

Sociodemographic Features, Affective Symptoms and Family Functioning in Hospitalized Patients With Dissociative Disorder (Convulsion Type)

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Abstract

Objective: To study the sociodemographic features, co-morbid anxiety and depression and family functioning in patients admitted with dissociative disorder to a tertiary care hospital in Peshawar, Pakistan.

Method: Patients admitted between April 2004 to September 2004 in Psychiatry Unit, Lady Reading Hospital, Peshawar and diagnosed as dissociative disorder (convulsion type) based on ICD-10 diagnostic criteria for mental disorders were included in the study. The sample size was 100. The demographic information was recorded, Hospital Anxiety and Depression scale and Family APGAR scale were administered.

Results: Majority of patients were female (88%), uneducated (71%) and residing in rural areas (70%). Scores on anxiety scale showed no significant relation with demographic variables except area of residence ($p=0.002$). Scores on depression subscale of HADS also showed a significant relation only with area of residence $p=0.05$. Clinical anxiety was present in 43% of patients while 73% had clinical depression. The relation between family functioning and dissociative disorder was not significant in our sample.

Conclusion: Dissociative disorder, convulsive type, occurs mostly in females who are uneducated and residents of rural areas. Association of depression with dissociative disorder was significant, however our study did not show any significant relation between this disorder and family functioning (JPMA 57:23;2007).

Introduction

The prevalence of dissociative disorder is high in developing countries and epidemiological studies conducted in India have found the prevalence to be 31% among hospitalized children and adolescents.¹ In Turkey the prevalence of dissociative disorder in a semirural area was found to be 27.2%.² Most of the studies report a high prevalence of the disorder amongst females, belonging to the middle income group and in those having less education.^{3,4} The few studies carried out in Pakistan on dissociative disorder also show female preponderance, less educational qualification and a poor socioeconomic status.^{5,6}

As in most psychiatric disorders, co-morbidity is frequently found in dissociative disorder.⁷ Several studies have shown that anxiety, depression and panic disorder are the most commonly occurring co-morbid disorders with dissociative disorder.^{3,8}

It is a well known fact that current family relationship difficulties, chronically stressful situations such as parental disharmony are predisposing factors for dissociative disorder.⁹ A study conducted in India on 16 children with dissociative disorder, found that in four patients the families had serious marital discord, tension and conflict.¹

An extensive study carried out in the Netherlands

revealed that maternal dysfunction and physical abuse were significant contributing factors for the illness.¹⁰ Krawetz et al in their study on family functioning in a Mental Health Centre in Canada found that families of patients with dissociative disorder were significantly more dysfunctional especially in areas of communication, defining roles and managing conflict than the patients in a control group.¹¹ In Pakistan family functioning in relation to dissociative disorder has not been studied systematically.

The present study aims to describe the sociodemographic characteristics of patients admitted with the diagnosis of dissociative disorder (convulsion type) in a tertiary care teaching hospital. We also aimed to examine the comorbidity of the disorder with anxiety and depression, and assess the level of family functioning in patients suffering from dissociative disorder (convulsion type).

Patients and Methods

Participants were screened in the Psychiatric Outpatient Department using ICD-10 criteria (WHO classification of psychiatric diseases).¹² Those patients who fulfilled the diagnostic criteria were admitted in Psychiatry Unit. Similarly patients referred by the Emergency Department were also screened and admitted if their symptoms were according to the diagnostic category of dissociative disorder. The study period was from April

2004 to September 2004. The sample size was 100 and purposive convenient sampling technique was used. Patients who presented with convulsions only were included and those patients who had a physical illness were excluded. The reason for including patients with convulsions only was that they were easy to measure and one form of presentation would result in uniformity of findings. Moreover this is the commonest presentation of dissociative disorder in our set up. The age range of patients included was from 15 to 40 years. The purpose of the study was fully explained to the patients included in the study and their consent was taken. It was a descriptive study. The demographic details were recorded on a performa developed for the study. In order to assess the patients for co-morbid anxiety and depression, Hospital Anxiety and Depression Scale was applied. This is a 14 item scale, having a subscale of anxiety and depression Each subscale consists of 7 items. Scores of 0-7 in the respective subscales are considered normal, 8-10 is taken as borderline and a score of 11 or more indicates clinical illness. The scale has been translated and validated for use in Pakistan.¹³ The majority of participants in the study were uneducated therefore the HAD scale was administered by the principal investigator who fully explained each item to the patient.

In order to assess family functioning, the Family APGAR Scoring was used.¹⁴ This consists of a 5 item questionnaire, each item having a minimum score of 0 and a maximum score of 2. A total score of 9-10 shows a highly functional family, a score of 6-8 suggests a moderately dysfunctional family and 0-5 indicates severe dysfunction in the family. The statistical analysis was done with the help of SPSS 11 and the t-test was applied to show the relation between demographic variables and scores of anxiety and depression, co-morbid anxiety and depression with dissociative disorder and the relation of dysfunctional family in patients with dissociative disorder.

Results

During the study period 100 patients were recruited. The mean age was 24.3±8.755 years.

Most of the patients (88%) were females, 71% were uneducated and the rest had an education from primary to matric level. Married patients constituted 60% while 40% were not married. The majority of patients (36%) came from poor socio-economic group or middle income group (52%).

Table 1 and 2 show the relationship of the demographic characteristics with the scores on rating scale for anxiety and depression. There was no statistically significant difference in the scores on HADS anxiety subscale

Table 1. Relation between demographic variables and mean scores on HADS subscale anxiety.

Demographic variables	N=100	Mean score ±sd on HADS subscale anxiety	Mean Difference (95% CI)	t	df	P
Gender						
Male	12	8.0±3.790	-2.10 (-4.269 to 0.065)	-1.925	98	0.057
Female	88	10.10±3.517				
Education						
Uneducated	71	9.94±3.668	0.32 (-1.257 to 1.903)	0.406	98	0.686
Educated	29	9.62±3.468				
Marital status						
Married	60	10.35±3.024	1.25 (-0.193 to 2.693)	1.719	98	0.089
Unmarried	40	9.10±4.247				
Residence						
Rural	70	9.13±3.611	-2.40 (-3.894 to -0.915)	-3.204	98	0.002
Urban	30	11.53±2.991				

Table 2. The relation between demographic variables and mean scores on HAD subscale depression.

Demographic variables	N=100	Mean score on HADS subscale depression ±sd	Mean Difference (95% CI)	t	df	P
Gender						
Male	12	12.33±5.990	-0.92 (-3.694 to 1.861)	-0.655	98	0.514
Female	88	13.25±4.332				
Education						
Uneducated	71	13.27±4.629	0.44 (-1.551 to 2.431)	0.438	98	0.662
Educated	29	12.83±4.359				
Marital status						
Married	60	13.57±4.339	1.07 (-0.767 to 2.901)	1.154	98	0.251
Unmarried	40	12.50±4.799				
Residence						
Rural	70	12.57±4.695	-1.90 (-3.832 to 0.042)	-1.942	98	0.055
Urban	30	14.47±3.893				

between male, female patients, married, unmarried and that of educated and uneducated patients. However the difference in the mean scores for anxiety with respect to area of residence was significant (p=0.002), the urban patients having a higher score than the rural patients.

The relationship of the demographic variables to the level of depression was also analyzed and there was no significant difference in the mean scores on HADS subscale depression between males and females, $p=0.514$. Similarly the difference in mean scores of HAD subscale depression for the uneducated and educated, the married and unmarried was not significant, the p values for these variables were 0.662 and 0.251 respectively (Table 2). However there was significant difference between area of residence and depression score $p=0.05$, the urban residents having a higher score.

The data was also analyzed for co-morbid anxiety and depression. In our sample of patients with dissociative disorder 43% had clinical anxiety, mean score on HAD subscale was 16.26 ± 25.107 . The remaining 57% did not have clinical anxiety, mean score on HAD subscale anxiety was 9.16 ± 10.861 . There was no statistically significant difference between the mean scores of patients having clinical illness and those not having the disorder, $p=0.059$. These results suggest that in this sample co-morbid anxiety with dissociative disorder could not be confirmed. The patients who had clinical depression were 73% and their mean score on HAD subscale depression was 14.70 ± 20.941 , whereas the patients without clinical depression were 27% and their mean score was 5.48 ± 6.405 . The difference in mean scores between the depressed and non-depressed group was significant, $p=0.027$ suggesting the presence of co-morbid depression.

Regarding family functioning assessed by the APGAR Scores, 51 patients had a score of >8 and 49 had <8 . The difference in mean scores between the two groups was also not significant ($p=0.453$).

Discussion

The sociodemographic characteristics of patients who presented with pseudosiezes is in broad agreement with other studies. Female patients comprised 88% in our sample, other studies conducted by Uguz et al and Sar et al reported figures of 87% and 80% respectively.^{3,4} Similarly other sociodemographic characteristics such as level of education, income status and proportion of female patients in our study are in broad agreement with other studies for example a study conducted in Peshawar showed 60% of patients to be uneducated or educated till primary level.⁵ Another study carried out in Lahore showed 51% of patients to have education upto 10 years and 74% belonged to lower socio-economic group.⁶ However we found a large number of patients (60%) who were married. Other studies have reported a preponder-

ance of single female patients e.g. in a Turkish study 24% of patients were married and a Pakistani study revealed 33% married patients.^{4,6}

On the whole conversion symptoms appear to be more common in females who are uneducated and belong to lower socioeconomic class. This is in agreement with the literature on dissociative disorder and somatization in general. It has been observed that patients belonging to these groups are more likely to present the psychological distress in somatic symptoms, rather than psychological ones.³

Two interesting findings emerge from this study. The mean score for anxiety subscale of HADS was found to be 9.85. Considering a cut off point of 11 is used in HADS to indicate anxiety disorder, it can be inferred that patients suffering from dissociative disorder are not suffering from anxiety disorder. As dissociative disorder is a type of anxiety disorder in present classification systems, this relatively low score on anxiety subscale is rather surprising. A study conducted in Lahore on dissociative disorder showed 35% of patients to have anxiety symptoms and the mean score on HADS anxiety subscale was 15.33.⁶ Similarly Willenger et al found significantly higher scores of anxiety in patients with dissociative disorder.¹⁵ Another study from Turkey showed that 37.2% of the patients had anxiety with dissociative disorder and compared to a control group this association was significant.¹⁶

The other interesting finding is a relatively high score reported on depression subscale of HADS i.e 13.14. This is also evident from the fact that using a cut off point of 11, about two third of the sample were found to be suffering from clinical depression. This is in contrast to the findings of Sayeed et al in which 29% of patients were suffering from clinical depression.⁶

Although it is possible that low score on anxiety subscale may indicate the "conversion" of psychological anxiety into somatic symptoms as suggested by psychodynamic theory, hence a low score on anxiety subscale of HADS it appears that the dissociative disorder in our set up represents a different phenomenon. The high scores on depression and significantly high proportion of patients suffering from depression indicates that the majority of patients presenting with dissociative symptoms have an underlying depressive illness. Their inability to present the psychological symptoms of depression results in presentation in the form of convulsions which receive more attention. This is also substantiated by predominance of females, lower socioeconomic status and uneducated patients in the study, all of which are well established risk factors for depression.

In our study 49 out of 100 patients had a dysfunctional family which is almost equal to the number who had normally functioning families. Moreover the difference in mean score on Family APGAR score between the dysfunctional and normally functioning families was not significant ($p=0.453$). An Indian study reported that 25% of adolescents in their sample had difficulties in family functioning.¹

Other studies carried out on family functioning in patients with dissociative disorder by Krawetz et al¹¹ and Wood et al¹⁷ revealed that families of patients with this disorder were significantly dysfunctional compared to a control group.

These results have various implications. Most importantly the recognition and treatment of underlying depressive illness needs to be considered for patients presenting with convulsions. As almost half of the patients had dysfunctional families in our study, family intervention in the form of education for the family should be a part of the management.

The major limitation of the study is that we only included patients who were suffering from convulsions. Although this is the commonest presentation of dissociative disorder in our set up, and it also resulted in a homogenous group of patients, it would be difficult to generalize the results of this study to patients with other presentations like paralysis, aphonia etc. In view of the fact that dissociative disorder is one of the commonest psychiatric disorder in our set up, there is need for further studies on the subject at community level because such cases also approach alternative treatment including faith healers. In particular the relationship of dissociative disorder with depression needs to be explored in studies involving larger and more representative samples.

Conclusion

Dissociative disorder, convulsive type, occurs predominantly in females who are mostly uneducated, of low socioeconomic status usually residing in rural areas. Association of depression with symptoms of dissociative disorder was significant, however our study did not show any significant relation between this disorder and family functioning.

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