ORIGINAL ARTICLE

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF DIFFERENT DISSOCIATIVE (CONVERSION) DISORDERS

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ABSTRACT

Objective: To develop understanding, which have implications for effective management of dissociative disorders.

Material and Methods: We analyzed the related data extracted from database collected from 12,092 patients in our outdoor psychiatric clinic of Khyber Teaching Hospital, Peshawar during June 2013 to June 2016. We used excel spreadsheet to filter and prepare our data to be analyzed with SPSS Windows version 20.

Results: A total of 721 (6%) patients were identified to have dissociative [conversion] symptoms and/or diagnosis. Four hundred and twenty one patients were included in the analysis. 85.7% of the patients were females while 14.3% were males. Three hundred and forty-six (83%) of patient had dissociative convulsion disorder. 50.5%, 27.2% and 25% of the patients reported depressive symptoms, Migrainous headache and anxiety symptoms respectively. The odd of females to report depressive symptoms was greater than males. Females were also found to present more with Trance and possession syndrome, as well as with more Migrainous headache symptoms compared to males.

Conclusion: There is a high frequency of depressive symptoms, Migrainous headache and anxiety symptoms in patient with conversion disorder.

Key Words: Dissociative disorders, Psychiatric comorbidities, conversion disorders, Non epileptic fits, pseudofits, functional symptoms, vascular headache.

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INTRODUCTION

Conversion disorders are common and challenging disorders to be treated by psychiatrist and physicians. There has been some difficulty in classification of Dissociative [conversion] disorders (CD) in the two major classification systems, Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5) and International Classification of Disease 10th Edition (ICD-10). In DSM-5, the disorders are classified under somatoform disorders[1], while in ICD-10 the term is used to define a group of disorders where there is partial or complete loss of the normal integration between memories of the past, awareness of identity, immediate sensations, and control of bodily movements with no evidence of a physical disorder that might explain the symptoms, and that there are psychological causation, even if the patients deny it[2]. Other terms to define the conditions include conversion hysteria, conversion reaction, hysteria and hysterical psychosis. Malingering and factitious disorders [conscious simulation of physical or psychological symptoms and signs] have been excluded although it is usually very difficult to assess the extent to which some of the loss of functions might be under voluntary control. ICD contains nine specific conditions under Dissociative [conversion] disorders, two of them being Trance and possession disorders (TPD) where there is a temporary loss of both the sense of personal identity and full awareness of the surroundings; in some instances the individual acts as if taken over by another personality, spirit, deity, or "force" and Dissociative convulsions Disorder (pseudo seizures) which may mimic epileptic seizures very closely in terms of movements, but tongue-biting, serious bruising due to falling, and incontinence of urine are rare in dissociative convulsion, and loss of consciousness is absent or replaced by a state of stupor or trance[2].

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In Western societies the rate of CD is 1% to 3% in outpatient psychiatry clinics, whereas in non-Western societies it is about 10%[3]. CD is more prevalent among females compared to males, with a ratio between 2:1 and 10:1. CD is also more prevalent in rural areas, in developing countries, among people of low socioeconomic classes, among undereducated people, and among those with relatively low medical knowledge[4]. Although CD may develop at any time between early childhood and late old age, it is reported to be most common between 15 and 35 years of age[5]. Comorbidities significantly affect the prognosis and the treatment of CD symptoms. The most common psychiatric comorbidities for CD are mood disorders and anxiety disorders. In a study by Bowman and Markand, depressive disorders were reported to accompany CD at a rate of 88%[6]. In another study by Kuloglu, Atmaca, and Tezcan, comorbidity rates for depression and anxiety disorders with CD were found to be 35.3%, 34.8% respectively[7]. In a study focusing on patients with pseudo seizures, the rates for borderline personality disorder, histrionic personality disorder, and antisocial personality disorder were 55%, 16%, and 11%, respectively8. Sar, Akyuz, Kundakci, Kiziltan, and Dogan investigated the frequencies of psychiatric disorders with CD and reported that 89.5% of patients with CD had at least one psychiatric comorbidity[9]. In inpatients with the diagnosis of CD, dissociative convulsions and dissociative identity disorder (DID) are the most common diagnosis[10]. The comorbidity of CD may interfere with the treatment of the primary disorder, further complicating the prognosis. Patients with CD usually present with acutely occurring symptoms suggestive of an organic disease, which seems frightening to patients and to significant others, causing them to be admitted to emergency units[11].

In this study we aim to investigate the demographic characteristics and presenting psychiatric symptoms and disorders that coexist in patients with Conversion disorders. We also aim to investigate any evidence for association between psychiatric comorbid conditions, in different age groups and gender.

MATERIAL AND METHODS

We conducted a retrospective study using the data in the database of our private outdoor psychiatric facility from June 2013 to June 2016. The demographic details, contact number, blood pressure, weight of the patients, history of present illness, past history, personal history, mental state examination, relevant physical examination and investigations in closed and open ended questions were recorded in our computer software for recording patients' data while they are being assessed. Assessments were made simultaneously by one consultant Psychiatrist and one medical officer with 4 years training in Psychiatry and diagnoses were made with mutual consensus. Interviews were conducted starting with personal history and open ended questions followed by close ended questions with an aim to establish diagnoses according to International Classification of Disease Version 10 (ICD-10). We did not directly ask about delusions and hallucinations unless the patient's responses to other questions or examination led us to suspect a psychotic illness, or when the family members directly reported such symptoms. Collateral information was also collected in cases of suspected seizure disorder, dementia and mental retardation, sometimes by telephonic contact with the close family members when the eyewitness accounts were not available at the time of assessment. Cognitive and memory testing were applied only when there were reasons to suspect intellectual impairment or dementia.

We have used guidelines and codes of ICD-10 classification of mental and behavioural disorders, clinical descriptions and diagnostic guidelines for the purpose of diagnosis in our sample. Some conditions not mentioned in chapter V of ICD-10 which include vascular headache, tension headache, epilepsy and resistant depression were diagnosed in accordance with other chapters of ICD-10 and in accordance with guidance provided in International Classification of Headache Disorders 2rd Edition beta (ICHD-III) and International Treatment Guidelines. An "awaiting" category was used in cases where no confident diagnosis could be made at the time of assessment or where multiple diagnosis were possible with no clear symptoms sufficient to qualify for a double diagnosis. Addition of such a category helped us remain confident about the diagnoses in majority of our sample. Double diagnoses were given in cases where symptoms of two psychiatric conditions were predominant in the course of the current episode. Some diagnoses were made in the follow up visit for the awaiting category when more information about the condition became available. Diagnoses were also changed on follow-up in cases where further information strongly suggested another diagnosis. The software keeps a record of all the information about the individual patients' visit. We used SPSS 20 for analysis of our data after the data was imported from our server database to excel spread sheet where the cases related to dissociative [Conversion] disorders were searched by applying filters. We used both include and exclude options of filter, using terms "Dissociative", "conversion", "non-epileptic fits", "apparent loss of consciousness", "low mood", "death wishes", "fearfulness", "worrying thoughts", "stress",

"sleep", "headache", "migraine", "throbbing", to the clinical features and the diagnosis columns of all the cases in our database. A total of 725 patients out of 12,092 patients were identified in our database that had dissociative [Conversion] Symptoms and/or diagnosis. Out of which 421 were included in the analysis and rest of the cases were excluded on the basis of missing variables of our interest and/or diagnosis.

Statistical analyses were performed using SPSS for Windows Version 20. Percentage values were calculated for socio-demographic and diagnostic parameters. Numerical parameters like age and duration of illness were analyzed in means, and standard deviations. Symptoms and co-morbid psychiatric conditions made our nominal variables and the association among these variables was evaluated using the Pearson chi-square test with an alpha value set to <.05.

RESULTS

A total of 721 (6%) out of 12,092 patients were identified to have dissociative [conversion] symptoms and/or diagnosis. Out of which 421 patients were recognized and included in the analysis. Three hundred and sixty-one (85.7%) of the patients were females while 60 (14.3%) were males, 271(64%) of the patients were married while 150(35.6%) were single. Mean age of the patients was 25.39 years ±11.05 SD while mean duration of symptoms was 2.36 years ±1.79 SD.

Three hundred and forty-six (83%) of patient had dissociative convulsion disorder as their primary diagnosis (Table 1). Trance and possession syndrome was diagnosed in 70(16.8%), other dissociative disorders in 46(11.1%), and dissociative motor disorder in 31(7.5%) of patients. Depressive symptoms were reported by 210(50.5%), and anxiety symptoms by 104(25%). Stressful life event preceding the illness was identified in 123(29.6%) of patients. Comorbid Migrainous headache was diagnosed in 113(27.2%) while disturbed sleep was reported by 47(11.3%) of patients.

A chi-square test of independence was performed to examine the association between gender, different symptoms and/or psychiatric disorders. There was evidence of association between gender and depressive symptoms, χ^2 (1) = 6.20, p =.013, with the odd of females to report depressive symptoms greater than males. Females were also found to present more with Trance and possession syndrome, χ^2 (1) = 5.01, p=.025 as well as with more Migrainous headache symptoms compared to males, χ^2 (1) = 4.99, p=.025, although males with Migrainous headache were more likely to complain of anxiety symptoms χ^2 (1) = 7.99, p=.005). There was a strong evidence for association between identifiable stress and anxiety symptoms χ^2 (1) = 69.77, p<0.001. Both depressive and anxiety disorder symptoms were associated with each other in both males and females, χ^2 (1) = 14.56, p<.001. There was no evidence of association between gender and dissociative convulsions disorder, dissociative motor disorder, other dissociative disorder, anxiety symptoms and identifiable stress.

Table 1. Symptoms and Psychiatric Disorders in Patient with Dissociative [conversion] Disorder

Symptoms/Disorders	Status	Males	Females	Total with percentage
Dissociative Convulsions Disorder	Present	49	297	346 (82.2%)
	Absent	11	64	75 (17.8%)
Trance And Possession Syndrome	Present	4	66	70 (16.6%)
	Absent	56	295	351 (83.4)
Dissociative Motor Disorder	Present	6	25	31 (7.4%)
	Absent	54	336	390 (92.6)
Other Dissociative Disorders	Present	8	38	46 (10.9%)
	Absent	52	323	375 (89.1%)
Depressive Symptoms	Present	21	189	210 (49.9%)
	Absent	39	172	211 (50.1%)
Anxiety Symptoms	Present	11	93	104 (24.7%)
	Absent	49	268	317 (75.3%)
Migrainous Headache	Present	9	104	113 (26.8%)
	Absent	51	257	308 (73.16%)
Stressful Event	Identified	15	108	123 (29.2%)
	Not Identified	45	253	298 (70.8%)

DISCUSSION

Conversion Disorders and their comorbidities have been investigated in the past, and national literature exists. Majority of studies in the past were conducted on patients with severe or refractory symptoms. We aimed at studying the characteristics of all patients who presented to our private psychiatric facility in Peshawar, Pakistan. Nearly all prevalence studies of CD have reported a female dominance in terms of female-to-male ratios for the prevalence of CD10,12. The current study had a female-to-male ratio of 5.2:1. Eighty three percent of our patient presented with dissociative convulsions, which is in line with presentation reported in the national literature[13,14]. In our study Depressive symptoms were reported by 50.5%, Migrainous headache in 27.2% and Anxiety symptoms were found in 25% of the patients. An indoor patients study conducted in Peshawar, Khyber Pakhtunkhwa province with similar demographic characteristics showed that in patients with CD, clinical anxiety was present in 43% of patients while 73% had clinical depression[15]. Other similar study with a small sample size reported 98% of the patients with conversion disorder to have comorbid complaints of anxiety and somatic symptoms[16]. The high rate of these symptoms could be explained by the severity of condition in those patients who needed indoor treatment as their symptoms were severe or they had failed to respond to outdoor treatments. Other explanation might include the difference in the assessment methods to identify these conditions.

Strengths and Limitations:

Structure and the large size of our study sample represent cases from different parts of Khyber Pakhtunkhwa, Pakistan and Afghanistan and the results can be generalized to the rest of population residing in these regions in particular and in Pakistan generally. Two assessors with adequate clinical experience and a diagnosis made with mutual consensus made assessment.

The population included only outdoor patients who came to seek treatment in private psychiatric facility and represent cases with less severe psychiatric morbidity. Although our sample size was adequate findings, cannot be generalized to cases with more severe symptoms. There may be information bias due to social desirability and suggestibility. Time constrain and lack of use of any structured tools based on DSM-5 and ICD-10 Diagnostic Criteria for research would have resulted in missing underlying psychopathologies in some cases including personality disorders. No causal relationship can be drawn from the analysis of our data.

CONCLUSION

High frequency of depressive symptoms, Migrainous headache and anxiety symptoms in patient with conversion disorder support the need for detailed assessment of these patients in order to improve short and long term outcomes.

RECOMMENDATIONS

Further studies with larger sample size and longitudinal follow-up are hereby suggested.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

Ahmad B: Idea and operating, data collection.

Mohammad A: Data collection and statistics

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.