

Psychosocial and socio-demographic correlates of patients presenting with psychogenic non-epileptic seizures

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To study the psychosocial and socio-demographic correlates in patients with conversion disorder presenting with non-epileptic seizures and discuss its interventional implication. This cross-sectional descriptive study was carried out in Sri Sathya Sai Institute of Higher Medical Sciences, Bangalore, India from September 2008 to February 2009. 151 consecutive patients with conversion disorder satisfying the inclusion and exclusion criteria were selected. They were interviewed using semi-structured socio-demographic profile proforma, Holmes and Rahe stress scale for the exploration of psycho-social stressors. The data were entered on MS excel, analyzed by SPSS-version 16.0. The psychosocial stressors were clearly identified in all patients. Almost ninety five (94.70%, n=143) out of the total 151 subjects had a history of stressors, while in the rest 4.95% no stressors could be established. The commonest stressors were Troubles with in-laws (26.49%), Death of close family member (11.92%) and Increase in argument with significant others (10.59%). Significantly higher number of the patients presented with the stressor of troubles with in-laws, when assessed on the Holmes and Rahe Social Readjustment Rating Scale. Detection of exact nature of correlates has immense potential for therapeutic as well as preventive field.

Keywords: psychosocial correlates, conversion disorder, non epileptic events

The term conversion disorder was introduced by Sigmund Freud, who hypothesized that the symptoms of conversion disorder reflect unconscious conflict¹. Conversion disorder is a loss or alternation in sensory or voluntary function, that cannot be fully explained by known pathophysiological mechanism². One of the common presentations of conversion disorder is "Nonepileptic events" also called "pseudo seizures", "psychogenic", "non-epileptic" or "hysterical" seizures. Non-epileptic seizures are clinical events that resemble epileptic seizures but are not associated with abnormal cortical electrical discharges. Non-epileptic seizures are thought to be the result of an unconscious psychological conflict or other stressors, which is converted into symbolic somatic symptoms that relieves anxiety and protect the conscious self from stressful emotions. The symptoms also provide considerable secondary gain to the individual, as the sick role generates attention and sympathy. Because the illness is preceded by conflicts or other stressors¹, finding the relevant stressors would be of immense potential not only for therapeutic but also for preventive purposes.

This study was conducted to detect psychosocial correlates in patients with conversion disorder presenting with non-epileptic events so as to have a better insight into its phenomenology and management, particularly in the socio-cultural context of the area covered by the research centre.

Method

This cross-sectional descriptive study was conducted in Sri Sathya Sai Institute of Higher Medical Sciences, Bangalore, India. The study sample comprised of patients who presented with Non-epileptic events and were diagnosed with conversion disorder from September 2008 to February 2009 in Neuro O.P.D. of the centre. The diagnosis of conversion disorder was made according to the criteria laid down by DSMIV TR. All patients irrespective of age and gender satisfying the inclusion and exclusion criteria were included in this

study sample. Patients presenting with conversion disorder with underlying co-morbid psychiatric disorder were excluded from the study.

Instruments

Then using Hindi Version of Sack's Sentence Completion Test the area of stressor was found and finally Holm's and Rahe Social Readjustment Rating Scale 5 was administered on all patients to identify the stressors. The data were entered on MS excel 2007 and analyzed by SPSS- version 16.0.

Procedure

Detail psychiatric history, mental status examinations and relevant investigations were conducted on all patients. Socio-demographic data were collected by using semi-structured sociodemographic profile proforma.

Results

The study population was 151 patients. The age of subject ranged from 10-50 years, with mean of 24.28 years. Out of 151 patients, 124 (82.12%) were females and 27 (17.89%) were males. Among all the patients (n = 52, 34.43%) were single and (n =99, 65.57%) were married. Majority of the patients n = 71, 47.02% were illiterate, n = 43, 28.47% were primary educated, n = 27, 17.88% were matriculate, n = 8, 5.3% had higher secondary education and n = 2, 1.32% were graduate.

Occupationally, out of 151 patients, n= 12, 7.94% were employed and n =49, 32.45 % were unemployed and n = 90, 59.60% were house wives.

94.70% (n = 143) out of 151 patients had history of stressors while in the rest 5.30% (n = 8) no stressors could be detected. Based upon the history, the commonest stressors were troubles with in-laws (n = 40, 26.49 %), Death of close family member (n = 18, 11.92 %), Increase in argument with significant others (Viz. husband/boyfriend/girlfriend etc.) (n = 16, 10.59%) respectively. The detailed list can be seen in Table-1

Table 1: Observed stressors in the sample (n=151)

Observed stressors	No. of Patients	%
1. Trouble with in-laws	40	26.49
2. Death of a close family member	18	11.92
3. Increase in argument with significant others	16	10.59
4. Personal injury or illness		13 8.60
5. Change in living condition	12	7.94
6. Spouse begins working outside home	12	7.94
7. Change in health of Family	11	7.28
8. Marriage	05	3.31
9. Gain of new family member esp. a baby girl	05	3.31
10. Loan or Mortgage	04	2.64
11. Change in financial status	03	1.98
12. Trouble with boss	02	1.32
13. Fired from job	02	1.32
14. Nil	8	5.3

Discussion

The results of this study shows that conversion disorder can occur at any age being most common in adolescents and young adults although some studies suggest a peak onset in the mid to late 30s. Interestingly, plenty of works suggested that it is the pseudoseizure (nonepileptic event) type which is commonest in this population. It is an established fact now that conversion disorder is more common in people with lower education level and its incidence decreases with increasing level of education.¹⁰ In a similar study on conversion disorder, only 5% of the patients were university graduates, 21% had secondary school, 44% preparatory school, 22% primary school level education and 8% were illiterate.

Surprisingly, our study also reports 5 cases of non-epileptic events which occurred few days prior to marriage and one of them presented with sudden attack in the night after engagement but it is unlike the study of Mc Connell et al who reported five cases of pseudo seizures (non-epileptic events), occurring on or immediately before the wedding day. The major psychosocial stressors among patients of this category were premarital relationship coupled with the existing strict socio-cultural norms which most probably resulted in conflicts leading to the event. Although there is no obvious consensus about the relationship of conversion disorder with marital status but some studies have reported married Indian population to be more prone.^{10,13} On the other hand a Libyan study reported that the percentage of married patients suffering from conversion disorder was only 15% and 25% in males and females respectively.

Generally, conversion disorder is characterized by the sudden onset of symptoms in clear relation with the stress¹⁴ and this observation is further supported by the results of our study. We observed thirteen categories of stressors which may have been reported earlier too but with different order and frequency. The varying pattern of psychosocial correlates appears to be a silent indicator of impact of modernization on the phenomenology of conversion disorder in a developing country like India.

In children and adolescent the most common dissociative symptom are pseudoseizure and there are body of literature which suggests that outcome of dissociative disorders in this population is better when pseudoseizure is the presenting symptom. Early diagnosis and presence of precipitating factors are associated with a favourable outcome. Although our results shows that psychosocial

stressors were present in a large proportion of patients who presented with Non-epileptic events with a diagnosis of conversion disorder but this shouldn't be considered enough particularly in the sense that identification of the exact nature of stressors is very crucial for comprehensive management of such patients.

It is well known that insight oriented psychotherapy or behavior therapy facilitates improvement. The most important feature of the therapy is a relationship with a caring and confident therapist. With patients who are resistant to the idea of psychotherapy, it can be suggested that the psychotherapy will focus on issues of stress and coping. Any implication to the patient that he or she is malingering is very counterproductive.

Hypnosis, anxiolytics, behavior therapy and relaxation exercises are effective in some cases and their judicious use when the stressors are known precisely is more likely to further improve the efficacy.

Strength and limitation of the study

A sample with varying nature of psychosocial stressors relevant to contemporary socio-cultural system is the strength of this study. Secondly, one important utility of finding the exact nature of psychosocial correlates would be in the field of preventive psychiatry. A prior scientific awareness about implication of these correlates would help not only mental health professional but also the NGOs working for the cause of community mental health and allied social activity in delivering a quality service at the grass root level.

Although this study has many more strengths, it also has some limitations. Primarily this is a tertiary care, single centre work with small sample size because of which it lacks extrapolation to the community at large. As it's a cross sectional, descriptive study, it lacks follow-up for future outcomes. Administration of an indigenous and extended version of psychosocial stress rating scale could have helped in detecting more exact nature of psychosocial stressors. Despite of its limitation the study has implication for future research, particularly carrying out a community based large sample study with appropriate randomization and control would be of great value.

Conclusion

Psychosocial stressors are correlated with the development of conversion disorder. Both genders tend to develop symptoms of conversion disorder after stressful events. Significantly higher number of the patients presents the stressor of Troubles with in-laws. Detection of exact nature of correlates seems to have immense potential for therapeutic as well as preventive field.

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