Subtypes of Dissociative (Conversion) Disorder in Two Tertiary Hospitals in Bangladesh

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Dissociative (conversion) disorders are common among the patients attending in and out patients of Psychiatry Department of tertiary hospitals in Bangladesh. This study was done to see the subtypes of dissociative (conversion) disorder according to International Classification of Diseases, Tenth Revision (ICD-10). This is a descriptive, cross sectional study done on 100 consecutive patients from the Departments of Psychiatry, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka and Dhaka Medical College Hospital (DMCH). Study period was July 2005 to June 2006. Among the patients of dissociative (conversion) disorder, mixed dissociative (conversion) disorder was found highest 34%, followed by dissociative convulsion 33%, dissociative motor disorders 19%, dissociative anaesthesia and sensory loss 5%, dissociative amnesia 4%, dissociative fugue 3%. However, the researcher did not find any multiple personality disorder which is relatively common in North America. This finding reflected that there are differences in prevalence of sub types of dissociative disorders in Bangladesh and Western countries.

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Introduction

Conversion disorder is linked historically to the concept of hysteria. Towards the end of the nineteenth century, Pierre Janet conceptualized hysteria as a dissociative disorder and described somatoform symptoms as aspects of this condition in his traumatized patients[1]. Janet's contemporary Sigmund Freud also considered hysteria as a trauma-based disorder. However, Freud later conceptualized that somatoform symptoms of hysteria as a result of a neurotic defense mechanism and referred to them as conversion disorder[1]. In DSM (Diagnostic and Statistical Manual for Mental Disorders)-II, The conversion and dissociative types of hysterical neurosis were classified as variants of a single disorder. But on subsequent editions of DSM system conversion and dissociative disorders were classified separately[1-3].

The major current problem of conversion disorder is its place in the classification in DSM-IV-TR and ICD-10 (International Classification of Diseases, Tenth Revision) systems. Conversion disorder is defined as a sub type of somatoform disorder in DSM-IV[TR]. DSM system includes somatization and conversion disorder in the same group of illness where as, in ICD-10, conversion disorder and dissociative disorders are classified as dissociative (conversion) disorder[4,5].

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The two diagnostic systems place conversion disorders in different groups. However, Freud's notion that hysterical symptoms arose from the conversion of emotional energy to a physical symptom has been central in both ICD-10 and DSM-IV^{TR} [6].

The common theme shared by dissociative (or conversion) disorder is a partial or complete loss of the normal integration between memories of the past, awareness of identity and immediate sensations, and control of the bodily movements. Even, if the person suffers from any physical disorder there must be no evidence of a physical disorder that can explain the characteristic symptoms of the disorder. Besides, there are convincing associations in time between the onset of symptoms of the disorder and stressful events, problems, or needs[4].

There is scarcity of literature on subtypes of conversion disorder because a few studies have been carried out on conversion disorder by using the diagnostic criteria of DSM-IV^{TR}. In last few years, most prevalence studies on conversion disorders were done in Europe and used the diagnostic criteria of ICD-10. In a Meta analysis, the common conversion symptoms found were the motor symptoms, sensory symptoms, pseudo seizure, and mixed type[7]. In another study Guz and colleague found that nearly 45% of patients had a combination of symptoms (a mixed presentation). In this study researchers also found seizure or convulsion (25.3%), motor symptoms (25.3%), and sensory symptoms (4.6%)[2]. However, subtypes of Conversion disorders were seen as well using the DSM IV criteria. In a Dutch study it was found that motor symptoms were highest (56%) among the respondents; followed by mixed symptoms (30%), seizure (8%) and sensory symptoms (6%)[8].

Conversion symptoms were assessed in many groups in the past like among criminals, among psychiatric outpatients[9,10]. Among criminals 6% of total sample (13 subjects) had conversion symptoms. Out of these 13 patients, 6 patients had paralysis, 3 had anaesthesia, 3 had amnesia, 2 had aphonia, and 1 had blindness (more than one symptom was observed in some patients[9]. When studied among 500 psychiatric outpatients, 118 patients had one or more conversion symptoms (24%). Among them 29 patients had anaesthesia, 28 had aphonia, 27 had ataxia, 20 had paralysis, 19 had blindness, 17 had unconsciousness, 16 had amnesia, 9 had deafness, 8 had 'fits', 7 had urinary retention, 29 had other symptoms[10].

In India, researchers found difficulties to categorize the sub types of dissociative disorders and conversion disorders according to the existing sub categories using either DSM-IV or ICD-10.Some of the sub categories of the dissociative and conversion disorders of the ICD and DSM classification were rarely met. Moreover, it was found that a significant percentage of patients seen in psychiatric practice might not fit into the defined subcategories of dissociative (conversion) disorders[11]. It is also evident in psychiatric practice in Bangladesh that the pattern of presentation of dissociative and conversion disorders and their sub categories are different from what we have seen in the Western world.

However, in Bangladesh many studies done on conversion disorders but prevalence studies were few. The prevalence of Somatoform disorders in a nation wide multi centered community based survey was 1.4%[12]. However, prevalence of conversion disorder was not separately done. A clinical study was done among psychiatric outpatients of a General hospital in Bangladesh. Among one thousand and twenty one patients, forty three (4.21%) were diagnosed as Dissociative (Conversion) disorders according to ICD-10[13].

Among them, nine patients were male and thirty four patients were female. Another clinic based study was done on one hundred and twenty consecutive patients of Dissociative (conversion) disorders, coming for the first time during the period of January 1999 to December 1999. Among them ninety seven (80.83%) patients had conversion symptoms in the form of convulsion (44.6%), abnormal gait/ataxia (15.83%), paralysis (6.65%), mutism (5.83%), stupor (4.16%), abnormal posture (5%), hiccough (1.66%). Dissociative symptoms were observed among twenty patients (16.6%), and mixed symptoms among three (2.5%) patients[14].

Another study was done on 52 out patients attending private consultation centers in Dhaka city (Bangladesh). The age range of patients was between four to sixteen years. The commonest presenting symptoms in studied sample were fainting attack twenty five (49%), then motor symptoms in nine patients (17.3%) and sensory symptoms nine (17.3%) patients followed by mute five (8.7%) and other somatic symptoms four (7.7%)[15].

The aim of this study was to see the pattern of presentation of dissociative (conversion) disorder according to ICD-10 and to see the subtypes. It was expected that like in India, the pattern of presentation and subtypes dissociative (conversion) disorder would be different than that of western countries[11]. In this study we aimed to see the subtypes of Dissociative (conversion) disorder and to compare whether the rare subtypes (like multiple personality disorder) were equally prevalent as found in western world.

Methods

A total of one hundred consecutive patients having dissociative (conversion) disorder were included in this study. These patients were recruited from in patient and outpatient of the department of psychiatry in Bangabandhu Sheikh Mujib Medical University (BSMMU-only medical University in Bangladesh) and Dhaka Medical College Hospital (DMCH). The study period was from July 2005 to June 2006.the patients were diagnosed after thorough clinical history taking and physical and mental state examination. Information was also collected from reliable attendants as well where necessary (e.g. when patient was mute, could not recall the detail of an emotionally charged event etc.) The assessment was done by using ICD-10 Diagnostic Criteria for Research (ICD-10, DCR) by help of qualified psychiatrists. The patients were approached for the study by the researcher and detail procedure was explained to the patient.

The patient's informed written consents were taken from the patients who wished to participate in the present research. Confidentiality and freedom of choice for participation was assured. Patients who were selected in the present study were interviewed by using a semi structured questionnaire. This questionnaire included socio-demographic and other related variables for the study. The symptoms of Dissociative (conversion) disorders were determined by using a symptom check list for the present study. This symptom check list was prepared by the researcher initially. It was modified by some psychiatrists and developed after pre testing. However, collected information was verified and if any history sheet was found incomplete it was discarded. The observed data was sorted, cleaned presented in tables and illustrations. Chi-square test and students 't' tests were applied where necessary.

Results

This cross sectional, descriptive study was conducted in the Department of Psychiatry in BSMMU and DMCH. In order to include 100 patients, 128 patients were included in the study. Among the 128 patients 9 patients refused to participate in the interview. Fifteen patients either discontinued the interview (though they were well informed prior to each session about the length of time taken for a session) or did not attend on subsequent sessions to participate in this study either due to shortage of time or they some how avoided. One patient, after thorough clinical assessment and investigation was found to be a case of Wilson's disease. The remaining three patient's data sheets were found incomplete before final scrutiny prior to analysis of data. Participation rate was found 78.12%.

The study period was one year starting from July 2005 to June 2006. Data were obtained from both BSMMU and DMCH. The Socio-demographic data were assessed. The sub-types of Dissociative (conversion) disorders were seen. The sociodemographic data of present study is shown in Table I. It is found that female (83%) largely out numbered male (17%), mean age was 23.4 years, majority of the population completed 6 to 10 years of schooling (58%).

The mean duration of illness were 10.7±14.3 weeks ranging from 1 to 54 weeks. More than half of the patients 56% had duration of illness less than 5 weeks followed by 29% had duration of illness 10 weeks and above and 15% had 5-9 weeks of duration of illness (shown in Figure 1).

Table I: Socio-demographic characteristics of the patients

Characteristics	Frequency	Percent
Age in years		
<20	41	41.0
20-29	36	36.0
30-39	15	15.0
≥40	8	8.0
Mean± SD =23.4±9.0	Range =10-48 years	
Sex		
Male	17	17.0
Female	83	83.0
Habitat		
Urban	47	47.0
Rural	53	53.0
Religion		
Muslim	95	95.0
Hindu	5	5.0
Years of schooling		
0	4	4.0
1-5	21	21.0
6-10	58	58.0
≥11	17	17.0
Mean ± SD=8.0±3.6 years	Range =0-17 years	
Occupation		
Student	40	40.0
Housewife	39	39.0
Service	11	11.0
Others	10	10.0
Marital status		
Unmarried	44	44.0
Married	53	53.0
Separated	2	2.0
Divorced	1	1.0
Monthly family income (Tk)		
<5000	37	37.0
5000-9999	26	26.0
10000-14999	19	19.0
≥15000	18	18.0
Median (Tk) = 6000.0	Range = Tk. 1200-100,000	
Family type		
Joint	42	42.0
Nuclear	58	58.0

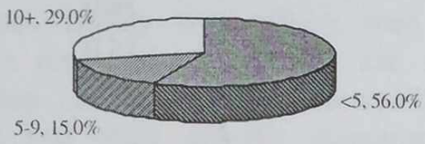

Figure 1: Distribution of patients by duration of illness

The subtypes of Dissociative (conversion) disorders were identified also (Table II).

Table II: Distribution of patients by sub-types dissociative (conversion) disorder

Pattern of Dissociative (conversion) disorder	Frequency	Percent
Mixed dissociative (conversion) disorders	34	34.0
Dissociative convulsions	33	33.0
Dissociative motor disorders	19	19.0
Dissociative anaesthesia and sensory loss	5	5.0
Dissociative amnesia	4	4.0
Dissociative fugue	3	3.0
Dissociative stupor	1	1.0
Trance and Possession disorder	1	1.0
Other Dissociative (conversion) disorder	0	0.0
Dissociative (conversion) disorders, Unspecified	0	0.0

Pattern of dissociative (conversion) disorder indicated that highest percentage 34% had mixed dissociative disorders followed by dissociative convulsions 33%, dissociative motor disorders 19%, dissociative anaesthesia and sensory loss 5%, dissociative amnesia 4% and other minor illness are dissociative fugue 3%, dissociative stupor 1% , trance and possession disorder 1% In this study the researcher find neither, Other Dissociative (conversion) disorders (which includes multiple personality disorders, Gansers syndrome etc) nor Dissociative (conversion) disorder, unspecified.

Discussion

The objective of the study was to see the subtypes of dissociative (conversion) disorders attending the two tertiary hospitals in Dhaka.

In this study, the mean age of patients was 23.4±9.0 years ranging from 10 to 48 years. Another study carried out in Bangladesh found age range 8 to 40 years[13]. In this study, 83% patients were female and 17% were male. Conversion disorder appears to be more in females than male, with reported ratio (Male: Female) varies from 2:1 to 10:1[14]. Fifty three of the respondents were from rural areas. Majority of the patients were Muslims (95%). This finding reflects the religion of the general population in Bangladesh.

The mean year of schooling were 8.0±3.6 years ranging from 0 to 17 years of education. In this study more than half patients (58%) had 6-10years of schooling. This finding was similar with the findings of other studies done in Bangladesh[12 - 14].

Among the respondents occupation, 40% were students, 39% were housewives and 11% were service holders. Findings were comparable with other studies done in Bangladesh. Fifty three patients were married. This finding is excessive of another clinic based study done among the private chamber patients[14]. The reason why married patients are having conversion disorder may be due the more stressful life events among the married population.

We have assessed the sub types of dissociation (conversion) disorders according to ICD-10. Among the patients 34% of patients had mixed dissociative (conversion) disorders, followed by dissociative convulsions 33%, dissociative motor disorders 19%, dissociative anaesthesia and sensory loss 5%, dissociative amnesia 4%, dissociative fugue 3%, dissociative stupor 1%, trance and possession disorder 1%. However, the researcher did not find any (F44.8) other dissociative disorder (Multiple personality disorder, Ganser's syndrome etc) or dissociative disorder, unspecified type (F44.9). Mixed Dissociative

(conversion) disorder was found highest (34%) among the sub types of Dissociative (conversion) disorders. This finding is consistent with study done in Europe[6,7]. Dissociative Identity disorder is common in North America. However in India, Dissociative Identity disorder was found to be non-existent[11]. Our finding is consistent with the findings of India. So it can be assumed that Dissociative Identity Disorder (Multiple Personality Disorder according to ICD-10) is a culture specific Disease. The ICD-10 researchers also suggested so, as Multiple personality disorder is much common in North America than in Europe[4]. Though sample size of the present study is not large enough but still this finding is important in cross cultural perspective. Further studies using large sample, to identify the sub-types of Dissociative (conversion) disorder is necessary to evaluate the findings of the present study.

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