

Conversion Disorder: A Comparison of Rural Versus Urban Population

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ABSTRACT

Aim: To find out the differences between the rural and urban population with conversion disorder regarding the sociodemography and symptomatology.

Duration: July 2009 to June 2011.

Results & conclusion: Out of 400 participants 161(40.25%) were from rural and 239(59.75%) from the urban areas. Female to male ratio was 4:1 and 66% of the study population was from the age group of 15 to 25. The differences regarding the symptomatology, we found that the convulsive category of symptoms was more frequent in the rural than in the urban population.

Keywords: Conversion disorder, rural, urban population.

INTRODUCTION

Conversion disorder is defined as “a condition in which there are isolated neurological symptoms that cannot be explained in terms of known mechanisms of pathology and in which there has been a significant psychological stressor”¹. Despite a recent revival in interest, it remains relatively neglected field of medicine and psychiatry.

It is often thought that the rates of conversion disorders are high outside the west though evidence for this is limited². Many authors have found rates to be higher in rural and lower socioeconomic group³. Conversion disorder is thought to occur primarily in societies which strict social system that prevents individuals from directly expressing their feelings and emotions towards others⁴.

The symptomatology of conversion disorder differs from population to population depending upon the local taboos and rituals⁵. It can present at any age but is rare in children younger than ten years of age and the elderly, with a peak incidence in the mid of late 30's⁶. Women predominate with between 2 and 6 females for every male patient⁷.

We planned this study to find out the differences between the rural and urban population with conversion disorder regarding the sociodemography and symptomatology.

MATERIAL & METHODS

A total of 400 patients of conversion disorder (according to DSM-IV-TR criteria) between 15 and 45 years of age of both gender were included while patients suffering from any medical disorder having a

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possible correlation with the presenting complaints and having a history of substance abuse who were using substance at the time of study. These cases were included from the Department of Psychiatry and behavioral sciences, King Edward Medical University/ Mayo Hospital Lahore, between July 2009 to June 2011.

A structure proforma was used as the data collection tool and comprised of thirteen sociodemographic features as variables in addition to the clinical presentation. Same proforma was used for the rural and urban population and the two groups had unequal number of subjects. The proforma did not include any personal information which could be used for identification of the participants. A separate record of first name, second name and address of the participants was kept to avoid the repetition of cases. Informed consent was obtained from the participants or their guardians, as appropriated by the circumstances.

SPSS version 15 was used to analyse the data. T test was used to find out the p value for the nominal variables (gender, marital status, occupational level, parental life and martial status, family history of psychiatric illness and the presenting symptoms category) and also the ordinal variables (age, group, educational level and income group), chi square test was applied to find the p value.

RESULTS

Out of 400 participants 161(40.25%) were from rural and 239(59.75%) from the urban areas. Female to male ratio was 4:1 and 66% of the study population was from the age group of 15 to 25. More than half of the study population had either received no education or less than 5 years of education and around 80% were unemployed. Thirty five percent of the study

sample had either one or both parents dead and almost 7% were those whose parents were either divorced or separated. Only 30(7.5%) out of 400 had less than four siblings, more than 63% had a middle birth order, and more than 55% came from the families with more than 5 members. Almost 85% had a monthly per capita income ranging from Rs. 500 to Rs. 3000 and family history of psychiatric illness was present in 16%. Motor and mixed categories of symptoms were the most common presentation followed by convulsive category. As far as the differences between the sociodemographic features of conversion disorder in the rural and urban population are concerned, there were some differences observed regarding literacy, employment family size and birth order. However, these differences are to be expected between the rural and urban population generally and do not reflect any particular significance. On the other hand when we consider the differences regarding the symptomatology, we find that the convulsive category of symptoms was more frequent in the rural than in the urban population.

DISCUSSION

On comparison the rural and urban population of the study regarding sociodemographic features we found considerable differences regarding gender, employment, number of siblings and birth order. Among the rural group the percentage of males presenting as conversion disorder patients was more, the rate of unemployment was higher, the percentage of patients having four or more siblings was higher and a middle birth order was also significant higher than in the urban population. While, on the other hand it is observed that there was no significant difference between the rural and urban groups as regards the age group distribution, marital status, parental vital and marital status, income per capita, family size and the family history of psychiatric illness. Comparing the presenting symptoms of the rural and urban population of the study, it was found that a higher percentage of conversion disorders from rural areas presented with exclusive convulsive symptoms than those from the urban areas, while not much difference was observed regarding the other presentations.

Studies in the past have shown a strong association of larger family size, number of siblings and a middle birth order with conversion disorder^{8,9} The current study shows that only 7.5% of the participants had less than four siblings and almost two third of the study population had a middle birth order. As for the family size, this study shows that

more than half of the subjects belonged to the families of more than five members. It can be said, as a result, that there is no discrepancy regarding family size, number of siblings and birth order between the results of this study and those of the previous ones. Limited data has suggested previously that conversion disorder is more frequent in the relatives of the patients of conversion disorder¹⁰. This study did not specify a family history of conversion disorder and rather included a family history of psychiatric illness and the rates for that were found to be 15%. Figures for the family history of psychiatric illness in the general population are not known so it is hard to make a suggestion as to whether this study's results show a significant association between the family history of psychiatric illness and conversion disorder.

Finally, coming to the presenting category of the conversion disorder we saw that there are some differences in the results of this study and those of previous ones regarding the clinical presentation of conversion disorder. This study shows that the motor and the mixed categories of symptoms are the most common presentations, followed by the convulsive symptoms, and sensory symptoms were the least common category. Previously many studies have been conducted focusing the convulsive symptoms of conversion disorder and some studies have also shown the convulsive category to be the most common presentation of conversion disorders.^{11,12} Some of the other studies state that the mixed category is the most common presentation.

There is a dearth of research literature when the differences between the rural and urban population when the sociodemographic features and the clinical presentation are considered. The impact of local customs and rituals over the presenting symptoms of conversion disorder has been suggested however in some of the previous studies. The findings of this study regarding the differences between rural and urban population with conversion disorder, therefore serve as an addition to the literature already available and also fill the gap somewhat which had received little consideration previously.

CONCLUSION

We concluded that the unemployment, illiteracy, large family size and middle birth order are more strongly associated with conversion disorder in the rural population than in the urban group. And as far as the differences in the clinical presentation are concerned this study concluded that the percentage of conversion patients presenting with only convulsive symptoms is higher among the rural population of the study than in the urban population.

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