

CONVERSION DISORDER IN YOUNG PEOPLE OF KARACHI: A 20 YEARS RETROSPECTIVE REVIEW

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ABSTRACT

OBJECTIVE: To explore the symptoms of conversion disorder in children and young adults admitted in a tertiary care hospital of Karachi.

STUDY DESIGN: Descriptive retrospective study.

PLACE AND DURATION OF STUDY: Department of Psychiatry, Aga Khan University hospital Karachi. Case note review of all records from January 1990 to December 2009 i.e. 20 years.

METHODOLOGY: We performed a case note review of all patients less than 25 years of age who had been admitted with a diagnosis of conversion disorder over a 20-year period.

RESULTS: A total of 121 case notes were reviewed out of which there were 87 females and 34 males. Motor symptoms were seen in 34.7% (n=42), followed by pseudo seizures in 24.8% (n=30) and unresponsiveness in 14% (n=17) of the patients.

CONCLUSION: Children and young patients who were diagnosed with conversion disorder presents with variable symptoms. Like similar studies from the other countries motor symptoms were most common. The differences in presentation, stressors and duration of illness in this study enunciated a call to explore these phenomena in prospective study design.

KEYWORDS: Conversion disorder, Mental health, Children & Adolescence, Dissociative disorder, descriptive studies.

INTRODUCTION

Conversion disorder has been classified differently in diagnostic and statistical manual of mental diseases version IV (DSM-IV) and International classification of diseases (ICD-10). In DSM IV it comes under broad category of somatoform disorders whereas in ICD 10 it has been classified separately with other dissociative disorders. Both systems share a common point that symptoms should have no physical/organic aetiology. In the conversion disorders it is presumed that this ability over conscious and selective control is impaired. It is usually very difficult to assess because of variability of presentation and subjective assessment of extent of loss of functions that might be under voluntary control. The notion about prevalence of conversion disorder in developed countries is of decline but emerging evidence suggest contrary. Children and young adults are the main age groups presenting with it. Its presentation is peculiar with gender and geographical area. In children and young adults pseudo seizures and gait abnormalities are the main presenting symptoms and motor symptoms are more prevalent in western countries. Study from Germany reported prevalence as around

0.2% in age group from 14 to 24 years. High prevalence has been found in young women, uneducated, rural and in people from lower socio economic background.

There is no national surveillance study from Pakistan. Previous studies have generally looked into retrospective data without any age limit or its association with depressive disorder and family functioning. Two studies from the same institute (Aga Khan University Hospital) have reported 257 patients admitted with conversion disorder in all ages from 1989 to 2005 in total. A hospital based study from Rawalpindi reported conversion as the fifth most common indication for hospital admission. Similar findings have been reported from neighbouring country India, reporting 31% hospital admission with this diagnosis. There is a dearth of research on conversion disorder from Pakistan in children and young adults, which makes around 43% of Pakistan population (78786 thousands are below 18). Our aim was to explore the symptoms of conversion disorder in children and young adults admitted in a tertiary care hospital of Karachi.

METHODOLOGY

This was a retrospective study conducted at the Aga Khan University Hospital (AKUH), Karachi Pakistan. Patients were identified using the Psychiatric Assessment System (PAS), which records the basic demographic and clinical details. We retrieved a total of 437 records of patients with the diagnosis of conversion disorder or Pseudo-seizures, below age 25, who visited and were admitted in hospital from January 1990 to December 2009 i.e. 20 years. Out of 437 records only 121 were available for review. Rest of the files were either coded wrongly with the diagnosis, not available for study or there was duplication because of readmissions. Data collection form was formulated that included socio-demographic details, Psychiatric diagnosis, and mode of presentation, investigations and possible stressors noted in case notes. [Our inclusion

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criteria were diagnosis of conversion disorder, age below 25 years and visits' to Aga Khan hospital. There was no exclusion criterion except those with incomplete file notes].

RESULTS

Out of our total sample of 121 patients who presented to the psychiatry services from January 1990 to December 2009, there were 87 (72%) females and 34 males (28%), giving a female to male ratio of 2.5:1, with mean age of 17 years. Majority were single 95 only 22 (18%) were married, information regarding 5 patients was missing. 30% (n=37) of the sample studied up to matriculation, followed by 22% (n=27) primary education, 13% (n=16) intermediate, 10% (n=12) graduate and less than 05% (n=5) were either illiterate or from Madressa system. In 20% (n=16) of the notes, information regarding education was missing. In this sample 59% (n=71) were student and 16% (n=20) housewives, rest were unemployed or labour. Majority of the sample was Muslim.

Duration of unattended/untreated period was up to 01 week in 61% (n=74) of the patients, followed by one month and more in 19% (n=22), information in 6 files were missing about this field.

TABLE – I: PRESENTING SYMPTOMS OF PATIENTS WITH CONVERSION DISORDER

| Presenting Complaints | Frequency | Percent |
|-----------------------|------------|--------------|
| Motor | 42 | 34.7 |
| Pseudo seizures | 30 | 24.8 |
| Unresponsiveness | 17 | 14 |
| Muteness | 06 | 5.0 |
| Tremors | 06 | 5.0 |
| Fainting spells | 03 | 2.5 |
| Stupor | 02 | 1.7 |
| Sensory | 01 | 0.8 |
| Others | 14 | 11.6 |
| Total | 121 | 100.0 |

DISCUSSION

As far as we could ascertain this is the first study from Pakistan over conversion disorder in children, adolescents and young adults. Being retrospective data it has an inherent limitation of relying on available data. Because of this there was missing data so we narrowed our proforma to focus available information. Children and adolescents form the major faction of Pakistan population as recent statistics reports a total of 43% below age 18.¹⁰ Our search criteria was up to age 25 as clinical observations suggested alike issues till young adulthood. Conversion disorder is now considered as rare in many of the western countries but in this part of world it is still one of the common indications for admission.

In our sample there were more females (71%) which is comparable with findings of previous studies from same

Majority of the patients 61% (n=74) had no previous episodes of conversion disorder, though 21% (n=25) had 2-5 previous similar episodes. 52% (n=62) had depressive symptoms at the time of presentation, and in 79% (n=96) there was no past psychiatric history.

Motor symptoms were seen in 35% (n=42), followed by pseudo seizures in 25% (n=30) and unresponsiveness in 14% (n=17) of the patients (Table 01). Interestingly 40% (n=48) did not report any stressor during hospital stay, whereas relationship problems were reported by 17% (n=20) and family related problems in 14% (n=17). In 8% (n=10) records this information was missing. During stay 34% (n=41) did not undergo any investigation. Baseline investigations were done in 23% (n=28), Scan (CT/MRI brain) in 21% (n=25) and EEG in 20% (n=24).

Before admission to hospital 20% (n=24) had received Anti-depressant, 09% (n=11) Benzodiazepine, 7% (n=8) Anti-epileptic and 6% (n=7) Antipsychotics, whereas 48 % (n=58) were on no treatment. On discharge 28% (n=33) patients were prescribed Antidepressants, 8% (n=10) Benzodiazepines, 6% (n=7) Antipsychotics and 04 Anti epileptics. In rest 54% (n=65) no Pharmacotherapy was prescribed.

TABLE – II: DURATION OF UNTREATED PERIOD

| No. of Days | Frequency | Percent |
|--------------|------------|--------------|
| 1-7 days | 75 | 62 |
| 8-30 days | 23 | 19 |
| >30 days | 23 | 19 |
| Total | 121 | 100.0 |

institute.⁷ A study from Australian paediatric population reported more females (76% in age 10-16 years) and overall mean age as 11.8 years,⁵ similar to findings by a study from India (11 years). As we focus our study to child and adolescent, the average age was 17 years; giving an estimate that conversion disorder is prevalent in females irrespective of the age and place of study. But recent evidence from Taiwan suggest a changing trend in comparison of two decades (1987-1996 and 1997-2006) as more males are being diagnosed with Conversion disorder as compared to females (p-value 0.05).³ One psychological explanation of conversion disorder is that it could be the physical manifestation of underlying unexpressed, unresolved psychological conflict. Females are more vulnerable population in this part of the world because majority are not encouraged to express their feelings and emotions, and for males being expressive is considered as sign of weakness. Low level of education has been associated with mode of presentation of conversion disorder in studies from globe. Reports from Pakistan are contrary as Khan S et al, MN Khan et al and both found majority of their cases to be educated minimally to secondary level. Although this would be difficult to infer as we already focus a young cohort, but our findings came different. In our sample majority were educated among whom 30% were matriculated, a finding similar to a study by Khattak T. Matriculation or grade ten education is of appropriate level as

our sample mean age was 17 years. This suggests comparing level of education and coping skills in child and adolescents further in future studies.

Duration between onset and diagnosis was up to one week in 62% of cases and one month or more in 19% of cases. This is comparable with other studies carried out in Australia⁵ and Turkey. Duration of untreated symptoms indicates how much time parents take to seek consultation with physician and their understanding of illness. Cultures with strong family system are more deeply invested and are at a greater chance of picking and identifying any abnormal symptom. Pakistan has relatively more close family system as compared to west. In practicing Medicine, Physician from developed countries with more state owned health system investigates thoroughly before giving a diagnosis of exclusion like conversion disorder. Probably these two factors have lead to an early diagnosis in our case.

Presentation of conversion disorder differs with age and place; pseudo seizures and gait difficulties are more common in child and adolescents and motor symptoms are the predominant manifestation in western countries. In our sample 34% presented with motor symptoms, which is a different finding compared to previous studies from same institute: in which unresponsiveness was the major symptom. The central difference is of methodology as we focus primarily population below 25 years. Comparing results with western studies describes similarity in presentation, as Kozłowska et al and Haung et al reported motor symptoms to be most prevalent, 64% and 47% respectively. 04 year follow up study from Turkey found pseudo seizures as the most common presentation. It would be difficult to comment on this difference of presentation from rest of the local studies and similarity to West, but probably its more associated with age than place.

Conversion disorder is a diagnosis of exclusion, so all the relevant investigations must be carried out before making this diagnosis. In a seven year follow up study of 85 patients, those who were initially diagnosed with conversion disorder, later at follow up 30 patients were given a final & definite diagnosis of organic disease and 34 had a definite psychiatric disorder other than conversion disorder. A systematic review reported a decline in the misdiagnosis from 29% in 1950s to a consistent low rate of 04% since 1960s. In our sample 34% did not had any investigation done. Analysing this in our setting suggests probable deliberate avoidance from investigations in view of high cost that patient family has to pay from their own pocket rather by the state.

There is a controversy in the aetiology of conversion disorder. Freudian school suggest presence of unresolved psychic sexual conflict converting into physical symptoms whereas cognitive behavioural school describes it as maladaptive coping to stress. Both are in agreement of secondary gain that perpetuates the illness. Identifying and helping in smooth resolution is the cornerstone of management. In our review of patient record, we found that in 40% of the patient there was no identifiable stressor. This is alarming as management depends on cause but this could be understandable considering a possibility of poor record keeping. Finding which was different from other studies is of family as a stressor, which emerged not as a major stressor

(14%) in our study contrary to local (79%) and study from outside Pakistan (up to 77%). A study from Pakistan evaluating stressors in patients has identified conflictual relations with in-laws, spouse, workplace and parents as the major stressor (cumulatively 46%). Being a retrospective study it would be difficult to comment over this finding, which need a prospective work.

CONCLUSION

The differences in presentation, stressors and duration of illness in this study enunciated a call to explore these phenomena in prospective study design.

LIMITATION:

Findings of this study needs to be carefully taken as this work is retrospective and there was missing fields in review of files; secondly being a private teaching hospital, patients from only a certain faction generally visits this hospital.

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