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Socio-demographics and Clinical Characteristics of Patients with Conversion Disorder

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The study explored the socio-demographic and clinical characteristics of patients diagnosed with conversion disorder, as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association, 2000). 47 diagnosed patients visiting Out-patient Clinic of Institute of Clinical Psychology, University of Karachi, Pakistan, during 2005-2006 were interviewed through a semi-structured Interview Form for Psychological Assessment designed by the Institute of Clinical Psychology, University of Karachi. Results indicate that mean age of the sample was 26.44 years; 76.59% being women; 59.57% were unmarried; 63.83% belonged to middle socioeconomic status. Majority of the patients had less than or up till 10 years of schooling (61.70%); 51.06% had middle birth order; and 53.19% were living in nuclear family structure. Also, 46.8% experienced mixed symptoms whereas 23.4% experienced motor symptoms. The most common stressor identified was problem with primary support group (36.2%). Mean score on Global Assessment of Functioning was 56.

Keywords: clinical characteristics, patients, conversion disorder, socio demographics.

The term "hysteria" has served in the past as an umbrella to a multitude of disorders (Abse, 1987; Merskey, 1995) presenting with symptoms originating from dynamic mechanisms (Breuer & Freud, 1955). Szasz (1961) showed a concern regarding the concept of hysteria that has undergone repeated changes and even its validity as a psychiatric entity has been questioned. According to Pu, Mohamed, Imam, and El-Roey (1986), the term "hysteria" is dropped from recognized classifications of psychiatric disorders (e.g. DSM IV, ICD 10), although it is commonly used in the clinical practice. Therefore, hysteria been clearly classified it into two diagnosable categories i.e., conversion disorder and dissociative disorder, respectively. He further

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reported a decline in the use of hysteria as a diagnostic label in western countries possibly as a result of its opponents and the increasing sophistication of society. Though on decline in the West (Singh & Lee, 1997), conversion disorder still continues to be one of the most frequently diagnosed psychiatric problems in Eastern countries such as Egypt (Okasha, 2004), Eastern Libya (Pu et al., 1986), Saudi Arabia (Hafeiz, Al-Maghrabi, & El-Sayed, 1988) and India (Subramanian, Subramanian, Devaky, & Vergheese, 1980).

Several theories have been proposed that explain the etiology of conversion disorder. Ford and Folks (1985) and Binzer and Kullgren (1996) concluded that it is unlikely that there are any universal etiological concepts. At present a multidimensional approach to the understanding of conversion reactions is still usually employed in which there are both separate and simultaneous biological, psychodynamic, socio-cultural, and behavioral explanations. By constructing the theory regarding the existence and action of the unconscious, and based on his experience with conversion patients, Freud (1896) has provided an understanding of the psychodynamic background and etiology of conversion disorder. Suppression is believed to be the major defense mechanism involved in conversion, as noted by the close relation between conversion conditions and traumatic events in the patient's past (Lazare, 1981). According to Freud (1896), an impulse or a wish that cannot be fulfilled due to negative connotations (such as fear, shame, guilt, or anger) is converted into physical expression, so that the conversion symptoms actually reflect a symbolic solution to the same unconscious psychological conflict. Freud accentuated the symbolic relation existing between the type of the conversion symptoms and the conflict (Miller, 1987; Yarom, 1997).

As the etiology and causes of the conversion disorder have various explanations, similarly it has varied presentation of symptoms. Usually conversion disorder is presented, with seizure like symptoms, or fits of unconsciousness (Dula & DeNaples, 1995; Jain, Verma, Solanki, & Sidana, 2000; Srinath, Bharat, Girimaji, & Seshadri, 1993) and in studies done by Kuloglu, Atmac, Tezean, Gecici, and Bulut (2003) and, Uguz and Toros (2003) frequency of fits was reported to be 40.3% to 41.3% followed by 40.3% for sensory symptoms, 12.6% for mixed symptoms and only 5% of the patients with this disorder presented with motor symptoms. McConnell, Valeriano, and Brillman, (1995) reported cases of seizures occurring on or immediately before the wedding day. They concluded that seizures occurring at the time of psychological stress may be either

neurological or psychiatric in origin. On the other hand, Babinski (as cited by Hare, 1991; Mace, 1992) defined hysteria as a disease with a psychological etiology, and no clear physiological or morphologic evidence, and characterized the hysterics as hyper-suggestible and easy to hypnotize.

Research on conversion disorder also extends to the demographics and socio-demographics of people suffering from the disorder. Previous studies have suggested associations between conversion and many different characteristics. There are divided opinions on the male-female frequency of conversion disorder. Hafeiz (1980) and Ziegler (1970) reported conversion disorder to appear more frequent in females, with reports varying from 2: 1 to 15: 1, although other reports state that there is no difference (Chodoff, 1974). Female gender (Lempert, Dietrich, Huppert, & Brandt, 1990; McKegney, 1967), position within siblings (Stephens & Kamp, 1962; Ziegler, Imboden, & Meyer, 1960), and low socioeconomic status (Maxion, Fegers, Pfluger, & Weiganfd, 1989; Stefansson, Messina, Meyerowitz, 1976) have all been proposed to be associated with conversion. APA (1994) also described conversion disorder as more frequent in rural areas, among low socio-economic status, and among subjects with less medical and psychological knowledge. There is earlier evidence that patients are more apt to be the youngest child in the family (Stephens & Kamp, 1962; Ziegler, et al., 1960). Other studies show no relation with birth orders (Barnert, 1971; Ljungberg, 1957; Wilson-Barnett & Trimble, 1985). Usually conversion disorder appears in adolescence or young adulthood. Presentation before the age of 10 or after 35 is rare, though cases have been reported (APA, 1994). Conversion disorder in children below the age of 10 is usually limited to walking impairments (Thompson & Sills, 1988) or convulsions. In Mace and Trimble's (1996) study, poor outcome was associated with higher age.

Besides socio-demographics, other associated factors might be the presence of any stressor or personality disorders. Comorbidity is often associated with poor treatment outcome, severe illness courses, and high service utilization. This presents a significant challenge in the identification, prevention, and management of people with comorbid disorders (Teesson, Degenhardt, Proudfoot, Hall, & Lynskey, 2005). As Hafeiz (1980) and Mace and Trimble (1996) put it, factors associated with favorable outcome are male gender, acute onset of symptoms, precipitation by a stressful event, good premorbid health, and absence of organic disease or a concomitant psychiatric disorder. During the course of the disease the subject tends to have

dependent behavior or adopts 'the patient role'. Accompanying psychological symptoms are abundant and include dissociative disorder, depression, and personality disorders (especially borderline, anti-social, and dependent; APA, 1994). The presence of a personality disorder at symptom onset serves as a significant risk factor for poor outcome (Lempert & Schmidt, 1990; Ljungberg, 1957; Mace & Trimble, 1996; Slater & Glithero, 1965): Hysterical personality was found to be the only significant predictor for poor outcome (Chandrasekaran et al., 1994). Personality disorders (Folks, Ford, & Regan, 1984; Ljungberg, 1957) and emotional stress (Maxion et al., 1989; Raskin, Talbott, & Meyerson, 1966) were evidenced to be related to the conversion.

Mace and Trimble (1996) found that other DSM-IV Axis I diagnoses were not found to be associated with outcome, nor was the degree of the stress factor triggering the conversion reaction, as described by Axis IV in DSM-IV. Briquet (as cited in Mai & Mersky, 1981) claimed that conversion disorder was due to stress and environmental situations, affecting 'affective' areas in the brain of person with pre-morbid hypersensitivity. Environmental factors and stressors found associated with conversion include presence of any traumatic event in life which reported to have found in 80% of the patients (Bowman & Markand, 1996), which might have occurred in the past as childhood sexual and physical abuse (Lussier, Steiner, Grey, & Hansen, 1997), or recently before the onset of the illness (Jain et al., 2000). Traumas might include childhood physical or sexual abuse, trauma in adulthood, stress of examination or failure, quarrels with peers or spouse, interpersonal conflicts and difficulties of daily life (Bhatia & Vaid, 2000; Thiam & Gueye, 1998).

DSM-IV Axis V is used for reporting the clinician's judgment of the individual's overall level of functioning. This information is useful in planning and measuring its impact, and in predicting outcome. Global Assessment of Functioning measures patients overall level of psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness. It does not include impairment in functioning due to physical (or environmental) limitations (American Psychological Association, 2000). In present study 'The Global Assessment of Functioning Scale' (APA, 2000) was used to determine the level of functioning at the time of the evaluation, which reflects the need for treatment or care of patients.

While reviewing the factors associated with conversion disorders, it seems beneficial to assess and present baseline data about the socio-demographic status and clinical features of patients who

visited out patient clinic of Institute of Clinical Psychology. University of Karachi, Pakistan. The purpose is to present a systematic analysis of patients with conversion disorder.

Method

Sample

The sample included those diagnosed patients of conversion disorder who visited the Out-patient Clinic (OPD) of Institute of Clinical Psychology during the year 2005-2006. From total reported cases during the afore mentioned period at OPD, 47 were diagnosed as patients of conversion disorder.

Instruments

Interview Form for Psychological Assessment. Interview Form for Psychological Assessment (Case History Sheet) is designed by the Institute of Clinical Psychology, University of Karachi, which is based on the criteria of Diagnostic and Statistical Manual of Mental Disorders, as well as other details necessary to carry out the diagnosis. It consisted of demographic information, which focused on the subject's age, sex, marital status, education, occupation, number of siblings, family structure, birth order, parent's education, and occupation, earning members of family, languages etc. In general, the Interview Form includes questions related to presenting complaints, symptoms of psychological and personality disorders, medical familial, social and sexual history. It also incorporates mental status emotion of the patient.

Procedure

It was a descriptive study and sample was drawn from the Institute of Clinical Psychology, selected on the basis of purposive sampling. It included those diagnosed patients who visited the out patient clinic of Institute of Clinical Psychology during the year 2005-2006. Patients were diagnosed after going through the process of complete psychological assessment procedure established at the Institute, which requires at least five intensive interview sessions of assessment through use of projective and objective measures. The patients with conversion disorder were approached after taking consent from the clinical Incharge of the Institute of Clinical Psychology.

Patients were interviewed again and the examiner filled in the semi-structured Interview Form for Psychological Assessment to further confirm the diagnosis and clinical/personal information. Presentation of motor, sensory, pseudo-seizure, and mixed symptoms of conversion were also ruled out through intensive clinical interview.

The socioeconomic status was also determined and participants were screened out. Ansari (2003), and Siddiqui (2003), reported socioeconomic status into three levels as Low, Middle and High on the basis of household income and expenditure survey conducted by the Federal Bureau of Statistics (FBS, 2001). Low socioeconomic status is considered when household have a monthly income of Rs. 14000 and below; middle socioeconomic status, when monthly income is Rs. 14000 to 30000; and high socioeconomic status is when monthly income of Rs. 30000 and above.

Statistics

Frequencies, percentages, means, and standard deviations were obtained after evaluating the data. Statistical analyses were carried out using Statistical Package for Social Sciences, twelve version (SPSS, V12) for Windows.

Results and Discussion

Table 1
Frequency and Percentages of Demographic Variables of the Sample with Conversion Disorder (N = 47)

Variables		*f*	*P*
Sex	Men	11	23.40
	Women	36	76.59
Socioeconomic Status	Lower	16	34.04
	Middle	30	63.83
	Upper	1	2.13
Marital Status	Single	28	59.57
	Married	17	36.17
	Divorced/widow	2	4.26
Family Structure	Joint	22	46.81
	Nuclear	25	53.19
Birth Order	First	14	29.79
	Middle	24	51.06
	Last	7	14.89
	Only	2	4.26

Continued...

Variables		*f*	*P*
Education	None	3	6.38
	Primary	10	21.28
	Middle	6	12.77
	Matriculation	10	21.28
	Intermediate	12	25.53
	Graduation	4	8.51
	Master	2	4.25

Present study is consistent to an extent to the previous findings that conversion symptoms are seen more often in poorly educated people of low socioeconomic status (Barnert, 1971; Maxion et al., 1989; Stefansson et al., 1976). Findings reveal that (see Table 1) majority of the study sample belonged to the middle (63.83%) socioeconomic status whereas only 2.13% belonged to upper socioeconomic status. Regarding educational qualification, majority of the patients were found to have less than or up till 10 years of schooling (61.70%) with 6.38% of illiterate patients (see Table 1). Researchers are in agreement to the fact that hysteria is more common in people with limited education (Marthur, 1975; Subramanian et al., 1980). The incidence of hysteria decreases with increasing level of education.

In addition, as far as the birth order is concerned, 51.06% of the patients belonged to middle-birth order, 29.79% first and 14.89% were last borns (see Table 1). Findings are consistent with previous research which found that middle born are the most vulnerable to develop conversion disorder (Khan, Ahmed, & Arshad, 2006). The reason for this difference in the people with different birth order might be that first born and the last born are given much attention, and opportunity to share their feelings while middle born might not be allowed or provided the opportunity to expression their feelings which results in producing repression. Besides birth order, marital status is another important variable. Out of the 47, subjects 28 (59.57%) were unmarried, 17 (36.17%) were married and 2 (4.20%) divorced/ widowed. However occurrence of conversion disorder in both family structures (Nuclear = 53.19%; Joint = 46.81%) were found to be almost equal.

In the present study the majority (76.59%) of patients with conversion disorder were women. The reason might be the high economic and social constraints among the women in our culture. In societies like Pakistan, women are not allowed to express themselves

openly therefore hysterical symptoms become an acceptable way for them to let out their feelings.

Table 2

Frequencies, Percentages, Mean, and SD of age (N = 47)

Age (Years)	*f*	*P*
≤ 10	0	0.00
11-19	21	44.70
20-29	12	25.50
30-39	09	19.10
≥ 40	05	10.60
M	26.44	
SD	11.78	

Table 2 reflects that the mean age of total sample was 26.44 years (*SD* = 11.78), with the greatest number of cases falling in the range of 11-19 years (44.7%). The results of the present study are consistent with the findings of previous studies, as conversion disorder was found to emerge between childhood and young adulthood; diagnosed twice as often in women as in men (APA, 1994; Tommason, Kent, & Coryell, 1991).

Table 3

Frequencies and Percentages of Diagnosed Symptoms (N = 47)

Diagnosed Symptoms	*f*	*P*
Mixed	22	46.81
Sensory	9	19.15
Motor	11	23.40
Seizure	5	10.64

According to Diagnostic and Statistical Manual of Mental Disorders-IV (APA, 1994) conversion disorder is an illness, which presents with sensory, motor, pseudo seizure or mixed symptoms precipitated by the stress in the absence of any physical illness. The present study indicates (see Table 3) that 46.81% of subjects

experienced mixed symptoms, 19.15% sensory, 23.40% motor and 10.64% seizure symptoms of conversion disorder.

Table 4

Frequencies and Percentages of Co-morbid Personality Disorders (N = 47)

Diagnosis	*f*	*P*
No Diagnosis	39	83.0
Histrionic Personality	2	4.3
Borderline Personality	2	4.3
Narcissistic Personality	1	2.1
Schizotypal Personality	1	2.1
Dependent Personality	2	4.3

There is also incidence of personality disorders in conversion disorder which influence the treatment outcome. Few researches indicate common presence of personality disorders and having close relatives with psychiatric illness or severe somatic disease in patients with conversion disorder (Binzer, Andersen, & Kullgren, 1997). In the present study (see Table 4) only 17% of the subjects had co morbid personality disorder (Histrionic Personality 4.3%, Borderline Personality 4.3%, Narcissistic Personality 2.1%, Schizotypal Personality 2.1%, and Dependent Personality 4.3%). This is in agreement with other studies, in which the frequency of personality disorders is in the range of 16 - 46% (Folks et al., 1984; Lecompte & Clara, 1987; Ljungberg, 1957; McKegney, 1967).

Table 5

Frequencies and Percentages of Co-morbid Axis IV Diagnosis (N = 47)

Diagnosis	*f*	*P*
None	8	17.0
Problems with Primary Support Group	17	36.2
Lack of Social Support	2	4.3
Partner Relational Problems	5	10.60
Occupational Problems	2	4.30
Financial Problems	4	8.50
Academic Problems	2	4.30
Relational Problems	6	12.8
Family Discord	1	2.1

Briquet and Charcot (as cited in Mace, 1992) have contributed to the development of the concept of conversion disorder by noting the influence of heredity on the symptoms and the common association with a traumatic event. In the present study (see Table 5) stressors were clearly identified in 83% of the subjects while in 17% subjects there was no indication of any stressor. Among all the identified stressors top three stressors include; problem with primary support group (36.2%), relational problem (12.8%) and partner relational problem (10.6%). Findings of the present study are consistent with the result of previous studies. Irfan and Badar (2002) reported that 90% of the subjects of their study had a history of stressors. Stress occurs when people are faced with events or situations they perceive as endangering their physical or psychological well being. These events are usually referred to as 'stressor' and the people's reactions to them are considered as 'stress response'. These perceived stressors usually fall into one or more of the following categories: Traumatic events, uncontrollable events, unpredictable events, or events challenging the limits of one's capabilities and self-concept (Atkinson et al., 1993). Thus stressors appeared as the most significant associated factor of conversion disorder.

Table 6

Global Assessment of Functioning at the time of Admission of Patients of Conversion Disorder (N = 47)

N	*Minimum*	*Maximum*	*M*	*SD*
47	35.00	75.00	56.15	8.49

Minimum Global Assessment of Functioning of the subjects was reported (see Table 6) to be 35 whereas, maximum Global Assessment of Functioning was 75 with mean of 56, which lies in the range between (51-60) indicating moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) or moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers; APA, 2000).

Although the results are found to be consistent with the expectations and previous findings, the results of study can not be generalized; as it has few limitations including the selection of patients from only one institution of Karachi, and limited sample size. However, study provides baseline information and stresses the need for further studies targeting the less considered population of people

with conversion disorders in Pakistan, with respect to their socio-demographics and other associated factors. The consideration will provide the clues to etiological as well as vulnerability factors of this commonly occurring disorder.

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