

CLINICAL PROFILE OF PATIENTS WITH CONVERSION DISORDER: A CROSS-SECTIONAL STUDY

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Received : 20/05/2023
Received in revised form : 25/06/2023
Accepted : 07/07/2023

Keywords:

Conversion disorder, Stressor, clinical profile, socio-demographic profile.

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DOI: 10.47009/jamp.2023.5.4.64

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2023; 5 (4); 313-317



Abstract

Background: Conversion disorder is defined as a psychiatric illness whose symptoms or deficits, affecting voluntary motor or sensory function, cannot be explained by a neurological or general medical condition. It usually occurs as response to any stressful situation. We aimed to study socio-demographic and clinical profile and stressors among patients with conversion disorder. **Materials and Methods:** This descriptive, cross sectional hospital based study was conducted in the department of Psychiatry, a tertiary care centre of central India over a period of one year from January 2022 to December 2022. 146 patients of conversion disorder, from psychiatry OPD and IPD were enrolled for study. **Result:** A total of 146 patients of conversion disorder were studied. Majority of the participants (43.64%) were of 18-30 age groups. Female(62.88%) predominated, majority were from rural area (60.82%), low socio-economic class (38.48%), nuclear family (68.38%). 56.70% were married and nearly half (53.95%) were unemployed. The most common presenting symptom was hyperventilation or shortness of breath (25.08%) followed by fainting attacks or giddiness (21.99%) and pseudo seizure (19.9%). Most common stressors were school/ education related matters (27.14%) followed by marital issues (24.74%). **Conclusion:** Conversion disorder is common among young, married, female, from rural background and low socio-economic status with less education. Among them family history of psychiatry disorder, medical illness and psychiatry co-morbidities are also very common. Common presentation of illness as physical or neurological symptoms and frequent, multiple consultations suggest possible lack of insight, chronicity and also lack of awareness about the illness resulting in stigma among general public as well as medical personnel. Less understanding of conversion symptoms can lead to multiple consultations, unnecessary investigations and referrals putting a strain on family, finance and also on our limited health resources.

INTRODUCTION

Sigmund Freud, a renowned psychologist, first used the term "conversion disorder" and proposed that its symptoms are a reflection of unconscious conflict.^[1] The term "conversion" describes the replacement of a suppressed idea with a somatic symptom.^[1,2] Conversion disorder, now known as functional neurological symptom disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM)-V,^[3] is characterised by a sensory or motor function deficit that cannot be attributed to a physical condition, with psychological factors thought to be related to the deficit because symptoms are preceded by conflicts or other stressors.^[4] It typically begins in early adulthood and develops as a result of stress. The 10th edition of the International Classification of Disease

(ICD) includes dissociative disorders, such as dissociative motor disorder, as a category for conversion symptoms.^[5] Although conversion/dissociative disorders have been well-described in literature and have been recognised for some time, there is still controversy surrounding their aetiology, pathogenesis, phenomenology, and treatment. The correct diagnosis of these patients will have a significant impact on how their clinical course develops.^[6,7] Conversion disorder is characterised by a loss of physical function along with a variety of signs, symptoms, and physical examination findings that are inconsistent with any known pathology of the nervous system, either neurological, anatomical, or physiological.^[8] Blindness, paralysis, dystonia, psychogenic nonepileptic seizures, anaesthesia, swallowing problems, motor tics, difficulty walking, hallucinations, anaesthesia, and dementia are a few

examples of common conversion symptoms.^[9] Even though there isn't a clear organic diagnosis, the patient's distress is very real, and the physical symptoms they experience can't be willed away. The cost of healthcare for those with conversion disorder is nine times higher than for those without the disorder. Approximately 82% of adults with this disease stop working as a result of their symptoms, according to estimates.^[10] Without accounting for lost time at work or disability payments brought on by the illness, conversion disorder costs the US \$20 billion annually.^[10] Despite the clinical importance of conversion disorder, research into it has advanced much more slowly than that of many other neurological and psychiatric conditions.^[11] Depending on the population studied, there are wide variations in the reported prevalence of conversion disorder. According to studies, 5% of patients in a general hospital setting meet the criteria for the full disorder, and 20%–25% of patients there exhibit individual symptoms of conversion.^[12,13] Approximately 30% of referrals for neurology outpatients have medically unexplained neurological symptoms.^[14] Adult females diagnosed with conversion disorder outnumber males by a ratio of 2:1 to 10:1. People with lower socioeconomic status and less education are more likely to experience conversion disorder; race does not appear to be a factor alone.^[10] The populations of developing and underdeveloped nations differ significantly from those of developed nations; in developing nations, the prevalence of conversion disorder may reach 31%.^[10] The clinical traits of conversion disorder have been the subject of some Indian studies.^[15,16] They have placed emphasis on how stressors play a part in conversion disorder. In India, young adults with conversion disorder are more likely to come from low-income, joint families and are more likely to be female.^[17] Additionally, married housewives are the most common group of illiterates with a higher prevalence of conversion disorder.^[18] Less is known about the clinical manifestations and sociodemographic factors in conversion disorder in the southern part of India. In light of the foregoing, the purpose of this study was to evaluate the various clinical manifestations of conversion disorder in this region of Southern India, as well as the associated sociodemographic variables.

MATERIALS AND METHODS

This descriptive, cross-sectional hospital based study was conducted in the department of Psychiatry, a tertiary care centre of central India over a period of one year from January 2022 to December 2022. During the study duration all psychiatry patients diagnosed with conversion disorder (as per ICD-10), between age group of 18-60 years, from both IPD (indoor) and OPD (outpatient), who satisfied all the inclusion criteria, were enrolled in our study with

their consent. Patients with other psychiatry, medical or surgical illness, with unclear/probable diagnosis and intellectual disability were excluded. Socio-demography profile, personal details of participants, family history of psychiatry and history of other major medical or surgical illness were recorded in semi-structured proforma. Clinical profile of the study subjects was also obtained, through a detailed psychiatry history of presenting complaints and antecedent stressor, pre-morbid personality traits, repetitive pattern of such behaviors. A thorough physical examination was done and whenever needed necessary investigations were done to rule out medical cause. For psychiatry diagnosis, study subjects were interviewed and diagnosis was made clinically as per ICD-10 criteria. Institutional ethics committee permission was obtained prior to study. Statistical analysis: Data were entered in excel spreadsheets. Descriptive analysis was done. Categorical variables were presented as frequency and proportions.

RESULTS

A total of 146 study participants, both male and females, aged 18 to 60 years with clinical diagnosis of the conversion disorder as per ICD-10, were included. Majority of the participants (43.64%) were of 18-30 year age group followed by 31-45 years (35.39%). Female predominance (62.88%) was observed and 60.82% were residing at rural area. Mostly (41.58 %) had primary education and 38.48% were from low socio-economic class. Majority (68.38%) belonged to nuclear family and 56.70% were married. Nearly half (53.95%) were unemployed. The socio-demographic variables of our study population are recorded in [Table 1].

In the clinical profile of study participants, 78.69% reported having at least one family member with a medical condition and 36.3% diagnosed or taking treatment for a psychiatric disorder. Predominant personality traits were found in 57.38%. Repetition of similar behavior in past during the time of stress or otherwise was present in 42.26%. Most of them (83.50%) had multiple physician /psychiatrist's consultation and 40.20% had comorbid psychiatric disorders. clinical profile is recorded in [Table 2].

The most common presenting symptom reported was hyperventilation or shortness of breath (25.08%) followed by fainting attacks or giddiness (21.99%) and pseudoseizure (19.9%). Other common presentations were facial or limb paralysis (10.65%), Stupor / unresponsiveness (8.93%), psychogenic vomiting / hiccup/ burping (4.12%) and ataxia (2.06%) [Table 3].

In our study, most common precipitating/ antecedent stressors were school/ education related matters (27.14%) followed by marital issues (24.74%). Our 23.71% participants reported relationship issues. The stressors details are given in [Table 4].

Table 1: Socio-demographic profile of the participants with conversion disorder

Socio-demographic profile		Number (N=146)	Percentage
Age (in years)	18-30	64	43.64%
	31-45	52	35.39%
	46-60	30	20.96%
Gender	Male	54	37.45%
	Female	92	62.88%
Residence	Urban	57	39.17%
	Rural	89	60.82%
Education	Illiterate	32	21.64%
	Primary	61	41.58 %
	secondary	20	14.08%
	High school	19	12.71%
Socio-economic class	Graduate or higher	14	9.96 %
	Low	56	38.48%
	Middle	49	33.67%
Type of Family	Upper	41	27.83%
	Nuclear	100	68.38%
Working status	Joint	46	31.61%
	Employed	67	46.04%
Marital status	Unemployed	79	53.95%
	Unmarried	44	29.89%
	Married and living together	83	56.70%
	Single (separated/ divorced/ deceased partner)	19	13.4%

Table 2: clinical profile of participants with conversion disorder

History of medical illness in family	Yes	115	78.69%
	No	31	21.30%
History of psychiatry illness in family	Yes	48	32.64%
	No	89	60.82%
	Not known	9	6.52%
personality traits	Yes	84	57.38%
	No	62	42.61%
Repetition of similar behavior in past	Yes	62	42.26%
	No	84	57.7%
Multiple physician /psychiatrists consultation	Present	122	83.50%
	Absent	24	16.49%
Comorbid psychiatric disorders	Present	59	40.20%
	Absent	87	59.79%

Table 3: Clinical presentation of conversion disorder

Clinical presentation	Number (N=146)	Percentage
Pseudo seizure	29	19.9%
Fainting attack/giddiness	32	21.99%
Hyperventilation/ shortness of breath	37	25.08%
Stupor / unresponsiveness	13	8.93%
Ataxia	3	2.06%
Paralysis/weakness of limb/facial	16	10.65%
Abnormal limb movements (chorea like)	1	1.03%
Psychogenic vomiting / hiccup/ burping	6	4.12%
Dystonia (eyes up rolling, neck tilting)	1	1.03% %
Tics like movements (neck, shoulder)	2	1.71%
Aphonia/ dysphonia	2	1.37%
Dysphagia	1	0.68%
Paresthesia (Tingling/numbness)	1	0.68%
Amnesia/disorientation	1	0.34%
Involuntary verbalization	1	0.34%

Table 4: Precipitating factors/ antecedent stressors

Type of stressors/precipitating factors	Total Number	Percentage	
Educational	Exams approaching/ exam day	40	27.14%
	Results declared/ poor academic performance		
Marital	Separation /divorce	36	24.74%
	Alcohol and other substance use in spouse		
	Domestic violence		
	Extramarital affair		
Relationship issues	Recent break-up	34	23.71%
	Assault (physical /sexual)		
	Parental pressure for marriage against will/ discontinue studies		
Family	Death in family	17	11.68%
	Illness in family		

	Altercation		
Financial	Loss/ theft	6	3.78%
Others	Prohibition from excessive social media usage/gaming etc.	13	8.93%
	Gadget addiction		
	Demands not fulfilled		
	Religious beliefs and events		

DISCUSSION

This study was conducted to find the clinical profile and various stressors in patients diagnosed with conversion disorders. The demographic factors identified in our study revealed that majority of the participants (43.64%) were of 18–30-year age group followed by 31–45 years (35.39%). The common occurrence of conversion disorder among young and middle aged has been documented by many researchers from India as well as other countries.^[19–29] Similarly female preponderance, rural background and low socio-economic status found in our study are also comparable to others.^[19–27] It can be theorized that women cannot articulate their feelings sufficiently and also somatization of the internal suffering (conflicts) is more common in them, as a result conversion may perhaps be interpreted as a non-verbal communication process, consequently, conversion disorder is more common in women.^[21]

Our majority of the participants (68.38%) belonged to nuclear family similar to previous studies,^[8–9] and most (56.70%) were married like others.^[19,23,25,26] In contrast, somereported predominance among unmarried individuals.^[20,22,24,27] It could be due to age distribution of our study population and the regional differences in age at marriage, with an average age at marriage of 15–17 years in central states like Madhya Pradesh, and a higher average age at marriage other states.^[30]

Our most of the participants (41.58 %) had primary education, slightly less than Ronald R K. 54% of their participants were educated up to primary.^[21] In contrast, others reported illiterates being common,^[23,26] or with higher level of education.^[19,20,24] Nearly half (53.95%) were unemployed similar to,^[27,28] possibly due the fact that our majority participants were students and housewives.

In the clinical profile, repetition of similar behavior in past during the time of stress or otherwise was present in 42.26%. Of total study participants 78.69% reported having at least one family member with a medical illness and 60.82% with family member having psychiatry disorder. Role models have been reported in 52.5% and 56%.^[21,22] Similarly positive family history of psychiatric disorders has been mentioned in previous research.^[27,28] We found 57.38% of the participants with predominant personality traits and 40.20% with comorbid psychiatric disorders; however most of them (83.50%) accepted having multiple physician/psychiatrist's consultation. Comorbid psychiatry disorders are quite common among patients with conversion disorders.^[21,27–29]

The most common presenting symptom was hyperventilation or shortness of breath (25.08%). Fainting attacks or giddiness (21.99%) and pseudoseizure (19.9%) followed next.

Nandi S. et al also found 25.5% participants with hyperventilation or shortness of breath and 17.6% with pseudoseizure; however their most common presenting symptom was unresponsiveness (39.2%).^[19] Common presenting symptoms from other studies are pseudoseizure,^[20,22,27] sensory,^[28] neurological,^[26] unresponsiveness/syncopal attack,^[23] dissociative stupor,^[24] and dissociative motor disorders.^[31]

In our study, most common precipitating/ antecedent stressors were school/ education related matters (27.14%), similar to 29.09% reported by Reddy LS et al.^[24] Marital and domestic problems (24.74%) were also common. Family and domestic matters as most common stressors have been reported many studies.^[20,22,24,26] Relationship issues and love affairs related stressor were present among 23.71%, slightly less than Deka K et al (30%).^[22] Most probable reason for these common stressors could be explained on the fact that our majority participants comprised of young, female participants.

CONCLUSION

Findings from our study suggest that conversion disorder is common among young, married, female, from rural background and low socio-economic status with less education. Among them family history of psychiatry disorder, medical illness and psychiatry co-morbidities are also very common. Common presentation of illness as physical or neurological symptoms and frequent, multiple consultations suggest possible lack of insight, chronicity and also lack of awareness about the illness resulting in stigma among general public as well as medical personnel. Less understanding of conversion symptoms can lead to multiple consultations, unnecessary investigations and referrals putting a strain on family, finance and also on our limited health resources. Various stressors indicate areas of focus and the role of community and preventive psychiatry.

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