



STUDY OF SOCIODEMOGRAPHIC ASPECTS AND PSYCHIATRIC COMORBIDITIES IN CONVERSION DISORDER(FUNCTIONAL NEUROLOGICAL SYMPTOMS DISORDER)

Medicine

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ABSTRACT

Objectives: To find out Psychiatric comorbidities and sociodemographic aspects of conversion disorder(CD).

METHOD: 60 consecutive patients diagnosed with CD were included in study.Scales to be used: 1.Mini international neuropsychiatry interview scale 2.Kuppuswamy socio-economic scale.

Results: At least one psychiatric diagnosis was found in 85.6.% of the patients during study.Somatoform disorder, generalized anxiety disorder, depressive disorder, simple phobia, major depression, were the most prevalent psychiatric disorders.

Conclusions: Comorbid psychaitric disorder should alert clinicians for a more chronic and severe psychopathology among patients with CD.

KEYWORDS

conversion disorder,psychiatric comorbidities

Clinical descriptions of CD date back almost 4,000 years, and symptoms were attributed to a "wandering uterus" by the Egyptians.Freud was the first to use the term 'conversion' to refer to the substitution of a somatic symptom for a repressed ideal^{23,45,6,7,8,9}. Freud, hypothesized the conversion of a painful affect into a physical symptom, as a defense mechanism to unbearable emotional stressors² and that the symptoms of CD reflect unconscious conflict⁸.CD describes neurological symptoms, including weakness, numbness and events resembling epilepsy or syncope, which can be positively identified as not being due to recognized neurological disease¹⁰.The most common psychiatric comorbidities for CD are mood disorders, anxiety disorders, dissociative disorders, somatoform disorder, dysthymic disorder, simple phobia and major depression^{7,9,10,14}. Comorbidities significantly affect the prognosis.The prevalence of CD is 50 per 100,000¹³.

AIMS AND OBJECTIVES:

To study psychiatric co-morbidities and socio-demographic aspects of CD.

ETHICAL CLEARANCE

The detailed project was submitted and presented to the research ethical committee of our institution and ethical clearance was obtained.

SUBJECTS

A cross sectional study was performed on a sample of 60.The study included a sample of 60 patients of either gender, between 18-55 years of age, reporting to the Out-patients and In-patient facility in Department of Psychiatry, Civil hospital, Ahmedabad.

METHODOLOGY

A sociodemographic form was produced to collect relevant data, including age,sex, occupation, marital status, highest level of education, family history of psychiatric disorders, and duration of current illness.The patients were analyzed using the following scales:

1. **Mini international neuropsychiatry interview scale**^{22, 23, 24, 25}(M.I.N.I.) is a short structured diagnostic interview, developed jointly by psychiatrists and clinicians in the United States and Europe, for DSM-IV and ICD-10 psychiatric disorders

2.**Kuppuswamy socio-economic scale**²⁷:Income, education, and occupation area unit taken into thought to determine socioeconomic status.

Table 1: Socio demographic status: shows co-morbidities associated with CD to be more common in females, illiterates, married, students, and in those with lower income, living in rural areas and in nuclear families.

FEATURES	CO-MORBIDITIES		Chi sq/t test	P value
	Present (42)	Absent (18)		
Mean age in years	36.76 ± 10.81	41.61 ± 12.42	1.522	0.134
Sex n (%)				
Male	5 (11.9)	7 (38.9)	5.734	0.017*
Female	37 (88.1)	11 (61.1)		
Education level				
Graduation	5 (11.9)	0	13.146	0.011*
Intermediate	2 (4.8)	1 (5.6)		
High school	6 (14.3)	9 (50)		
Primary school	10 (23.8)	5 (27.8)		
Illiterate	19 (45.2)	3 (16.7)		
Marital Status				
Single	5 (11.9)	0	4.538	0.209
Married	33 (78.6)	18 (100)		
Widow/ Divorced	4 (9.5)	0		
Occupation				
Student	20 (47.6)	5 (27.7)	6.337	0.027*
House wife	13 (30.9)	7 (38.8)		
Employed	6 (14.2)	3 (16.6)		
Un employed	3 (7.1)	3 (16.6)		
Religion				
Hindu	30 (71.4)	14 (77.8)	0.26	0.61
Others	12 (28.6)	4 (22.2)		
Family income				
>60,000	10 (23.8)	7 (38.9)	1.482	0.477
18,000 - 60,000	13 (31.0)	5 (27.8)		
<18,000	19 (45.2)	6 (33.3)		
Family type				
Nuclear	36 (85.7)	8 (44.4)	10.974	0.001*
Joint	6 (14.3)	10 (55.6)		
Location				
Urban	6 (14.3)	12 (66.7)	7.619	0.006*
Rural	36 (85.7)	6 (33.3)		

Table 2 Psychiatric disorders: shows highly significant association of depression, anxiety disorder, panic agorophobia and generalized anxiety with conversion disorder.

Psychiatric Disorders		Co-morbidities		Chi sq	P value
		Present (42)	Absent (18)		
Depression	Present	36 (85.8)	0	39.74	0.0001**
	Absent	6 (14.2)	18 (100)		
Anxiety Disorder (Total)	Present	34 (81)	0	30.47	<0.001**
	Absent	8 (19)	18 (100)		
Panic agorophobia	Present	18 (42.8)	0	19.27	<0.001**
	Absent	24 (57.2)	18 (100)		
Generalised anxiety	Present	14 (33.3)	0	31.22	<0.001**
	Absent	28 (66.7)	18 (100)		
Agoriophobia	Present	2 (4.7)	0	1.167	0.547
	Absent	40 (95.3)	18 (100)		
Obsessive compulsive disorder	Present	5 (11.9)	0	0.564	0.452
	Absent	37 (88.1)	18 (100)		
Somatic symptom disorder	Present	2 (4.7)	0	0.321	0.557
	Absent	40 (95.3)	18 (100)		
Alcohol use Disorder	Present	5 (12)	0	0.931	0.334
	Absent	37 (88)	18 (100)		
Total Co-morbidities	Present	36 (85.8)	0	21.17	<0.001**
	Absent	6 (14.2)	18 (100)		

**.-Statistically significant ($p < 0.001$)

DISCUSSION:

CD was found in all age groups however more commonly in adolescents and young adults with mean age of occurrence being 31.75 years. These findings were supported by findings of study conducted by Waleed Azeed Al-Ameedy et al, Kamala Deka et al, Balram Pandit et al, Rehana Amin et al, and Fatma AKYÜZ et al^{8, 19, 21, 31}. Married people get exposed to additional life event stressors like change of place, problems in relation, divorce, and trouble with in-laws, etc. which enhance their chances of developing stress related disorders³¹. Our finding is supportive of above theory as most common precipitating factors were found to be marital conflicts and trouble with in laws. Other studies also report higher incidence of CD amongst married^{19, 21}. On the other hand a Libyan study reported that the percentage of married patients suffering from conversion disorder was only 15% and 25% in males and females respectively⁸.

Lower socio economic status and rural population were found to have CD, this can be attributed to the fact that issues of survival and hardships have to be dealt with on a daily basis and also that the coping mechanisms are not enough to solve these problems³⁰. Like the findings of Amin et al³¹ CD patients of our study too most commonly belonged to our study too most of the conversion disorder patients belonged to class IV socio-economic class of Kuppusswamy's scale. Highest incidence of CD was found amongst the illiterates and education limited to primary school however according to study by Anuradha et al shows higher incidence amongst post graduate level³⁰. Co-existence of another psychiatric diagnosis is a common finding in CD. It has been reported that mood disorders are found in 45%–85% of CD cases who have symptoms of convulsions or breath-holding spells; the most common co-morbid mood disorder is major depressive disorder⁴. Consistent with above findings CD pts. in our study presented with psychiatric co-morbidities (70%) supported by study of Sar et al⁷. In our study depression and anxiety disorder were common psychiatric co-morbidities associated with CD followed by panic, agorophobia and generalized anxiety. Similarly Fatma et al found most common co-morbid psychiatric diagnoses as depression (50%) and dissociative disorder⁴. According to our study CD patients with duration greater than 2 years had more prevalence of psychiatric co-morbidities. Hence early diagnosis of CD can help in early treatment and better prognosis.

SUMMARY AND CONCLUSION

We conclude that conversion disorder is a common problem, it occurs more commonly in females and married and are more vulnerable.

Lower socio economic status and rural background are important vulnerability factors, immediate stressors differ in both sexes but long term stressors are somewhat similar in both the sexes and are related to financial matters.

Anxiety and depressive symptoms were common psychiatric comorbidities followed by panic agorophobia and generalized anxiety.

The diagnosis of conversion disorder is a clinical challenge. A careful psychiatric history and examination should be taken to screen for comorbid psychiatric illness as early diagnosis leads to better prognosis.

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