A COMPARISON OF LIFE EVENTS IN DEPRESSIVE ILLNESS AND DISSOCIATIVE (CONVERSION) DISORDERS

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ABSTRACT

Objective: To compare the nature, number and timings of the stressful life events prior to dissociative (conversion) disorders and depressive illness.

Design: Comparative study.

Place and Duration of the Study: Psychiatry Unit, Government Lady Reading Hospital, Peshawar from December 2003 to December 2004.

Subjects and Methods: We recruited dissociative (conversion), depressed and normal control subjects (N=225) divided into three groups, details regarding life events over one year period by using Presumptive Stressful Life Events Scale was obtained. Statistical analyses yielded support for the hypotheses that stressful life events are associated with dissociative (conversion) disorders and depressive illness.

Results: No significant difference was found in scores on PSLES for dissociative (conversion) (n=75, M=114.51+28.67) and depressive groups (n=75, M=113.75+30.09) (t (148) =-.158, p< .874). The nature and number of life events reported by dissociative (conversion) (n=75 M=2.09) and depression groups (n=75; M=2.21) and the time that preceded the onset of illness also did not differ significantly.

Conclusion: It was accomplished by the findings of the current research that stressful life events preceding depressive illness and dissociative (conversion) disorders were almost of similar nature, type and intensity and temporal relationship was also alike.

Key words: Stressful life events, dissociative (conversion) disorders, depressive illness.

INTRODUCTION

Conversion disorder is linked historically to the concept of hysteria. The latest version of the International Classification of Diseases, the ICD-10, puts all manifestations of hysterical neurosis under the rubric of dissociative (conversion) disorders[1]. Although dissociative (conversion) disorder is relatively uncommon in the West it represents one of the commonest diagnoses in many developing countries. In India, for example, the prevalence of up to 31% is reported among inpatients[2]. The prevalence in all psychiatric out patients setting in India was between 6-11%[3]. In Turkey among outpatients who were admitted to a primary health care institution in a semi rural area, the prevalence of conversion symptoms in the preceding month was 27.2%[4]. In Egypt it is one of the most frequently diagnosed conditions[5]. In Pakistan dissociative disorders are reported to be one of the commonest diagnoses representing 12.4% and 4.8% of the admissions in inpatient psychiatric units[4]. Most of the studies report a high prevalence of the disorder amongst females as compared to males (60% vs. 4.20%), belonging to the middle income group and in those having less education. The predominance of females in dissociative (conversion) disorder is a well-known finding in psychiatric epidemiology for which several explanations have been offered. A plausible explanation might be that depressive disorders in females are expressed in the form of dissociative (conversion) disorders due to restrictions on the females in our society to express the psychological distress openly. This also explains the much less prevalence of depression found in different studies conducted in Pakistan[6]. Various hypotheses have been suggested to explain this high prevalence in developing countries but lack empirical evidence[7].

In countries like Pakistan, the approach towards mental illness is still prejudiced and the socio-cultural inhibition can be so strong that they prevent an individual from in quest for emotional and psychological disorders. It is likely that in Asian culture, physical symptoms are more acceptable and patients putting across their distress in the form of dissociative (conversion) disorders are more likely to get medical consultation. This cultural approval of the symptoms is an important factor that

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determines mode of reactions towards the stress. This probably is the reason why hysteria is a disorder that one commonly comes across in a psychiatric practice in Pakistan. Therefore, physical symptoms representation is commonly prevalent in the Asian sub continent. The bodily symptoms of conversion disorder may be an adaptive way of expressing the difficulties faced by the person in the stressful situation that is accepted by the society. That can be one of the reason that the manifestation of symptoms in conversion disorder differs significantly from west to east worldwide. Cross-cultural studies showed that in eastern culture physical connotation of any illness has greater success in securing consideration and support than the expression of emotional distress[8,9]. The stress and stressful life events are known as the precipitation of depressive disorder. One recent study conducted on the impact of stress areas, stress severity, and stressful life events on the onset of depressive disorder in Thai depressed patients concluded that the depressed subjects experienced more stressful life events than the non-depressed subjects. The important stressful life events in Thai depressed patients included severe medical illness, job loss, financial distress, and relationship problems[10].

Major life events and chronic difficulties have been found to be associated with the onset of depression. Another research addressed this issue by administering an interview-based measure of life stress, the Beck Depression Inventory, and the Global Assessment of Functioning scale to 100 adults diagnosed with major depressive disorder. Participants who experienced a pre onset severe life event exhibited greater overall levels of depression than did their counterparts without pre onset severe life events. These findings draw attention to the potentially greater importance of acute stress compared with chronic stress for influencing these key clinical features of depression[11].

The studies constantly show association between stressful life events and depression. Both in psychiatric and psychological literature the relationship between depression and stressful life events is eminent and documented fact that they usually precede depressive illness but is less well studied in case of dissociative (conversion) disorders.

A retrospective study titled as “Is hysteria still prevailing” conducted on the prevalence and relationship of socio-demographic details in patients with conversion disorders. It also found stress in most of the cases before the start of illness[12].

Other comparative studies also showed that looking back on the year before symptoms onset, conversion patients clearly perceived more difficulties in global functioning as compared with control. That was due to the higher number of life events experienced. Those events mostly perceived as negative, difficult to adjust to, were uncontrollable[13-15].

The previously mentioned studies have evaluated the importance and role of stressful life events in the onset of dissociative (conversion) disorders and depressive illness in combination with other factors. Moreover, dissociative (conversion) disorders typically have been studied and treated symptomatically. It seems and can be argued that dissociative (conversion) disorders are actually the somatic manifestations of underlying depression, which the patients are unable to express due to lack of psychological mindedness. The present study examined and compared the nature, number and timings of stressful life events associated with dissociative (conversion) disorders and depressive illness. The independent variable (participant variable) was the dissociative (conversion) disorders and depressive illness and the dependent variable was the score on stressful life events scale. The primary hypothesis was that if both depressive illness and dissociative (conversion) disorders represents the two different dimensions of the same distress than the severity and nature of stressful life events preceding both will be broadly similar.

SUBJECTS AND METHOD

Participants

The participants in this study consisted of 225 subjects divided into three groups, Group A = 75 Dissociative (Conversion) Disorders patients, Group B = 75 Depressive Illness Patients and Group C= 75 Normal Control subjects. All the patients were consecutive admissions for these disorders during a period of 2003-2004. The normal control group was selected from the first degree relatives of patients suffering from Dissociative (Conversion) Disorders who accompanied the patients and had no symptomatology of any psychiatric and physical illness.

The study was conducted at department of Psychiatry, Postgraduate Medical Institute, Lady Reading Hospital, Peshawar, Pakistan. This is tertiary care teaching facility offering services to North West Frontier Province and adjoining Afghanistan. In view of practical problems in a busy tertiary care unit and economic constraints participants were assigned to groups by convenient sampling and both Pakistani and Afghani patients were included in the sample.

The patients were eligible to be included in the study if they met the International Classification of Mental and Behavioural Disorders ICD-10 criteria of Dissociative (conversion) disorders and Depressive Illness[1]. All the participants who agreed to participate in the study by giving informed consent, and aged between 17 and 60 years were included. The exclusion criteria were Dissociative (conversion) disorders or Depressive illness secondary to organic disorders, or other psychiatric disorders like substance abuse and schizophrenia. Patients suffering from Dissociative (conversion) disorders who also met the criteria for co morbid depressive illness were not included in this study.

Materials

The materials for the present study consisted of Presumptive Stressful Life Events Scale (PSLES) which was used for obtaining the details about various life events over last one year from Depressed Group, Dissociative (conversion) Group, and Control Group. This scale was developed in India by Singh, Kaur & Kaur[16]. It is an inventory of 51 stressful life events; item No. 1 with highest score of 95 and last item No. 51 with the lowest score of 20. It evaluates the life events experienced in a life time, in the past one year, frequency of occurrence of each event and quantitative estimate of each of the life events. Considering many cultural similarities in the domain of life events in areas such as family life, this scale was considered to be more relevant for use in our population.

The level of depression was assessed with the help of Hamilton Depression Rating Scale[17, 18]. It is a 21-question multiple choice questionnaire that clinicians may use to rate the severity of a patient's major depression. The first 17 questions contribute to the total score (HAM-D-17). Questions 18-21 are recorded to give further information about the depression (such as whether diurnal variation or paranoid symptoms are present); scores can range from 0 to 54. The scores between 0 and 6 indicate a normal person with regard to depression, scores between 7 and 17 indicate mild depression, scores between 18 and 24 indicate moderate depression, and scores over 24 indicate severe depression.

Hamilton Anxiety Rating Scale was used to asses the degree of anxiety among subjects of the three groups[20]. This test is administered by the doctor or therapist who asks the patients the corresponding questions on the questionnaire and then rates their answers on a scale from 0-4 with four being the highest level of anxiety. If the total is less than 17 a person is deemed to suffer from mild anxiety. Scores from 18-24 show a moderate level of anxiety, anything over 25 indicates severe anxiety. In addition the demographic characteristics of the sample were obtained using a semi structured interview designed for the purpose of this study.

Procedure

It was a comparative study conducted at Psychiatry Unit, Government Lady Reading Hospital, Peshawar, Pakistan in 2007. Purposive sampling technique was used for the assignment of the subjects to the three groups, namely, Dissociative (Conversion) Group, Depressed Group, and Control Group.

A test package consisting of all the above-mentioned instruments were individually administered to all the patients suffering from depressive illness, dissociative (conversion) disorders and also to the normal subjects of the control group. The patients were diagnosed as suffering from dissociative (conversion) disorder or depressive illness by consultant psychiatrist as per ICD 10 criteria. Stressful life events were measured among the subjects of the three groups, according to the Presumptive Stressful Life Event Scale. In order to measure the severity and prevalence of depression, and anxiety among the subjects of the three groups, Hamilton Depression Rating Scale and Hamilton Anxiety Rating Scale were administered to the sample. The scales were translated and back translated by bilingual psychiatrists for use in this population. As majority of the patients presenting to the service were illiterate or had little education, the translated versions of the instruments were read to them. Demographic profile of all the subjects of three groups (N=225) were obtained.

RESULTS

The data was analyzed using SPSS version 10. Mean scores, standard deviations, *t* test, One-way ANOVA; *F* values were computed in order to compare the scores on Presumptive Stressful Life Events scale. The Chi square test was used for comparisons involving categorical variables, except when the expected cell size fell below 5, in which case the Fisher's exact test was used. Comparisons are considered statistically significant at the 5 percent level ($p<.05$).

Mean score on Presumptive Stressful Life Events Scale was not significantly different between those who presented with Dissociative (conversion) Disorders and Depressive illness, ($M=114.51$, $SD = 28.67$ and $M = 113.75$, $SD = 30.09$ respectively, $t\ (148) = -.158$, $p < .874$). On the other hand, significant difference was found amongst the mean scores of Control Group ($M = 28.37 \pm 30.06$.) in contrast to Dissociative (Conversion) Disorders and Depressive illness Groups on Presumptive Stressful Life Events scale by using one-way analysis of variance (ANOVA), $F(2,222) = 209.660$, $p = <.000$.

The mean score on HAM-D for depressed patients was ($M = 26.92$, $SD = 4.09$), while those suffering from Dissociative (Conversion) Disorders had a mean score of ($M = 15.01$, $SD = 2.94$), a statistically significant difference ($t\ (148) = 20.477$, $p < .000$). There was also statistically significant difference between the mean score on HAM-A for Depressed patients as compared to those suffering from Dissociative (Conversion) Disorders ($M = 23.45$, $SD = 4.25$, VS $M = 18.65$, SD 3.67, $t\ (148) = 7.399$, $p < .000$).

The number and nature of stressful life events amongst the Dissociative (Conversion) Disorders ($n=75$, $M= 2.21$) and Depressed ($n=75$, $M=2.09$) groups also did not differ significantly. Analysis of specific life events revealed that total 34 types of events were reported by the subject of three groups, there was no statistically significant difference in 22 categories of life events between the subjects of depressive and dissociative (conversion) groups.

Table 2 describes 13 Life Events reported by patients of depressive illness and dissociative (conversion)

Table 1

Demographic Characteristics of Depressed Group, Dissociative (Conversion) Group, & Normal Control Group. (N = 225)

S. No.			Depressed Group	Dissociative (Conversion) Group	Control Group
1.	Gender	Female	59 (78.7%)	63 (84.0%)	36 (48.0%)
		Male	16 (21.3%)	12 (16.0%)	39 (52.0%)
2.	Marital Status	Married	38 (50.6%)	21 (28%)	45 (60.0%)
		Single	37 (49.3%)	54 (72%)	30 (40.0%)
3.	Dwelling	Urban	19 (25.3%)	22 (29.3%)	21 (28.0%)
		Rural	56 (74.7%)	53 (70.7%)	54 (72.0%)
4.	Living status	Alone	04 (5.3%)	03 (4.0%)	03 (4.0%)
		With family	71 (94.7%)	72 (96.0%)	72 (96.0)
5.	Job status	Employed	11 (14.7%)	8 (10.7%)	34 (45.3%)
		Not employed	64 (85.3%)	67 (89.3%)	41 (54.7%)

Disorders. For the purpose of this analysis we excluded those categories of life events which had frequency of two or less.

Table 3 shows the temporal relationship between the onset of depressive illness, dissociative (conversion) disorders and the life events for the patients of group A and B.

Majority of events were concentrated within first two months prior to the development of the disorders. The timing of life events also did not differ significantly between the groups.

Table 2

Nature and Number of life events reported by Depressed Group, Dissociative (Conversion) Group, & Normal Control Group (N = 225)

S. No.	Nature of stressful life events	Depressed group	Dissociative (Conversion) group	Control group	Presumptive stressful life events scale scores
1.	Family Conflicts	20	19	09	47
2.	Major Personal Illness	17	22		56
3.	Death of a Close Family Member	17	13	06	66
4.	Getting Engaged/Married	14	22		43
5.	Financial problems	20	08	02	54
6.	Marital Conflict	13	06	05	64
7.	Conflict with Laws	13	06		57
8.	Broken Affair/Engagement	07	09		57
9.	Self/Family Member Unemployed	06	05	01	51
10.	Failure/Appearing in Examination	02	08		43
11.	End Schooling	04	04		36
12	Change in Social/Activities	03	04		28
13.	Marital separation	03	02		77

Table 3

Time between the onset of Depressive Illness or Dissociative (Conversion) Disorder and the Life events

S. No.	Period	No. of Depressive Group patients	No. of Dissociative (Conversion) Disorder Group patients
1.	2 weeks	23(10.2%)	26(11.5%)
2.	3 weeks	20(8.8%)	20(8.8%)
3.	1 month	11(4.8%)	14(6.2%)
4.	2 months	9(4%)	12(5.3%)
5.	4 months	2(0.8%)	1(0.4%)
6.	6 months	2(0.8%)	1(0.4%)
6.	7 months	4(1.7%)	1(0.4%)
7.	8 months	1(0.4%)	
8.	1 year	2(0.8%)	

The patients suffering from Dissociative (Conversion) Disorders were significantly younger, less educated, and single. The mean age of patients suffering from dissociative (conversion) disorders was 20.76 (*SD*=6.52) that of depressed group was 24.56 (*SD*=8.91) and the normal control had a mean age of 27.20±9.21 ($p<.000$). Both disorders appeared to be predominantly common among females, 59 (78.7%) of the subjects in those suffering from depression were females as compared to 63 (84%) in those suffering from Dissociative (Conversion) Disorders.

Among depressed group 38 (50.6%) were married, while among dissociative (conversion) group only 21(28%) subjects were married ($p<.000$). Majority of the subjects from both groups had no or little education (no formal education in 41.3% of all groups, primary education in 16% of patients). Similarly there was no statistically significant difference between the groups on dwelling status, about two third of patients in each group belonged to rural background. Almost similar proportions of patients in each group and normal control belonged to poor or lower middle income group and there was no statistically significant difference between the groups in income status, defined on the basis of gross income derived from various sources including agricultural income.

DISCUSSION

The purpose of this study was to compare the nature, number and the time of the stressful life events associated with dissociative (conversion) disorders and depressive illness. To achieve those objectives the data was collected from three groups of subjects (i) subjects diagnosed as suffering from depressive illness (ii) subjects diagnosed as suffering from dissociative (conversion) disorders and (iii) control group, who were normal subjects and were chosen from among the first degree relatives of the subjects of the dissociative (conversion) group[19].

Empirical research on hysterical conversion has lagged behind theoretical speculation[20]. Prevalence studies are rare, etiological considerations are even rarer. This may be due to fact that many psychiatrists consider conversion hysteria has almost disappeared. This is manifest in the literature on stressful life events in Dissociative (conversion) Disorders. Although there is vast literature on stressful life events in depression, the phenomenon is rarely studied in Dissociative (conversion) Disorder which is surprising in view of the fact that presence of psychological stressor is considered as important criteria in evolution of conversion symptoms both in DSM-IV and the ICD-10. The latter, for example stipulates an "...evidence for psychogenic causation, in the form of clear association in time with stressful events and problems or disturbed relationship..."as important criterion for the diagnosis of dissociative disorders.

A stressful life event being a prerequisite for the diagnosis of Dissociative (conversion) disorders (ICD-10) we expected that the number of life events and their temporal relationship with onset of symptoms will be more closely related with the Dissociative (conversion) disorders as compared with the depressive illness. However, total number as well as the severity of life events as indicated by scores on Presumptive stressful life events scale (PSLES) Table 2 was not significantly different between the dissociative (conversion) and depressive illness group. It is also interesting to note that timing Table 3 of the events that preceded the onset of illness also did not differ significantly between the two disorders. The normal control group had significantly lesser life events as compared to both the disease groups, confirming the etiological role of the life events in these disorders. Other

studies which used a control group of physical disorder patients also reported significantly higher number of life events in those suffering from Dissociative (conversion) disorders again confirming the significance of life events in the etiology of conversion disorder[21-24]. The only study, to our knowledge that used a control group of affective disorder patients had findings similar to the present research. By using a self report questionnaire they found that conversion patients did not differ significantly from a control group of affective disorders matched for age and sex with respect to number or impact of life events in a year precedes the onset of symptoms. They however found there was a significant relationship between the recent life events and severity of conversion symptoms[25].

Two further observations seem to support our hypothesis. Based on two cross sectional surveys at two points over 10 year period found that the rate of conversion declined considerably[26]. The authors postulated that this may be associated with persistent rise in socioeconomic status of women. In subsequent study, however, they found a decline in prevalence of hysteria over 20 years (54/1000 in 1972 vs. 11/1000 in 1992) as well as a rise in depression (109/1000 in 1972 vs. 258/1000 in 1992)[27]. These findings seem to support the hypothesis that hysteria in these settings is being replaced with depression. We believe that an improvement in socioeconomic status acts as a mediating mechanism allowing psychological metaphor rather than the somatic expression of illness to be more acceptable to the community.

The patients with depressive illness had scored high on Hamilton Rating Scale for Depression as compared to dissociative (conversion) group. Depressed group had mean score of 26.92 ± 4.09 as compared to 15.10±2.94 mean score of dissociative (conversion) group subjects and 1.71±2.46 mean score of control group (F (2,222) =1138.74, p=<. 000). There was also significant difference found among the scores of three groups on Hamilton Rating Scale for Anxiety, depressed group with mean score of 23.45±4.25, dissociative (conversion) group with mean score of 18.65±3.67 and control group with mean score of 2.64±3.14 (F (2,222)=645.263,p=<. 000). The high incidence of depression in the conversion patients compared with controls is confirmed by other studies, all showing a percentage of affective disorder[28].

It seems that for majority of patients presenting with Dissociative (conversion) disorders in these settings, the dissociative symptoms represent just another form of somatisation albeit more dramatic in line with somatic presentation of other common mental disorders including depression[29, 30]. However, we believe this presentation is not based on the psychodynamic or etiological concept of "somatization," a hypothetical process whereby somatic symptoms represents a conversion or dissociation. Instead this reflects interplay of various psychological, social and biological factors encouraging the patients to present with somatic symptoms rather than psychological. This is predominantly determined by perception of illness and symptoms interpretation at individual level and the reactions of other people (family, friends, and acquaintances) at the community level as well as iatrogenic factors[31].

The findings of this study have considerable implications for the treatment and classification of these disorders. The similarity in the principal etiological role of stressful life events with depression should raise concerns about the validity of diagnosis of Conversion Disorder. This along with very large overlap with the many other psychiatric disorders that are also defined in part by somatic symptoms lends weight to now increasing debate about the classification of these disorders in present classifications[32].

According to the findings of present study Table.3 it appeared that patients with depressive illness and dissociative (conversion) disorders had same socio-demographic characteristics except for age, gender, marital status, working conditions and educational qualification. Both disorders appeared to be predominantly common among young females. These findings of the present study are supported by the results of previous studies conducted on sociodemographic and clinical characteristics of patients with conversion disorder[33].

These findings also suggest that the treatment for dissociative disorders in these settings should also encompass the biological and psychological interventions for depression and need to focus beyond transient somatoform symptoms. The presence of dissociative disorder, especially in young female patients with predominantly lower socioeconomic and educational status should alert clinicians to the presence of a depressive illness for which effective interventions are available which can easily be implemented at community level. Indeed it has been suggested that conversion should be evaluated as a symptom rather than as a primary diagnosis[16]. In view of overwhelming evidence of co morbidity and almost no evidence from randomized controlled trials for effective interventions for dissociative disorders[34], future research should test the usefulness of intervention used for depressive illness in dissociative disorders.

Limitations

Retrospective assessment of life events which is associated with recall bias, lack of blind assessment for the life events and no matching for age and sex are major limitations of the present study. In future better designed studies will be needed with proper controls. In addition prospective evaluation will be desirable to compare the outcome between the two disorders. Convenient sampling was an additional restraint of the study.

CONCLUSION

It was concluded that prior stressful life events experienced by patients of both depressive illness and dissociative (conversion) disorders were approximately of identical character, category, strength and even chronological association was parallel. Furthermore, both illnesses are demonstration of identical distress but manifest in a different way in people having diverse personality types.

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