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A Study of Socio-demographic Profile Phenomenology, Psychological Stressors, and Life Events in Dissociative and Conversion Disorder Patients

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Abstract

Background: Conversion symptoms are thought to result from unconscious psychological conflicts or other stressors, which are converted into symbolic somatic symptoms. Studies from India show that the prevalence of dissociative disorders ranges from 1.5 to 15% of the psychiatric population. With this background, we planned a study of dissociative patients, focusing on factors such as the psychological stressors preceding the dissociative disorder, life events, and possible differences between male and female dissociative patients.

Material and Methods: This cross-sectional descriptive study was conducted at a tertiary care center in North India from September 2015 to September 2016, with 66 patients diagnosed with conversion disorder (ICD-10) in the psychiatry outpatient department (OPD). Socio-demographic data were collected using a semi-structured socio-demographic profile form. The patients were assessed with the Presumptive Stressful Life Events Scale (PSLES) and the Life Events Scale for Indian Children (LESIC). The collected data were pooled, tabulated, and subjected to statistical analysis. Chi-square tests were used to analyze the association between categorical variables, such as gender differences, socio-demographic factors, and the presence of stressful life events.

Results: In our study, out of 66 patients, 75.7% were female and 24.2% were male. Most of the patients fell into the 15 to 19 age group category. The majority of patients were literate and came from an urban background. Most males had education-related stressors, while family disharmony was the major stressor in the female group. Dissociative convulsions were the most common presentation in the total sample.

Conclusion: Psychosocial stressors are associated with the development of conversion disorder. Both genders tend to develop conversion disorder following stressful events. Identifying the exact nature of these correlates has immense potential for therapeutic as well as preventive purposes.

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Introduction

The term "conversion disorder" was introduced by Sigmund Freud, who hypothesized that the symptoms of conversion disorder reflect unconscious conflict.[1] Conversion disorder is described as a loss or alteration in

sensory or voluntary function that cannot be fully explained by known pathophysiological mechanisms.[2] Conversion symptoms are thought to be the result of unconscious psychological conflict or other stressors, which are converted into symbolic somatic symptoms that relieve anxiety and protect the ego from stressful situations. Poor education, unemployment, inadequate nutrition, and lack of adequate housing all seem to contribute to conversion disorder in our country, which has diverse cultures, religions, and languages.

Dissociative disorders can present with a variety of symptoms, whose prevalence varies with culture. In studies from India, the prevalence of dissociative disorders ranges from 1.5% to 15% of the psychiatric population,[3-7] whereas studies from the west report a higher prevalence rate of 8 to 29%.[8-11]

Studies from both India and the West have reported the importance of psychosocial stressors preceding the onset of dissociation, but very few have studied the type of stressors in the Indian population. Most studies from the west emphasize childhood sexual abuse as the predominant stressor,[12,13] while studies in India report educational stress and family disharmony as the most common causes.[14] In recent years, there has been an emphasis on the role of significant life events in the pathogenesis of various psychiatric disorders like depressive disorders, substance use disorders, and others. Very few studies have focused on this aspect with respect to dissociative disorders.

With this background, we planned a study of dissociative patients, focusing on factors such as psychological stressors preceding the dissociative disorder, phenomenology, socio-demographic profile, life events, and possible differences between male and female dissociative patients.

Material and Methods

This cross-sectional descriptive study was conducted at a tertiary care center in North India from September 2015 to September 2016 in the psychiatry outpatient department (OPD). The study sample comprised 66 patients who were diagnosed with dissociative and conversion disorders. The diagnosis of conversion disorder was made according to the criteria laid down by ICD-10 by two psychiatrists who assessed the patients individually. Detailed psychiatric histories, mental status examinations, and relevant investigations (CT scan, MRI, EEG, ECG) were conducted on all patients. Socio-demographic data were collected using a semi-structured socio-demographic profile form. The patients were assessed with the presumptive stressful life events scale (PSLES) and the life events scale for indian children (LESIC). The study was conducted after obtaining approval from the concerned authorities. Written informed consent was obtained from the subjects or their parents.

Presumptive Stressful Life Events Scale (PSLES)

The presence of significant life events was assessed in subjects aged over 15 years using PSLES in the form of a semi-structured interview. The scale covers 51 defined life events and is scored 0 and 1 for the absence and presence of particular life events, respectively. PSLES was developed from the Social Readjustment Rating Questionnaire by Holmes and Rahe and has been well-standardized for the Indian population. The scores are calculated in two formats: number of life events and weighted stress scores. Based on their data, the authors reported that an adult in India is likely to experience, on average, two stressful life events in the past year without suffering any physical or psychological disturbances.[15]

Life Events Scale for Indian Children (LESIC)

This is an Indian adaptation of the British Life Events Inventory, comprising 50 items and is completed by interviewing the parent, preferably the mother, of the child being assessed (under 14 years of age). LESIC provides stress scores for each item and is validated for the Indian socio-cultural context. The scale has high test-retest reliability and inter-rater reliability (+0.89 and +0.92, respectively). It provides a measure of the number of life events in the past year and the weighted stress score.[16]

Inclusion criteria

- Patients diagnosed with dissociative and conversion disorders as per ICD-10 criteria.
- Age group between 5 and 45 years.
- Informed consent.

Exclusion criteria

- The presence of physical illness that could explain the presenting symptomatology.
- Pre-existent neuropsychiatric, neurological, or major medical disorders.
- Patients with intellectual deficiencies, head injuries, or other organic problems.
- The presence of associated alcoholism or drug abuse.

Table 1: Socio-demographic profile of patients

S. No.	*Variable*		*Male*	*Female*	*Chi-square*	*p-value*
1	Age group (years)	5–9	0	0	26.20	.000
		10–14	6 (37.5%)	0		
		15–19	8 (50 %)	19 (38%)		
		20–24	0	5 (10%)		
		25–29	1 (6.25%)	13 (26%)		
		30–34	0	10 (20%)		
		35–39	0	0		
		40–45	1 (6.25%)	3 (6%)		
2	Mean age		16.12 ± 7.37	24.22 ± 6.23		
3	Marital status					
		Married	4 (25%)	24 (48%)	4.394	.111
		Unmarried	12 (75%)	23 (46%)		
		Other (separated/widow)	0	3 (6%)		
4	Education					
		Illiterate	5 (31.25%)	11 (22%)	0.58	0.7482
		Primary school	4 (25 %)	15 (30%)		
		High school & above	7 (43.75%)	24 (48%)		
5	Locality					
		Urban	6 (37.5 %)	5 (10%)	6.6	0.0101
		Rural	10 (62.5 %)	45 (90%)		
6	Occupation					
		Household work	0	27 (54%)	25.95	0.000
		Labour work	0	0		
		Agriculture work	2 (12.5%)	0		
		Office work	0	1 (2%)		
		Student	12 (75%)	19 (38%)		
		Business	0	3 (6%)		
		Unemployed	2 (12.5%)	0		
7	Socioeconomic status (Scale Kuppuswamy)					
		Upper	0	0	10.32	0.035
		Upper middle	5 (31.25%)	4 (8%)		
		Lower middle	6 (37.5%)	9 (18%)		
		Upper lower	3 (18.75%)	21 (42%)		
		Lower	2 (12.5%)	16 (32%)		

Result

Table 1 shows the socio-demographic profile of the patients. There are 66 patients in our study, of which 75.7% (n = 50) are female and 24.3% (n = 16) were male. The mean age of male patients was 16.12 ± 7.37 years, while for female patients, it was 24.22 ± 6.23 years. Most patients (40.90%) fall in the 15 to 19 age group category, and none are under 10 years of age. Of the patients, 53.3% (n = 35) were married, 42.4% (n = 28) were unmarried, and 4.54% (n = 3) were separated. The majority of patients (66%, n = 44) are literate, and only 24.24% (n = 16) were illiterate. Out of the total 66 patients, 40.90% (n = 27) were housewives, and 46.96% (n = 31) were students. Regarding socioeconomic status (SES), 36.36% (n = 24) belong to the upper-lower SES, 27% (n = 18) to lower SES, 22.72% (n = 15) to the lower-middle class, 13.63% (n = 9) to the upper-middle class, and none belong to the upper class. Additionally, 74.24% (n = 49) of patients belong to a rural background, and 35.75% (n = 23) are from an urban background.

Statistically significant differences between genders are noted in the domains of age group, locality, occupation, and socioeconomic status.

Table 2 describes the characteristics of dissociative presentation. The results demonstrate that the majority,77.27% (n = 51) of patients, had a 'total duration of dissociative illness' lasting for less than one month. The difference in the total duration of dissociative illness between genders was statistically significant (p = 0.042).

The course of the present dissociative illness among male patients was observed to be stable in 56.25% (n = 9) patients and worsening in 43.75% (n = 7) patients, while among female patients, the course of dissociative illness was stable in 44% (n = 22) patients, worsening in 52% (n = 26) patients, and improving in 4% (n = 2) before the present interview. The difference in the course of the present dissociative illness between genders was statistically insignificant (p = 0.551).

In our study, 37.50% (n = 6) males had a single episode, while 62.50% (n = 10) had multiple episodes. Among females, 22.00% (n = 11) had a single episode, while 78.00% (n = 39) had multiple episodes. The difference noted between genders is not significant (p = 0.217). In our study, 27.27% (n = 6) males and 16% (n = 8) females had stability of symptoms, while 62.5% (n = 10) males and 84% (n = 42) females had multiple changing symptoms. Although the difference noted between genders is not significant (p = 0.067).

Table 2: Characteristics of dissociative presentation

S. No.	*Characteristics of dissociation*	*Male*	*Female*	*Total*	*Chi-square*	*p-value*
1. Total Duration of disorder						
	< 1week	6 (37.5%)	8 (50%)	14	11.46	0.042
	<2 week	1 (6.25%)	21 (42%)	22		
	< 1month	5 (31.25%)	10 (20%)	15		
	< 3 month	1 (6.25%)	4 (8%)	5		
	< 6 month	3 (18.75%)	3 (6%)	6		
	>6month	0	4 (8%)	4		
2. Course of illness						
	Stable	9 (56.25%)	22 (44%)	31	1.192	.551
	Improvising	0	2 (4%)	2		
	Worsening	7 (43.75%)	26 (52%)	33		
3.Type of presentation	Single episode	6 (37.5%)	11 (22%)	17	1.523	0.217
	Multiple episode	10 (62.5%)	39 (78%)	49		
stability of symptoms	Stable	6 (37.5%)	8 (16%)	14	3.353	0.067
	Unstable	10 (62.5%)	42 (84%)	52		

Table 3: Characteristics of psychosocial stressor

S. No.	Type of stressor	Male	Female	total	Chi square	p-value
1	Educational	8 (50% %)	6 (12%)	14	17.565	.024
2	Relationship	3 (18.75 %)	7 (14%)	10		
3	Marital discord	0	3 (6%)	3		
4	Family disharmony	3 (18.75 %)	27 (54%)	30		
5	Occupational	1 (6.25%)	0	1		
6	Death in family	0	3 (6%)	3		
7	Financial	1 (6.25%)	2 (4%)	3		
8	Physical abuse	0	0	0		
9	Other	0	2 (4%)	2		

Table 3 describes the psychosocial stressors preceding the illness. Assessment for type of stressors in males showed that 50% (n = 8) had education related stressors, 18.75% (n = 3) had family disharmony, 6.25% (n = 1) had occupational-related problems, 6.25% (n = 1) had financial stressor, 18.75% (n = 3) had relationship problems and none had history of physical abuse while in females it was observed that 12% (n = 6) had education related stressor, 54% (n = 27) had family disharmony, 4% (n = 2) had financial stressor, 14% (n = 7) had relationship problems, 6% (n = 3) had marital discord and 6% (n = 3) had a history of death in the family. The differences noted in psychosocial stressors preceding the dissociative illness between genders was statistically significant (p = 0.024).

Among females, the major stressors noted in the study were family disharmony 54% (n = 27), education-related problems 12% (n = 6), relationship problems 14% (n = 7), marital discord 6% (n = 3), financial conflicts 4% (n = 2), death in the family 6% (n = 3) and none physical abuse.

Table 4: Assessment of life event and Stress Levels

S. No.	Variable	Male	Female	Chi-square	p-value
1.	Life event in the previous one year	4 ± 2.21	4.44 ± 2.17	4.92	0.765
2.	PSLES score	180.80 ± 90.09	205.19 ± 100.84	41.00	0.383
3.	LESIC score	178.28 ± 132.76	297.85 ±118.42	14.00	0.337

Abbreviations: PSLES = Presumptive Stressful Life Events Scale; LESIC = Life Events Scale for Indian Children

Table 4 shows the results obtained using the PSLES and LESIC scales. The number of life events in the previous year among males was 4 ± 2.21, while among females, it was 4.44 ± 2.17 life events. Male patients aged over 15 years who were assessed on the PSLES scale showed a mean weighted stress score of 180.80 ± 90.09, and for females, it was 205.19 ± 100.84. For male patients under 15 years assessed on the LESIC scale, the mean weighted stress score was 178.28 ± 132.76, and for females, it was 297.85 ± 118.42. There was no statistically significant gender difference observed with respect to life events and stress levels.

Table 5 describes the prevalence of various types of dissociative disorders in the study and compares the same between male and female subjects. From the table, we see dissociative convulsion was the most common presentation occurring in 40.90% (n = 27) of the total sample, followed by dissociative motor disorder in 34.84% (n = 23), dissociative stupor in 7.57%, n = 5 mixed dissociative disorder in 4.54% (n = 3) and trance and possession disorder in 12.12% (n = 8). No cases of dissociative amnesia, dissociative fugue, dissociative anesthesia and sensory loss, other dissociative disorders, or unspecified dissociative disorder were observed during the course of the study.

Comparison between male and female subjects showed that among males, 50.00% (n = 8) had dissociative motor disorder, 12.50% (n = 2) had dissociative stupor, 25% (n = 4) had dissociative convulsions, and 12.50% (n = 2) had mixed dissociative disorder, while in females, 46% (n = 23) had dissociative convulsion,

Table 5: Type of Dissociative Disorder

S. No.	Type of Dissociative disorder	Male	Female	total	Chi square	p-value
1	Dissociative amnesia	0	0	0	8.874	0.448
2	Dissociative convulsion	4 (25%)	23 (46%)	27 (40.90%)		
3	Dissociative fugue	0	0	0		
4	Dissociative motor disorder	8 (50%)	15 (30%)	23 (34.84%)		
5	Dissociative stupor	2 (12.5%)	3 (6%)	5 (7.57%)		
6	Dissociative anaesthesia and sensory loss	0	0	0		
7	Trance and possession	0	8 (16%)	8 (12.12%)		
8	Mixed Dissociative disorder	2 (12.5%)	1 (2%)	3 (4.54%)		
9	Other Dissociative disorder	0	0	0		
10	Dissociative disorder unspecified	0	0	0		

30% (n = 15) had dissociative motor disorder, n = 1 (2%) had mixed dissociative disorder, 6% (n = 3) had dissociative stupor, and 16% (n = 8) had trance and possession disorder. There were significantly more females who presented with dissociative convulsions than males (p = 0.448).

Discussion

Dissociation, conceptually a difficult phenomenon to study, may occur in a variety of psychiatric disorders. Psychosocial trauma may contribute to the development of dissociation. In this study, we describe the types of psychosocial stressors, socio-demographic profile, and characteristics of dissociative presentation. Additionally, we examine the differences in these attributes between genders.

Socio-demographic Correlates

In the study, age of the patients ranged from 5 to 45 years. This age criterion was used as dissociation is rarely seen in ages below five years [17]or above forty five years. It was observed that the mean age of males in the study was significantly less than female patients. (p = 0.018) In the study sample, dissociation was more common in adolescence (50.91 %), being most prevalent among 15 to 19 years (40.91%) age group. This corresponds with the findings of the previous studies.[5,18 ,19]

The majority of patients in our study were females (75.75%), consistent with previous findings.[7,19] This trend could be attributed to the societal norms in our conservative culture, where women often rely on their parents and spouses, influencing the hierarchy of dominance within families. Through unconscious simulation of illness, they may achieve goals that cannot be attained through direct confrontation.

Among the females, 53.03% were married, 42.42% were unmarried, and 4.54% were separated. Earlier studies on marital status have yielded contradictory results. Ray et al.[5] and Subramanian et al.[18] reported that dissociation is more common in married females, while Bagadia et al.[4] and Ponnudurai et al.[20] found dissociation to be more common in unmarried females.

Regarding educational status, 45.45% of the patients had attained at least a high school education, and 65.15% belonged to a lower socio-economic status. However, no significant difference was observed between genders in terms of educational or socio-economic status. These findings are consistent with previous studies where no significant gender difference was found.[4,5,18,21]

In our study, the literate group outnumbered the illiterate. This deviation from the widely accepted hypothesis that hysteria is more prevalent among illiterates may be attributed to the increasing recognition of the value of education. Consequently, individuals are more inclined to pursue education than before. Moreover, most of the patients were in the age group of 16-20 years. This is the age period during which individuals typically continue attend-

ing school, regardless of their success in passing examinations.

No patients from a high socioeconomic status reported, possibly because individuals from this status prefer private practitioners or general practitioners over government hospitals. Additionally, it was observed that 74.24% of the study participants were from rural backgrounds, while only 25.75% had an urban background. A significant difference in gender (p = 0.010) was noted regarding residential status. These findings align with a study by Folk et al.[21],who analyzed 1000 consecutive psychiatric consultations and found that subjects with conversion disorder were predominantly from lower socioeconomic status and rural backgrounds, consistent with our study. However, Trivedi et al.[22] found 'hysteria' to be predominantly in urban areas (84.6%), which contrasts with our findings. People residing in urban areas have easier accessibility to psychiatrists and general physicians, leading them to prefer consulting private practitioners for psychiatric ailments within their limits. This may partly explain the difference in urban and rural populations observed in our hospital.

The occupational status revealed that dissociation was more commonly seen in students (50.90%) in the overall sample. Among males, 83.33% were students, while in females, household work (48.37%) was the predominant occupation, followed by students (41.86%). This gender difference in the occupational status of dissociative patients was statistically significant (p = 0.004). Deka et al.[23] also reported in her study that among dissociative patients, 50% were students and 20% were housewives.

Course of illness

Table 3 describes the characteristics of dissociative presentation in general and their differences between gender groups. Among males, 75% had symptoms for less than one month and 25% for two to six months, while in females, 86.04% had symptoms for less than one month, 4.65% for two to six months, and 9.30% for more than six months. This difference in the total duration of illness between genders was found to be statistically significant (p = 0.016). Subramanian et al.[18], in a study of 276 patients in a chart review, reported that the duration of dissociation was less than a month for 50%, between two to six months for 33%, and more than six months for 17%.

The course of the dissociative illness was stable in 49.09% of cases, improved in 1.81%, and worsened in 49.09%. Twenty percent of the patients had a single dissociative episode, while 80% had multiple dissociative episodes. Analyzing the stability of the dissociative symptoms—whether they remained the same (stable) or changed (unstable) over the course of the present dissociative illness—it was found that 81.82% had stable symptoms, while 18.18% had unstable or fluctuating symptoms. There was no significant difference observed between genders regarding the course and stability of the dissociative illness or the type of presentation. There have been no earlier studies reporting on the maximum duration of an individual dissociative episode, the course and stability of the dissociative illness, or the type of presentation.

Psychosocial Stressors and Dissociation

Early diagnosis and the presence of precipitating factors are associated with a favorable outcome. Generally, conversion disorder is characterized by the sudden onset of symptoms in clear relation to stress.[18,24] These studies reported that all the patients described at least one psychosocial stressor. This observation is further supported by the results of our study.

Among males, the most common stressors were education-related problems (50%), while among females, it was family disharmony (60%). A significant difference (p = 0.024) was noted in the type of stressor between males and females. In a recent Indian study by Deka et al.[23] studying 40 dissociative patients, 100% had psychosocial stressors: 40% had family-related problems, 30% had school-related problems, and 30% had love-related problems. In contrast, studies from Western countries report common stressors to be sexual abuse, emotional abuse, and physical abuse.[25,26] Even though literature from the West places more importance on childhood sexual abuse as a precursor for dissociation, this has not been reflected in any of the Indian studies on dissociation.

In our study, we found approximately four life events in our patients. Recent stressful life events were evident in 31.8% of adults and 46% of children with conversion disorder in the report by Smith et al.[27] The differing rates are possibly related to different methodologies and definitions employed. Among females, the most common presentation was dissociative convulsion (46%), followed by dissociative motor disorder (30%). In males, the most common presentation was dissociative motor disorder. Trance and possession disorder were observed only in female patients. This is similar to studies done by Uma et al., Deka et al., and Srinath, who reported dissociative convulsions as the most common presentation in their study samples.[23 28,29]

Limitation of the Study

Primarily, this is a tertiary care center study with a small sample size, which limits its extrapolation to the community at large. As it is a cross-sectional, descriptive study, it lacks follow-up for future outcomes. The administration of an indigenous and extended version of the psychosocial stress rating scale could have helped in detecting the more exact nature of psychosocial stressors.

Conclusion

Psychosocial stressors are correlated with the development of conversion disorder. Both genders tend to develop symptoms of conversion disorder after stressful events. A significantly higher number of patients present with the stressor. Detecting the exact nature of these correlates seems to have immense potential for therapeutic as well as preventive purposes.

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