Original Article

Psychological Dissection of Patients Having Dissociative Disorder: A Cross-sectional Study

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ABSTRACT

Background: Patients present with dissociative disorders as a decompensation to underlying stressful situation. It is clinically important to evaluate the presence, type, and temporal relation of the stressors resulting in dissociation. Further knowing the sociodemographic and psychological profile of the dissociative patient helps in better management. **Materials and Methods:** The study included 55 dissociative patients aged between 5 to 45 years. Psychiatric diagnosis was made using ICD-10 DCR. Psychosocial stressors and stressful life events were assessed using presumptive stressful life events scale/life events scale for Indian children and clinical interview. Personality and temperament traits were assessed using medico psychological questionnaire and temperament measurement schedule, respectively. Intelligence quotient (IQ) was assessed using standard progressive matrices and colored progressive matrices. Statistical analysis was done using Epi Info 7 software. **Results:** All patients had significant psychosocial stressors preceding dissociation. Precipitating factor with temporal association was observed in only 83.64%. Family disharmony (41.82%) followed by education-related problems (29.09%) was the most common psychosocial stressors. 61.82% of the dissociative patients had psychiatric comorbidity. Mean IQ of study sample was 92.47. Dissociative children had high emotionality and energy levels but low sociability, rhythmicity, and distractibility. 50% of the adults were neurotic and had emotionally unstable personality. **Conclusion:** Dissociative disorders are commonly seen in females, adolescents, and in those from lower socioeconomic status and rural areas. They are always preceded by psychosocial stressors. Most of them have comorbid psychiatric disorders such as depression and anxiety. Neuroticism and emotionally unstable personality traits are common in adult patients while temperamental traits such as low sociability, low rhythmicity, low distractibility, high emotionality, and high energy levels are common in children.

Key words: *Comorbidity, dissociative disorders, personality, stressors, temperament*

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INTRODUCTION

Dissociative disorders earlier known as "hysteria" have been described since antiquity and hippocrates even hypothesized "wandering uterus" to be the cause for the dissociation in females.[1] With the advances in science, there has been shift from these religious and spiritual concepts to a scientific basis for dissociation.

Pierre Janet conceptualized dissociation as a deficit in the integration of different systems of ideas and functions that constitute personality. This limitation in the integrative capacity leads to the inability to integrate experiences and develop awareness of their reality, acceptance, and creative adaptation. He also explained about the relationship between traumatic experiences and memories. Janet claimed that traces of memories of traumatic events remain as "unchanged unconscious ideas" that cannot be removed and cannot be translated into a personal story resulting in dissociation.[2] Modern conceptualization and approach to dissociation are based on these Janetian concepts and importance is given to the antecedent trauma as the causative factor and also in treatment approach of the dissociative patients.[3]

Thus, this study was designed to identify the presence, type, and temporal association of psychosocial stressors in dissociative disorders; analyze the psychological factors such as personality traits, temperamental traits, and intelligence; and also to identify the commonly associated comorbid psychiatric disorders in dissociative patients.

MATERIALS AND METHODS

After obtaining approval from the Ethics Committee, KLE University, Belgaum 590010, Karnataka, and written informed consent from the patients, a total of 55 patients attending the psychiatry outpatient department or admitted in psychiatry free ward from 1st January 2012 to 31st December 2012 were recruited into this cross-sectional study. The patients included in the study aged between 6 and 45 years and had a clinical diagnosis of dissociation according to ICD-10 DCR.[4] Patients with organic cause for the presenting illness and those with mental retardation were excluded from the study.

Information regarding the sociodemographic profile and a detailed history of the dissociative presentation and the psychosocial stressors were obtained from the patients and their relatives. Further, stressful life events were assessed using presumptive stressful life events scale[5] in adolescents and adults (≥15 years) and life events scale for Indian children[6] in children (≤14 years). Intelligence quotient (IQ) was determined using standard progressive matrices[7] for adolescents and adults (≥15 years) and colored progressive matrices[8] for the children (≤14 years). Finally, personality assessment of adults was done using medico psychological questionnaire (MPQ)[9] and temperament assessment of children using temperament measurement schedule (TMS).[10]

Data obtained were tabulated and statistical analysis was done using the Epi Info 7 software. Mean, standard deviation, and percentages were used to describe the sample. Chi-square and ANOVA were used to compare between groups. $P \leq 0.05$ was considered statistically significant.

RESULTS

Analysis of the sociodemographic details [Table 1] revealed that 43 (78.18%) were female and 12 (21.82%) were male. The mean age of the sample was 21.96 ± 8.61 years. Overall, it was observed [Figure 1] that 50.91% of total samples were between 10 to 19 years of age. The religious status of the samples was as follows: 85.45% Hindus, 12.73% Muslims, and 1.82% Christians. Majority of the patients in the study were unmarried (52.73%), had attained at least high school education (80%), were students (50.91%), were from lower socioeconomic status (72.73%), and rural areas (76.36%).

Assessing the patients for psychosocial stressors [Table 2], it was observed that all the patients had an underlying psychosocial stressor preceding the onset of dissociation but precipitating factor with temporal association to present dissociative episode was observed in 83.64%. The most common psychosocial stressor in the study was family disharmony (41.82%) followed by education-related problems (29.09%), relationship problems (14.55%), marital discord (5.45%), financial conflicts (3.64%), occupational problems (1.81%), death in family (1.81%), and physical abuse (1.81%). On analyzing for stressful life events, it was found that the patients had an average of 4.34 ± 2.17 life events in the previous year.

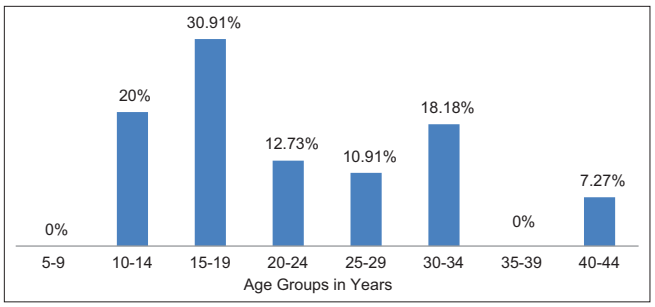

Figure 1: Illustrates the Age distribution of the subjects in the study

Table 1: Sociodemographic details of the subjects in the study

Variable	Frequency/mean (%/SD)
Mean age (years)	21.96±8.61
Sex	
Male	12 (21.82)
Female	43 (78.18)
Religion	
Hindu	47 (85.45)
Muslim	7 (12.73)
Christian	1 (1.82)
Marital status	
Married	22 (40)
Unmarried	29 (52.73)
Separated	2 (3.64)
Divorced	0
Widow	2 (3.64)
Education	
Illiterate	6 (10.91)
Primary school	5 (9.09)
High school	23 (41.82)
Preuniversity	15 (27.27)
Graduate	4 (7.27)
Postgraduate	2 (3.64)
Occupation	
Household work	21 (38.18)
Labor work	0
Agriculture work	1 (1.81)
Office work	1 (1.81)
Student	28 (50.91)
Business	3 (5.45)
Unemployed	1 (1.81)
Socioeconomic status	
Upper	0
Middle	15 (27.27)
Lower	40 (72.73)
Residence	
Rural	42 (76.36)
Urban	13 (23.64)

SD – Standard deviation

Table 2: Type of psychosocial stressors

Type of stressor	*n* (%)
Educational	16 (29.09)
Relationship	8 (14.55)
Marital discord	3 (5.45)
Family disharmony	23 (41.82)
Occupational	1 (1.81)
Death in family	1 (1.81)
Financial	2 (3.64)
Physical abuse	1 (1.81)

The most common dissociative presentation [Table 3] was dissociative stupor (60%), followed by dissociative motor disorder (40%), dissociative convulsion (27.27%), and trance and possession disorder in 14.55%. No cases of dissociative amnesia, dissociative fugue, dissociative anesthesia and sensory loss, other dissociative disorders, and dissociative disorder unspecified were observed during the study. Mixed dissociative disorder was observed in 29.09% of the study sample.

Comorbid psychiatric disorders were seen in 61.82% of dissociative patients. Of these, depression was observed in 43.64% of the total study sample followed by mixed anxiety and depression (14.55%), adjustment disorder (1.81%), and anxiety not otherwise specified (NOS) (1.81%).

Psychological analysis of the dissociative patients revealed that the mean IQ of the overall samples in the study was 92.47 ± 11.93. Personality assessment using the MPQ showed that 18 (50%) of the adults were neurotic and had an emotionally unstable personality, 16 (44.44%) were in normal zone, and only 2 (5.55%) were in emotionally stable zone. In the overall sample, it can be observed that dissociative children had higher temperament levels of activity (17.10 ± 1.82), intensity (16.16 ± 1.86), approach withdrawal (15.58 ± 1.77), mood (16.31 ± 1.63), persistence (15.84 ± 1.38) and had low temperament levels of adaptability (14.16 ± 1.50), threshold (14.53 ± 1.07), rhythmicity (14.37 ± 1.92), and distractibility (14.89 ± 0.87). On factorial assessment, children had high emotionality (16.00 ± 1.25), energy levels (16.63 ± 1.40) but had low sociability (14.75 ± 1.01).

DISCUSSION

Dissociation conceptually a difficult phenomenon to study may occur in a variety of psychiatric disorders. Apart from exposure to psychosocial trauma, certain primary personality and temperament attributes may contribute to the development of dissociation. In this study, evaluating the dissociative disorder patients, we identify the presence, type and temporal association of psychosocial stressors, temperament and personality traits, and the intellectual ability of the patients with dissociative symptoms apart from their sociodemographic profile.

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 5 years[11] or above 45 years. The sociodemographic analysis of the patients showed that the mean age in the study was 21.96 ± 8.61 years. In the study sample, dissociation was more common among females (78.18%) and adolescents (50.91%). This corresponds with the earlier findings by Bagadia *et al*.,[12] Subramanian *et al*.,[13] and Deka *et al*.[14]

Table 3: Type of dissociative disorder

Type of dissociative disorder	*n* (%)
Dissociative amnesia	0
Dissociative stupor	33 (60)
Dissociative fugue	0
Dissociative motor disorder	22 (40)
Dissociative convulsion	15 (27.27)
Dissociative anesthesia and sensory loss	0
Trance and possession disorder	8 (14.55)
Mixed dissociative disorder	16 (29.09)
Other dissociative disorder	0
Dissociative disorder unspecified	0

Among the study sample, the educational and socioeconomic status showed that 80% of the patients had attained at least high school education and 72.73% belonged to lower socioeconomic status. These findings go along with the previous studies done by Bagadia *et al*.,[12] Ray *et al*.,[15] Subramanian *et al*.,[13] Ponnudurai *et al*.,[16] and Deka *et al.*[14] The occupational status revealed that dissociation was more commonly seen in students (50.90%) and homemakers (38.18%). Deka *et al*.[14] in her study also reported that among dissociative patients, 50% were students and 20% were homemakers.

The status of religion in the study was as follows: 85.45% Hindus, 12.73% Muslims, and 1.82% Christians. Bagadia *et al.*[12] studying 192 patients also reported the religious distribution as 87% were Hindus, 7% were Muslims, and 6% were Christians. Further it was observed that 76.36% of the present study samples were from rural background while only 23.64% had an urban background. There has been no data from previous studies regarding the residential status of the dissociative patients.

All the patients in the study had an underlying psychosocial stressor preceding dissociation, but precipitating factor with temporal association to present dissociative episode was observed in only 83.64% of the total sample. This was significantly more than that reported in the previous study (52.50%) by Subramanian *et al*.[13] Assessing for the stressful life events in the previous year, it was observed that dissociative patients had a mean of 4.34 stressful life events which is significantly higher than 1.90 events seen in normal individuals.[5]

The types of stressors noted in the study subjects were family disharmony (41.82%), education-related problems (29.09%), relationship problems (14.55%), marital discord (5.45%), financial conflicts (3.64%), occupation-related problems (1.81%), death in family (1.81%), and physical abuse (1.81%). In a recent Indian study by Deka *et al*.[14] studying 40 dissociative patients found all 100% had psychosocial stressors, of them 40% had family-related problems, 30% school-related problems, and 30% had love-related problems while studies from the western countries report the common stressors to be sexual abuse, emotional, and physical abuse.[17,18] Even though literature from the west lays more importance on the childhood sexual abuse as a precursor for dissociation, this has not been reflected in any of the Indian studies on dissociation.

The most common type of dissociative presentation was dissociative stupor (60%) followed by dissociative motor disorder (40%), dissociative convulsions (27.27%), and trance and possession (14.55%). Mixed dissociative presentations were observed in 29.09% of the total sample. There were no cases of dissociative amnesia, dissociative fugue, dissociative anesthesia, and sensory loss and other dissociative disorder. Studies done by Uma *et al*.[19] and Deka *et al*.[14] have reported dissociative convulsions to be the most common presentation in their study sample while in the present study, dissociative stupor was found to be most common.

Comorbid psychiatric disorder was observed in 61.81% of the total sample, in which depressive disorders were seen in 43.64%, followed by mixed anxiety and depression in 14.55%, adjustment disorder and anxiety NOS 1.81% each. Till date, there have been no Indian studies on comorbid psychiatric disorders associated with dissociation. The literature from the west has reported anxiety and depressive disorders to be the most common comorbidity associated with dissociative disorders,[20-23] while most of the patients in the current study were noted to have depressive disorders followed by anxiety disorders.

Assessment of IQ showed that the mean value of the total sample was 92.47 ± 11.93. On comparing the educational status and socioeconomic status with IQ in the study samples, a statistically significant difference was observed at $P = 0.043$ and $P = 0.048$, respectively. This signifies that lower educational status and lower socioeconomic status were associated with lower IQ and thus were at higher risk for developing dissociation due to emotional and cognitive immaturity in handling the psychosocial stressors. Previous study by Malhotra *et al*.[24] also confirms this finding by showing that dissociative children have a lower IQ at 90.06 ± 10.3.

The personality assessment of adults revealed that 50% of the subjects were emotionally unstable and neurotic. This revealed that neurotics were at higher risk to have dissociation. Assessment of temperament on five factor

analysis using TMS revealed that children in the present study had high emotionality, high energy levels, low sociability, low distractibility, and poor rhythmicity. On the contrary to present study findings, Raghutaman and Cherian[25] studying temperament in children found low activity, low emotionality, and low distractibility.

With this study, we have been able to explain the sociodemographic details of the dissociative patients; identify the common temperament traits seen in dissociative children; associate the emotionally unstable and neurotic personality with dissociation; associate the lower intellectual capability with the dissociation; establish the role of stressful life events in the dissociative disorders; identify the prevalence and type of comorbid psychiatric disorders associated with the dissociative disorders. This study lays a good platform for further larger epidemiological and clinical studies involving the dissociative patients in Indian population. The limitation of the present study is that the personality assessment of adult dissociative patients using MPQ could comment only on the emotional stability and neuroticism in the patients.

CONCLUSION

Dissociative disorders are more common in adolescents, students, and in those from lower socioeconomic status and rural areas. Dissociation is significantly more common in females than males (3.5:1). It always occurs in the background of increased stressful life events and in the presence of significant psychosocial stressors. Precipitating factor with temporal relation to the dissociative episode is observed in up to 83.64% of the dissociative patients. The most common dissociative presentation is dissociative stupor. Comorbid psychiatric disorders are observed in 61.80%, with depression being the most common. Mean IQ of the patients is on a lower side at 92.47 ± 11.93. The temperamental traits associated with dissociation in children are high emotionality, high energy levels, low sociability, low distractibility, and low rhythmicity while in adults neuroticism and emotionally unstable personality are associated with dissociation.

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Conflicts of interest
There are no conflicts of interest.

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