ABSTRACT

Background: Dissociation is understood as one of coping mechanism to deal with intense stressors. Individuals vary widely in their subjective response to a similar stressful event depending on number of factors including their family and social support system. So, authors tried to study the expressed emotion in patients of dissociative disorder along with other socio-demographic factors and its relation with perceived stress.

Methods: This cross-sectional descriptive study was done on 100 patients with primary diagnosis of dissociative disorder. Hamilton depression rating scale (HAM-D) was used to assess comorbid Depressive symptoms and Hamilton anxiety rating scale (HAM-A) was used to asses comorbid anxiety symptoms. Perceived stress scale (PSS) was used to assess the perception of stress. Family emotional involvement and criticism scale (FEICS) was used to measure perceived criticism (PC) and intensity of emotional involvement (EI).

Results: Mean perceived stress in this study was 25.8. Mean score for perceived criticism (PC) was 16.5 and emotional involvement (EI) was 15.7. Both measures of expressed emotions were significantly higher in females and subjects belonging to joint families and rural area. In this study perceived stress by subjects was significantly (p=0.001) correlated to perceived criticism (Pearson r = 0.78) and emotional involvement (Pearson r = 0.77).

Conclusions: High perceived criticism and emotion over involvement of family member was associated with perceived stress in dissociation patients.

Keywords: Dissociative disorder, Emotional involvement, Expressed emotion, Perceived criticism, Stress
Precipitating factor with temporal association was also observed in many cases.\textsuperscript{4,5}

Individuals vary widely in their subjective response to a similar stressful event depending on number of factors including their family and social support system moreover patients of dissociative disorders have reported higher subjective stress for traumatic events compared to normal population.\textsuperscript{6} The expressed emotion (EE) is considered to be an adverse family environment, which includes the quality of interaction patterns and nature of family relationships among the family caregivers and patients of psychiatric disorders. It is a significant characteristic of the family milieu that has been found to predict symptom relapse in a wide range of mental disorders. The empirical data show that EE is one of the major psychosocial stressors and it has direct association with recurrence of illness.\textsuperscript{7} As Dissociative disorder is chronic relapsing remitting disorder, we tried to study the expressed emotion in patients of dissociative disorder along with other socio-demographic factors and its relation with Perceived stress.

**METHODS**

This cross-sectional descriptive study is based on the detailed evaluation of the hundred patients with primary diagnosis of dissociative disorder as per ICD-10 coming to psychiatry outpatient department of Sir Sunder Lal Hospital, Institute of Medical sciences, Banaras Hindu University, Varanasi a premier tertiary care hospital situated at northern part of India, covering and serving a large catchment area. Dissociative patients giving written informed consent were included in the study. Patients who had other chronic medical conditions were excluded from the study. The age range of patients included was from 15 to 45 years. The demographic details were recorded on a performa developed for the study. Hamilton depression rating scale (HAM-D) was used to assess comorbid depressive symptoms and Hamilton anxiety rating scale (HAM-A) was used to assess comorbid anxiety symptoms. Perceived Stress scale (PSS) was used to assess the perception of stress. Family emotional involvement and criticism scale (FEICS) was used to measure perceived criticism (PC) and intensity of emotional involvement (EI). These two factors are analogous to critical comments and emotional over involvement. The scale consists of 14 items pertaining to psychological and physical complaints related to anxiety. Each item is scored on a scale of 0 (not present)-4 (severe), with a total score ranging from 0-56. Total score less than 17 indicates mild, 18-24 indicates moderate and 25-30 indicates severe anxiety.\textsuperscript{10} Perceived stress scale (PSS) PSS is the most widely used scale to measure perception of stress. It is measure of the degree to which situation in one’s life are appraised as stressful. It has 10 items scored on scale 0 (never) - 4 (most often). Total score ranges from 0-40 with higher scores indicating higher perceived stress. Total score ranging from 0-13 would be considered low stress, 14-26 moderate stress, 27-40 high perceived stress.\textsuperscript{11}

Family emotional involvement and criticism scale (FEICS)- The family emotional involvement and criticism scale (FEICS) has two subscales: perceived criticism (PC) and intensity of emotional involvement (EI). These two factors are analogous to critical comments and emotional over involvement. It is 14 item scale even number items measuring PC and odd number item measuring EI. Scores range from 0-28 for each subscale.\textsuperscript{8}

**RESULTS**

During the study period 100 patients were recruited. The mean age was 21.4±5.7 years. Most of the patients (88\%) were females. Married patients constituted 34\% while 66\% were not married. The majority of patients (86\%) came from middle and upper lower socio-economic class.

Other socio demographic characteristics had been described in Table 1. Within dissociative disorder majority of subjects (60\%) had dissociative convulsion, 14\% had dissociative sensory loss, 10\% had dissociative motor disorder, 8\% had mixed dissociative disorder, 8\% had other dissociative disorder. In this study mean duration of illness was 2 months. Mean HAM-D score was 8.8 most of patients were having mild depressive symptoms, likewise mean HAM-A score was 8.0 majority of patients had minor anxiety symptoms. Both HAM-D and HAM-A score were significantly higher in female as compared to male, there was no significant difference for marital status, family type or residence (Table 2). Mean perceived stress in our study was 25.8.

Perceived stress was significantly higher in females and subjects belonging to joint families and rural area.
Table 1: Socio-demographic status of subjects.

| Socio-demographic status of subjects | N  | %   |
|-------------------------------------|----|-----|
| Sex                                 |    |     |
| Male                                | 12 | 12% |
| Female                              | 88 | 88% |
| Family type                         |    |     |
| Nuclear                             | 44 | 44% |
| Joint                               | 56 | 56% |
| Marital status                      |    |     |
| Married                             | 34 | 34% |
| Unmarried                           | 66 | 66% |
| Domicile                           |    |     |
| Urban                               | 51 | 51% |
| Rural                               | 49 | 49% |
| Religion                            |    |     |
| Hindu                               | 82 | 82% |
| Muslim and other                    | 18 | 18% |
| Education                           |    |     |
| Illiterate                          | 0  | 0%  |
| Primary                             | 2  | 2%  |
| Highschool                          | 25 | 25% |

Table 2: Relation between demographic and clinical variables.

| Demographic variable | HAM-D score | HAM-A score | PSS score | PC score | EI score |
|----------------------|-------------|-------------|-----------|----------|----------|
|                      | Mean ±SD    | T           | P         | Mean ±SD | T         | P         | Mean ±SD | T        | P         | Mean ±SD | T        | P         |
| Gender               |             |             |           |          |          |          |          |          |          |          |          |          |
| Male                 | 6.6±2       | -3          | 0.00      | 6.0±2    | -3       | 0.001     | 21.6±6   | -2.0     | 0.01      | 14.3±3.8 | -2       | 0.02      | 13±4     | -2       | 0.04      |
| Female               | 9.1±2       | -1          | 0.13      | 8.6±2    | -0.8     | 0.37      | 28.3±4   | -4       | 0.00      | 17.8±3.1 | -4       | 0.00      | 17.2±3   | -4       | 0.00      |
| Family type          |             |             |           |          |          |          |          |          |          |          |          |          |          |          |          |
| Joint                | 9.1±2       | -1          | 0.13      | 8.0±2.5  | -0.8     | 0.37      | 28.3±4   | -4       | 0.00      | 17.8±3.1 | -4       | 0.00      | 17.2±3   | -4       | 0.00      |
| Nuclear              | 8.3±2       | -1          | 0.13      | 8.5±2.7  | -0.8     | 0.37      | 22.6±7   | -4       | 0.00      | 14.2±3.7 | -4       | 0.00      | 13.8±4   | -4       | 0.00      |
| Marital status       |             |             |           |          |          |          |          |          |          |          |          |          |          |          |          |
| Married              | 8.8±2       | -1          | 0.13      | 8.4±2.7  | -0.3     | 0.7       | 26±6     | -3       | 0.00      | 17±3      | -3       | 0.00      | 17±3     | -3       | 0.00      |
| Not married          | 8.7±2       | -1          | 0.13      | 8.2±2.6  | -0.3     | 0.7       | 25±6     | -3       | 0.00      | 16±3      | -3       | 0.00      | 15±3     | -3       | 0.00      |
| Residence            |             |             |           |          |          |          |          |          |          |          |          |          |          |          |          |
| Rural                | 9.6±3       | -1          | 0.13      | 8.0±2.7  | 0.9      | 0.3       | 28±5     | -3       | 0.00      | 17±3      | -3       | 0.00      | 17±3     | -3       | 0.00      |
| Urban                | 8.4±2       | -1          | 0.13      | 8.5±2.5  | 0.9      | 0.3       | 23±7     | -3       | 0.00      | 15±3      | -3       | 0.00      | 14±3.0   | -2       | 0.00      |

Mean score for perceived criticism (PC) was 16.5 and emotional involvement (EI) was 15.7. Both measures of expressed emotions were significantly higher in females and subjects belonging to joint families and rural area (Table 2).

In this study perceived stress by subjects was significantly (p=0.001) correlated to perceived criticism (Pearson r=0.78) and emotional involvement (Pearson r=0.77).

**DISCUSSION**

In this study occurrence of dissociative disorders was found to be higher in females (88%) than in males (12%), and in Younger age group (mean age- 21.4). This corresponds with the findings of other Indian studies by Deka et al, Chaturvedi et al, Bagadia et al. Moreover, these findings obviously support already established findings of prevalence of dissociative disorder. Majority of our subjects were literate. Most of them were either completed or pursuing their higher secondary or graduation.

The predominant study population was of students (60%) as our institute also provide health facilities to student residing in university campus.

Majority of subjects were Hindu (82%) followed by Muslim, belonging to upper lower or middle socioeconomic status, representing general demographic of our region.

Subjects were more from Joint Family (56%). As many as 49% of the subjects belonged to the rural community there was not much difference as almost equal (51%) subjects belonged to the urban community, findings are similar to findings of Vyas et al.
Dissociative convulsion (60%) was most common diagnosis in our study followed by dissociative sensory loss (14%) and dissociative motor disorder (10%) findings are similar to finding of Chaturvedi et al. Majority of patients in our study had mild depressive and anxiety symptoms our finding are similar to findings of Khattak et al.

Perceived stress was moderately high in our study subjects moreover it was significantly higher in females and those belonging to Joint Family and rural areas. Similar pattern was seen for both measures of expressed emotions i.e perceived criticism and emotional involvement both were significantly higher in female and subjects belonging to Joint family and rural background. There was also significant correlation between expressed emotion and perceived stress.

High dependence of female over their family in rural areas and less autonomy of decision making in joint family could be one of reason for higher perceived stress in these patients. The empirical data show that EE is one of the major psychosocial stressor and it has direct association with recurrence of illness. It is well established that high family levels of EE are consistently associated with higher rates of relapse in patients with schizophrenia.

Study on expressed emotion in dissociative disorders are lacking although role of dysfunctional family in dissociative disorder is well established.

This study has one again established the role of psychosocial factors and perceived stress in dissociative disorders, we also found high Perceived Criticism and emotional over involvement with family as important cause of Perceived stress in these patients.

Due to cross sectional nature of our study we cannot say that high expressed emotion in family was present prior to onset of illness or it is due to illness of patient, further longitudinal studies are warranted to clearly delineate the role of expressed emotion in cases of dissociative disorder.

CONCLUSION

Dissociative disorders are more common in adolescents, students, and in those from joint families and rural areas. Dissociation is significantly more common in females than males. It always occurs in the background of increased stressful life events and in the presence of significant psychosocial stressors. Comorbid mild depressive and anxiety symptoms are common. High perceived criticism and emotion over involvement of family member was also associated with dissociation. So, management of dissociative disorder should also focus on family interventions aimed at reducing expressed emotion.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Singh NK, Gupta P, Yadav JS. A study of expressed emotion, perceived stress and socio-demographic profile in patients of dissociative disorder. Int J Res Med Sci 2020;8:2861-5.