴. In present study most of patients had weakness of left lower limb followed by weakness of left upper limb consistent with other studies in which conversion group patients significantly presented with monoparesis and left sided symptoms than paraparesis and right sided symptoms¹⁹. The predominance of left sided symptoms may be explained since most people are right-handed, which affect processing in the right hemisphere, left-sided symptoms were thought to be more common because of the direct, downstream contralateral effects of nondominant hemisphere dysfunction. Most studies that have reported this left-sided symptom gradient have used patient handedness as a surrogate to predict dominant/non-dominant hemispheres^{18,19}. In another study most of the children had presented with abnormality of gait, of which majority complained of difficulty in, or total inability to walk because of generalised leg pains²⁰. In current study visceral symptoms were also common in the form of unresponsive spells followed by globus hystericus, and psychogenic vomiting. Another study showed 'unresponsiveness' as the commonest presenting feature of conversion disorder in certain areas of world²¹. In another study most of patients presented with syncope and loss of consciousness³. P Grattan-Smith et al 1988 reported large no. of patients presented with globus hystericus²⁰. In a similar study they have found patients with conversion disorder presented with psychogenic vomiting²² and urinary retention²³. Few patients also presented with sensory symptoms like blindness and deafness which is consistent with other studies^{3, 16, 20,21}. In our study most of the cases had acute onset with duration of illness for less than 2weeks. Chronic conversion for more than 2years duration was found in good number of patients and similar history of psychiatric illness in past with positive role model for illness in family or in close vicinity were supported by a similar studies^{9,10}.

La belle indifference

La belle indifference, the apparent lack of concern towards symptoms was shown by some patients and the difference was found to be statistically insignificant. The evidence from the published literature suggests that La belle indifference is not a useful clinical sign for distinguishing between conversion symptoms and organic disease. The quality of

the published studies was poor, many were retrospective, many provided an incomplete description of the patient's symptoms, and none used operational criteria and masked ratings to assess whether La belle indifference was present ²⁰.

Life event checklist

The life event may be psychological crises that disturb a balance between psychological defences and forbidden mental content ²⁴. In our study most common life events reported by patients were natural disasters. Because Kashmir remained the main victim of natural disasters over past 10-12 years and almost everyone in Kashmir was affected. Physical assault was also commonly found in our patients who exceed the rates as found in general population but does not differ substantially from abuse rates in psychiatric controls as measured with the Life Event Checklist ²⁵. In our study sudden death of close one in their life time was reported by 15.33% and life threatening injury or illness by 22.33% of patients similar to those found by Sharma et al (2002) ²⁶. In our study sexual assault was present in 29.0% of patients. In similar studies 26.3% ²⁷ of patients had experienced sexual abuse. In our study road traffic accident was reported by 53.33% of patients, assault with a weapon by 35.66%, exposure to war-zone in 3.33% and other life events (29.0%) include fire or explosion, serious accident at work, home, or during recreational activity, exposure to toxic substance, captivity, severe human suffering were also seen. Kashmir valley has witnessed an armed conflict from last three decades, with one of the studies suggesting the prevalence of trauma exposure of 58.69% in the general population and 15.9% prevalence of Post-traumatic Stress disorder. Among patients suffering from PTSD 16% had comorbid conversion disorder ²⁸. Majority of patients had experienced different traumatic life events during their life with mean number of life events as 2.5. In a similar study they have found a total of 4.2 of different life events in patients with conversion disorder and 3.8 of life events in controls ²⁹ and Sandeep Choudhary (1989) found maximum number of patients (28%) reported 4-5 stressful life events ³⁰.

CONCLUSION

Traumatic events and the way people cope with them have a crucial role in the development of psychological distress and psychopathology. It was found that patients show a relation between the perceived unpleasantness and the number of life events. Life events with respect to relationships including death of spouse, divorce, death of close family member, marriage, gaining a family member, death of close friend, major change in no. of arguments, trouble with in-laws,, spouse working outside were predominant. These findings suggest that the impact of social-occupational rather than physical health-related life events is related to the symptom onset in patients with conversion disorder. Thus when an apparent discrepancy between objective findings and clinical presentation is found, consider the possibility of disability due to a psychological mechanism, at the earliest contact to avoid inaccurate diagnostic labelling, unnecessary treatments with the potential for significant side effects

which in turn will have a long term detrimental impact on medical management and health of patients.

REFERENCES

1. Sadock BJ, Sadock VA, Pedro Ruiz: Synopsis of Psychiatry, Behavioural sciences/ Clinical Psychiatry 11th Ed 2015;13:473-79.
2. Lishman WA: Organic psychiatry: the psychological consequences of cerebral disorder. Oxford: Blackwell 1988.
3. David JD Louis D: Emergency Department Presentation of Patients with Conversion Disorder; Academic Emergency Medicine 1995;2:120-123.
4. Blake, Weathers, Nagy, Kaloupek, Charney, and Keane 1995.
5. Dilling H, Mombour W, Schmidt MH: International Classification of Psychiatric Disorders: ICD-10, chapter V, clinical diagnostic guidelines. Toronto: World Health Organisation 1991.
6. Habeeb T et al: Hysteria, A clinical and sociodemographic profile of 40 patients admitted to a teaching hospital, 1985-1995. Ann Saudi Med 1997;17:35-38.
7. Carson AJ et al: Neurological disease, motional disorder, and disability: they are related. A study of 300 consecutive new referrals to a neurology outpatient department. J Neurol Neurosurg Psychiatry 2000; 68:202-6.
8. Anthony D: Mancini the trouble with average; the impact of major life events and acute stress may not be what you think; A Briefing Paper Prepared for the Council on Contemporary Families 2013.
9. Subramanim D et al: A clinical study of 276 patients diagnosed as suffering from hysteria; Ind J Psych 1980;22:83-68.
10. Kamala Deka et al: A study of clinical correlates and socio-demographic profile in conversion Disorder; Indian J Psychiatry 2007;49:205-207.
11. Paper – 2, Jammu and Kashmir, census of India 2011.
12. Firdosi, MM. Margoob, MA: Socio-demographic Profile and Psychiatric Comorbidity in Patients with a Diagnosis of Post-Traumatic Stress Disorder – A study from Kashmir Valley; Acta Medica International 2016;3(2).
13. Stephansson J et al: Hysterical neurosis, conversion type: clinical and epidemiological considerations. Acta Psychiatrica Scandinavica 1976; 53:119-138.
14. Binzer M, Andersen PM, Kullgren G: Clinical characteristics of patients with motor disability due to conversion disorder: a prospective control group study. J Neurol Neurosurg Psychiatry 1997; 63:83-8.
15. Crimlisk, H et al: Slater revisited: 6-year follow-up study of patients with medically unexplained motor symptoms. BMJ 1998; 316:582-586.
16. Guz H et al: Conversion disorder and its subtypes: A need for a reclassification; Nord J Psychiatry 2003; 57:377-381.
17. Swartz M, McCracken J.: Emergency room management of conversion disorders. Hosp Community Psychiatry 1986; 37:828-33.
18. Roelofs K et al: Childhood Abuse in Patients With Conversion Disorder; Am J of psy 2002; 159; 1908-

- 1913.
19. Gale S et al: Lateralized, nonepileptic convulsions in an adult with cerebral palsy: Case report and review of the literature *Epilepsy and Behaviour Case Reports* 2015; 4:104–107.
 20. Grattan-Smith P et al: studied Clinical features of conversion disorder; *J Arch Dis Child* 1988; 63:408-414.
 21. Syed EV, Aliq R, Effendi S, Mehmud S: Conversion disorder: difficulties in diagnosis using DSM-IV/ICD-10; *J Pak Med Assoc* 2001;5:143–5.
 22. Pu T et al: one hundred cases of hysteria in eastern Libya. A socio-demographic study; *British Journal of Psychiatry* 1986;148:606-609.
 23. Choudhary S: Study of Sociodemographic variables, phenomenology and role of stressfull life events in hysterical neurosis; M.D Thesis; University of Delhi 1989.
 24. Elizabeth S et al; The contribution of life events to Pseudoseizures in adults; *Bulletin of Menninger clinic* 1999;63:70-88.
 25. Nijenhuis ERS, Van der Hart O, Kruger K. The psychometric characteristics of the Traumatic Experiences Checklist (TEC): First findings among psychiatric outpatients. *Clinical Psychology and Psychotherapy* 2002;9:200-210.
 26. Sharma et al; Psychosocial Factors in Children and Adolescents with Conversion Disorder; *JACAM* 2002;1;4(3).
 27. Vedat Sar et al; childhood trauma, dissociation, and psychiatric comorbidity in patients with Conversion Disorder; *Am J Psychiatry* 2004;161:2271–2276.
 28. Muhammad Mudasir Firdosi, Mushtaq Ahmad Margoob; Socio-demographic Profile and Psychiatric Comorbidity in Patients with a Diagnosis of Post-Traumatic Stress Disorder – A study from Kashmir Valley; *Acta Medica International* 2016;3(2).
 29. Roelfs K et al; the impact of early trauma and recent life events on symptom severity in patients with conversion disorder; *The J of Nervous and Mental Disease* 2005;193:508-514.
 30. Sandeep Choudhary; Study of Sociodemographic variables, phenomenology and role of stressfull life events in hysterical neurosis; M.D Thesis; University of Delhi 1989.

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 07-12-2017; **Accepted:** 06-01-2018; **Published:** 15-01-2018