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Socio-Demographic and Clinical Profile of Patients with Conversion Disorder: A Cross-Sectional Study from East Nimar Region of Central India

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ABSTRACT

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. This descriptive, cross sectional hospital based study was conducted in the department of Psychiatry, a tertiary care centre of east Nimar region, of central India over a period of one year from January 2022 to December 2022. 291 patients of conversion disorder, from psychiatry OPD and IPD were enrolled for study. A total of 291 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%. 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

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. The term "conversion disorder" was coined by renowned psychologist Sigmund Freud, who hypothesized that the symptoms of conversion disorder reflect unconscious conflict. The word conversion refers to the substitution of a somatic symptom for a repressed idea[1,2].

Conversion (Functional Neurological Symptom) disorder (DSM-5) refers to patients who have neurological symptoms in the absence of neurological disease, encompassing one or more symptoms of altered voluntary motor or sensory function. The recent edition of DSM-5 does not include the association with conflicts or other stressors as a necessary diagnostic criterion and emphasized the need to find positive clinical features such as Hoover's sign, tunnel vision, positive finding on tremor entrainment test or occurrence of closed eyes with resistance to eye opening in psychogenic non-epileptic attacks[3]. In International Classification of Disease (ICD)-10th edition, conversion symptoms are classified as dissociative disorders (e.g., dissociative motor disorder), with similar diagnostic criteria[4].

In India, high occurrence of conversion disorder has been reported in young adults, mainly married, females, from rural background, lower socioeconomic status[5-11]. Many have highlighted the role of coping styles[5], stressors[8,10,12], role models[7,8], personalities[13] and co-morbidities[7,14-17] while others have mentioned neuroscientific basis[18], neurologic soft signs[19]. It has also been reported as the second most common diagnosis in neurology clinics[20]. Whereas, some researchers have found that around 25-50% of patients diagnosed with conversion disorder are eventually discovered to have a medical condition that could have caused the symptoms[1]. It has been called as a feminist issue too[21].

The purpose of this study was to assess the clinical and socio-demographic profile of patients with conversion disorder from east Nimar region of central India and to identify the stressors in these patients. This would help in implementing appropriate counseling, behavior modification and psycho-education of the patient and their family.

MATERIALS AND METHODS

This descriptive, cross sectional hospital based study was conducted in the department of Psychiatry, a tertiary care centre of east Nimar region 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 291 study participants, both male and females, aged 18-60 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 Pseudo seizure 19.9%. Other common presentations were facial or limb paralysis

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

Socio-demographic profile	Number (N = 291)	Percentage
Age (in years)		
18-30	127	43.64
31-45	103	35.39
46-60	61	20.96
Gender		
Male	109	37.45
Female	183	62.88
Residence		
Urban	114	39.17
Rural	177	60.82
Education		
Illiterate	63	21.64
Primary	121	41.58
secondary	41	14.08
High school	37	12.71
Graduate or higher	29	9.96
Socio-economic class		
Low	112	38.48
Middle	98	33.67
Upper	81	27.83
Type of family		
Nuclear	199	68.38
Joint	92	31.61
Working status		
Employed	134	46.04
Unemployed	157	53.95
Marital status		
Unmarried	87	29.89
Married and living together	165	56.70
Single (separated/divorced/deceased partner)	39	13.4

Table 2: Clinical profile of participants with conversion disorder

Clinical profile	Number (N = 291)	Percentage
History of medical illness in family		
Yes	229	78.69
No	62	21.30
History of psychiatry illness in family		
Yes	95	32.64
No	177	60.82
Not known	19	6.52
personality traits		
Yes	167	57.38
No	124	42.61
Repetition of similar behavior in past		
Yes	123	42.26
No	168	57.7
Multiple physician/psychiatrists consultation		
Present	243	83.50
Absent	48	16.49
Comorbid psychiatric disorders		
Present	117	40.20
Absent	174	59.79

Table 3: Clinical presentation of conversion disorder

Clinical presentation	Number (N = 291)	Percentage
Pseudoseizure	58	19.90
Fainting attack/giddiness	64	21.99
Hyperventilation/ shortness of breath	73	25.08
Stupor/unresponsiveness	26	8.93
Ataxia	6	2.06
Paralysis/weakness of limb/facial	31	10.65
Abnormal limb movements (chorea like)	3	1.03
Psychogenic vomiting /hiccup/burping	12	4.12
Dystonia (eyes up rolling, neck tilting)	3	1.03
Tics like movements (neck, shoulder)	5	1.71
Aphonia/dysphonia	4	1.37
Dysphagia	2	0.68
Paresthesia (tingling/numbness)	2	0.68
Amnesia/disorientation	1	0.34
Involuntary verbalization	1	0.34

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.

DISCUSSIONS

This study was conducted to find the clinical-socio demographic 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

Table 4: Precipitating factors/ antecedent stressors

Type of stressors/precipitating factors	Total no.	Percentage
Educational	79	27.14
Exams approaching/exam day		
Results declared/poor academic performance		
Marital	72	24.74
Separation/divorce		
Alcohol and other substance use in spouse		
Domestic violence		
Extramarital affair		
Relationship issues	69	23.71
Recent break-up		
Assault (physical/sexual)		
Parental pressure for marriage against will/discontinue studies		
Family	34	11.68
Death in family		
Illness in family		
Altercation		
Financial	11	3.78
Loss/theft		
Others		
Prohibition from excessive social media usage/gaming etc.	26	8.93
Gadget addiction		
Demands not fulfilled		
Religious beliefs and events		

occurrence of conversion disorder among young and middle aged has been documented by many researchers from India as well as other countries[5-12,14,15,17]. Similarly female preponderance, rural background and low socio-economic status found in our study are also comparable to others[5-12,14]. 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[7].

Our majority of the participants (68.38%) belonged to nuclear family similar to previous studies of Deka *et al*.[8] and Bashar *et al*.[9] and most 56.70% were married like others[5,9,11,12]. In contrast, some reported predominance among unmarried individuals[6,8,10,14]. 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.

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[7]. In contrast, others reported illiterates being common Bashar *et al*.[9] and Khan *et al*.[12] or with higher level of education[5,6,10]. Nearly half (53.95%) were unemployed similar to Malik *et al*.[14] and Morsy *et al*.[15] 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% Deka *et al*.[8] and 56% Roy[7]. Similarly positive family history of psychiatric disorders has been mentioned in previous research of Malik *et al*.[14] and Morsy *et al*.[15]. 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[7,14-17].

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. 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%[5]. Common presenting symptoms from other studies are pseudoseizure[6,8,14], sensory[15], neurological[12], unresponsiveness/syncopal attack[9], dissociative stupor[10] and dissociative motor disorders[7].

In our study, most common precipitating/ antecedent stressors were school/education related matters 27.14%, similar to 29.09% reported by Reddy *et al*.[10]. Marital and domestic problems 24.74% were also common. Family and domestic matters as most common stressors have been reported many studies[6,8,10,12]. Relationship issues and love affairs related stressor were present among 23.71%, slightly less than (30%)[8]. 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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