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Socio-demographic correlates of persons with schizophrenia seeking care at Mental Hospital: a cross- sectional study from North-East India

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Abstract

Introduction: Schizophrenia is a chronic and debilitating psychiatric illness affecting about one percent of the world's general population. It needs continuous care as it is mostly a life time disorder. Disability associated with it is also very high. Multiple factors influence help seeking nature of these groups of patients and these needs to be studied so that suitable public health program can be designed and it appeals the users.

Aims and Objectives: This study was undertaken to identify the socio-demographic correlates of schizophrenia in a group of patients attending a mental hospital.

Materials and Method: This cross sectional study was carried out at the outpatient department of a psychiatric hospital in North East India. Study was approved by Institutional Ethical Committee. Written consents were obtained from each participant. Purposive sampling technique was used. Socio demographic and clinical parameters were collected in a pre designed proforma. Diagnosis of schizophrenia was done by trained psychiatrists using ICD-10 Classification of mental and behavioural Disorders (clinical descriptions and diagnostic guidelines). This was further re evaluated by the standardized Mini-International Neuropsychiatric Interview (MINI) version 6.0 (MINI v6.0). The psychiatric symptoms were assessed with BPRS rating and subjects high values in BPRS were excluded. Data analysis was done by Statistical Package for Social Sciences (SPSS) version 23.0.

Results: A total of 511 cases were included out of 554 subjects. Majority of the sample were males (70.6%), 83.4% was in age group of 21-40 years and were mostly from rural areas. Only 8% had formal employed status and majority were atleast matriculate. Hindu subjects were more in the group and majority had low family income.

Conclusion: Schizophrenia is a disease of the young and it usually runs a chronic course having significant impact on someone's life. The help-seeking nature of this disorder may be influenced by many socio economic factors including availability and acceptability of services, gender, age, socio economic condition, educational status, marital status and clinical status of the patients.

Keywords: Schizophrenia, Socio demographic profile, Mental hospital, BPRS, MINI, Help seeking

Introduction

Schizophrenia is a relatively common, chronic, and frequently devastating neuropsychiatric disorder, affecting about one percent of the world's general population.(1) People with schizophrenia may experience "positive symptoms" such as hallucinations, delusions, thought disorders and movement disorders. They may also experience "negative symptoms" like flat affect, reduced feelings of pleasure in everyday life, difficulty beginning and sustaining activities and reduced speaking. In some people "cognitive symptoms" are also noticed like poor executive functioning, trouble focusing or paying attention and problems with working memory. Poor cognition is related to worse employment and social outcomes and can be distressing to individuals with schizophrenia.(2,3)

Males tend to experience symptoms a little earlier than females. Most commonly, schizophrenia occurs in late adolescence and early adulthood. It is uncommon to be diagnosed with schizophrenia after age of 45 years and if it occurs after 45 years then it is called late onset schizophrenia. Schizophrenia rarely occurs in children, but awareness of childhood-onset schizophrenia is increasing.(4)

According to the World Health Organization (WHO), there are about 450 million people with different degrees of mental illness worldwide, among whom about 60 million suffered from schizophrenia.(5) It is reported that people with schizophrenia have a higher probability than the general population to suffer from HIV infection, osteoporosis, sexual dysfunction, obstetric complications, cardiovascular diseases, overweight and diabetes.(6)

Schizophrenia is a severe public health problem and a serious societal problem. It is a huge economic burden on the sufferer's family and on society. In nearly every society, schizophrenia is highly stigmatized. Prejudice and discrimination related to schizophrenia lead to poor treatment compliance, increased social isolation, difficulties in finding housing, education and employment and increased probability of alcohol and drug abuse. These consequences contribute to the disability produced by the disorder and establish a vicious circle of disadvantage increasing the burden on patients and their families.(7) Treatment seeking in mental health problems is influenced by many factors including culture, knowledge and belief of the person and the

community, economic factors, service facility availability, travelling issues, co-morbid health conditions, issues related to care giver, season particularly in rural areas and many more. All these are again different in a multi cultural society as seen in India. Again, India is in a socio-cultural and economic flux. Globalization is transfusing western thoughts in all aspects if Indian living. So the traditional beliefs about mental illnesses are also being challenged by the Western biomedical models. In contrast to traditional Indian model, where family members take most of the treatment decisions, the Western biomedical model emphasizes the concept of autonomy and patient's/caregiver's active participation in treatment decisions and this is being reflected in the regular process of legislature update in relation to the care of mentally ill persons. Understanding personal beliefs and explanatory models about mental illness as understood by the patients may prove beneficial for holistic management of this devastating illness.[8]

An understanding of the way in which people seek help for mental disorders is important for planning mental health services, coordinating the psychiatric referrals, and enhancing the treatment-seeking attitude and thus better clinical and functional outcome. Though psychiatric services are limited in many parts of the world, especially in developing countries like India, even at places where they are available and among those who could have easier access to avail benefits early from psychiatric services, significant proportion of patients find psychiatric services as the last resort after having consultations from many different types of non-psychiatric care providers, including faith healers. In this, lot of crucial time is lost, which could have relevance to better prognosis, as early recognition and management are of utmost importance in psychiatry. Trivedi et al commented regarding help seeking behavior and pathway of care that like many other such developing nations across the globe, India has made considerable progress with regard to mental healthcare facility, but faith healers are still the first care providers for majority of the psychiatric patients with poor referral patterns, and during pathways, there are instances where care seekers might revert back to faith healers or may simultaneously be seeking help from modern as well as traditional methods of therapy. Direct access to psychiatric services after the onset of illness is not a prominent pathway[9] and care at mental hospitals is also not sought frequently.

The causes of schizophrenia include environmental and genetic factors or both[10] which includes factors like educational level, economic levels, family history, migration, social support etc.

Hence this study was designed to find the Socio-Demographic correlates in patients with schizophrenia attending the outpatient department of a mental hospital situated at Tezpur, India which has been renamed as Lokopriya Gopinath Bordoloi Regional Institute of Mental Health and now it is involved in mental health education in different specialties of mental health disciplines. This hospital was built as a lunatic asylum in 1876 by Colonial Government and it is approaching 150 years of existence in service. The findings of the study may help us in understanding the help seeking nature of these groups of persons and their families and thus may help in formulating policies of care and rehabilitation.

Materials and Method

Subjects and sampling: The study was a cross sectional study carried out at the outpatient department of Lokopriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur, India. The catchment area of the hospital is mostly North East India including North Bengal. Out of 554 persons with schizophrenia selected using purposive sampling technique, a total of 511 were recruited for the study. Out of 511 subjects, 361 were male and 150 were female. 43 cases were excluded due to co-morbid medical illnesses, substance use and relatively poor psychotic state. Written informed consent was obtained. The study was approved by the Institutional Ethical Committee.

Inclusion criteria

- Age group ranging from 18-45 years.
- Both male and female subjects
- Diagnosis of schizophrenia as per ICD-10 Classification of mental and behavioural Disorders (clinical descriptions and diagnostic guidelines) confirmed by Mini International Neuropsychiatric Interview version 6.0
- Those who gave informed consent.

Exclusion criteria

- Co-morbid medical illness (e.g. Diabetes, Hypertension, Metabolic & endocrine disorders, any neurological deficits, chronic pain syndromes, epilepsy) or any other psychiatric disorder.
- Any co existing physical disability
- Any current use of tobacco, alcohol, cannabis or other substances in dependence pattern**.**
- Patients having active psychosis as defined by BPRS score >35.

Tools

The following instruments were administered:

a. A questionnaire/proforma was designed to elicit information on socio-demographic characteristics of patients and their clinical characteristics, such as illness and medication history, clinical examination.
b. The patients were diagnosed as per ICD-10 Classification of mental and behavioural Disorders (clinical descriptions and diagnostic guidelines) by trained psychiatrist
c. Diagnosis was reconfirmed using Mini-International Neuropsychiatric Interview (MINI) version 6.0 (MINI v6.0) by trained psychiatrist.

d. Assessment of the clinical status was done by psychiatrist using the Brief Psychiatric Rating Scale (BPRS).

Statistical Analysis: Data was analyzed using Statistical Package for Social Sciences (SPSS) version 23.0 (SPSS South Asia Pvt. Ltd., Bengaluru, Karnataka, India). Descriptive statistics used in the analysis of frequencies, mean, stand deviation and tables. Group differences were determined using Chi- square test and student t-test. p-value of 0.05 was considered as cut-off point for statistical significance.

Results

361 (70.6%) subjects of the sample was male. 426 (83.4%) subjects of the total sample was in the age range 21-40. It says schizophrenia is mostly an adult disorder and most of the service users are adults of productive age group. Only 3.3% of the sample was younger than 20 years of age (Table 1). 433 (84.7%) participants were from rural areas which consisted 314 (87%) male and 119 (79.3%) female subjects. 39 (7.6%) subjects of the sample had onset of illness before 18 years of age. 7.2% of males and 8.6% females had early onset schizophrenia respectively.

Mean age of the sample was 32.23 + 7.06 years. There was no significant difference between the mean age of male and female. Again the mean age at onset for the sample was 26.85±6.893. Although the mean age at onset for female was slightly higher than that of the male but there was no significant difference among them (Table 2).

50.9% of the sample was married and percentage of being married was higher among female as compared to male but the difference was not statistically significant. Only 8% of the sample was employed either in Government or private set up formally. However 45.6% and 46.4% were self employed and unemployed respectively. There was significant gender difference in employment status. 87.3% female subjects were unemployed although this contained the homemaker group. Only 12.7% subjects had family income of more than Rs 11500O per month. Majority of the sample were Hindu (68.9%) and there was no significant difference in gender in it. 86.1% of the sample were at-least matriculate but females were significantly illiterate. 57.1% were from nuclear family. One fourth (24.9%) of the sample had some member of the family suffering from psychiatric illnesses. The BPRS score was comparable among the groups but male had relatively significant longer mean duration of total illness.

Table 1: Socio demographic & Clinical variable (part 1)

Variable	Frequency (%)			
Gender	Male	361 (70.6)	**Male**	**Female**
	Female	150 (29.4)		
Age	< 20 years	17 (3.3)	8 (2.2)	9(6.0)
	21-40 years	426(83.4)	305(84.5)	121(80.7)
	>40	68 (13.3)	48(13.3)	20(13.3)
Age at Onset of Illness	<18	39 (7.6)	26 (66.7)	13 (33.3)
	18-45	472 (92.4)	335 (71.0)	137 (29)

Table 2: Socio demographic & Clinical variable (part 2)

Variable	Mean	Total (%)	Male(%)	Female(%)	P value
BPRS		26.05±2.409	26.08±2.478	25.98±2.242	0.669
Age	< 20 years	17 (3.3)	8 (2.2)	9(6.0)	0.093
	21-40 years	426(83.4)	305(84.5)	121(80.7)	
	>40	68 (13.3)	48(13.3)	20(13.3)	
	Mean:	32.23±7.062	32.45± 6.791	31.69± 7.667	
Marital Status	Married	260 (50.9)	175(48.5)	85(56.7)	0.092
	Unmarried	251 (49.1)	186(51.5)	65(43.3)	
Employment Status	Employed	41(8.0)	34(9.4)	7(4.7)	.000
	Unemployed	237(46.4)	106(29.4)	131(87.3)	
	Self-employed	233(45.6)	221(61.2)	12(8.0)	
Family Income (Per Month INR)	Less than 1500	32(6.3)	23(6.4)	9(6.0)	0.084
	1,500-3,500	121 (23.7)	84(23.3)	37(24.7)	
	3,500-5,500	130 (25.4)	105 (29.1)	25 (16.7)	
	5,500-7,500	98 (19.2)	62 (17.2)	36 (24.0)	
	7,500-9,500	35 (6.8)	23(6.4)	12 (8.0)	
	9,500-11,500	30 (5.9)	18 (5.0)	12 (8.0)	
	More than 11,500	65 (12.7)	46 (12.7)	19 (12.7)	

Religion	Hindu	352 (68.9)	245(67.9)	107 (71.3)	
	Islam	134 (26.2)	98 (27.1)	36 (24.0)	
	Christian	25 (4.9)	18 (5.0)	7 (4.7)	0.738
Education Level	Above Matric	161 (31.5)	127 (35.2)	34 (22.7)	
	Matric	279 (54.6)	197 (54.6)	82(54.6)	
	Illiterate	71 (13.9)	37 (10.2)	34 (22.7)	.000
Family Type	Nuclear	292 (57.1)	202 (56.0)	90 (60.0)	0.40
	Joint/Extended	219 (42.9)	159 (44.0)	60 (40.0)	
Locality	Rural	433 (84.7)	314 (87.0)	119 (79.3)	0.029
	Urban	78 (15.3)	47 (13.0)	31 (20.7)	
Family History	Present	127 (24.9)	91 (25.2)	36 (24.0)	0.774
	Absent	384 (75.1)	270 (74.8)	114 (76.0)	
Age at Onset of Illness	<18	39 (7.6)	26 (66.7)	13 (33.3)	
	18-45	472 (92.4)	335 (71.0)	137 (29)	
	Mean:	26.85±6.893	26.67±6.571	27.30±7.617	0.345
Duration of Illness	< 24 months	102 (20.0)	65 (18.0)	37 (24.7)	
	24-48 months	131 (25.6)	90 (24.9)	41 (27.3)	0.123
	>48	278 (54.4)	206 (57.1)	72 (48.0)	
	Mean:	67.66±52.05	73.17±55.13	54.38±40.96	0.000

Discussion

The present study reported higher number of male cases with schizophrenia which is in accordance with the previous findings.[4,11-13] Males are more likely to seek care for the illness and again the associated stigma of mental illness may be a factor that hinders use of care at these facilities by the female. Families usually keep information about mental illness secret for various reasons that include concern about marriage prospects in case of unmarried. Legislature in India in this regard varies according to religion and people are mostly unaware of the provisions.[14]

Most of the patients with schizophrenia were under the age group 21-40 years of age (83.4%), as in previous study.[15] People of this age group are young adults and are usually physically strong. They are mostly in the early stage of the illness where positive symptoms predominate. Hence help seeking is more in this group. Moreover functional impairment brought by the illness also has direct economic impact on the individual and the family and hence the service utilization in this pattern may be explained.

In the present study we found almost equal distribution of marital status in the total sample with relatively higher percentage of married status among female as compared to male. Walker et al., 1985 found that formerly married men were the most symptomatic and currently married men the least symptomatic. In contrast, married women had a higher rate of symptoms than the never married or formerly married women.[16] We had not found such correlation which may be explained by the design of the study.

Schizophrenia is a devastating disorder affecting all spheres of life and is a major cause of disability and it is complex to be understood. Community is usually unaware of the disability and the patients usually suffer from ill treatment and usually are denied of the disability rights although there is legislature in this regard.[17] Only 8% of the sample had formal employment which can be explained by the effect of illness that may even be extending from a longer prodromal phase making the individual an under achiever. India is a country where majority of the population are engaged in agricultural work and work in the unorganized sector. This may account for the higher level of self employment and this is related to relatively better clinical outcome in third world countries like India. In a study from Nepal also reported that Schizophrenia is common among unemployed patients and from Hindu background.[15] Social problems, such as long-term unemployment, poverty, low academic achievement and homelessness are common in persons with schizophrenia.[12,18-20]

Schizophrenia is associated more with migrated people and urban or semi urban locality is found to be significantly associated with the illness in many studies.[21-24] This may be explained by many reasons like relatively dense population of urban areas providing less space for these group of people and less resilience among the busy people of the urban areas, increased early help seeking either due to perceived increased problem, relative availability of service or better economic and social status that may be related to awareness of the illness etc. Our study had more representation from rural areas and this is due to the catchment area of the hospital. People from urban areas usually seek care at other centers including private facilities. Private psychiatric care facility in rural areas is almost nonexistent in this part of India. It is seen that female from urban areas are brought more to this facility as compared to urban male patients. This needs more exploration as it may be due to relatively lesser female from rural areas seeking help for various reasons which may include accessibility, financial and gender

specific issues. Again the matter of urban females seeking more help in mental hospital need to be seen from various angles depending on the socio economic position of the family and their expectation from the service centers.

Low family monthly income is a strongly associated with of schizophrenia.[22,25] Relatively longer course, chronicity, disability, treatment cost and many intangible costs are associated with this low family income. These ecological factors have been long recognized in schizophrenia.[26]

The study population had more representation from the Hindu and thus we had observed over representation of a particular religious community. This is in line with a previous finding[15] but the association was not significant statistically. A study that explores the help seeking nature in relation to magico-religious belief and cultural aspects may give interesting finding from different parts of India. This may become helpful in designing public health policies.

Significant gender issues were found to be associated with academic achievement in the group of persons with schizophrenia. 86.1% of the total sample was at-least matriculate that may be attributed to the age of onset of the illness. However it was found that females were significantly illiterate as compared to males. They were mostly from low socio economic status. It makes us to ponder even when elementary education is made compulsory and free in India through legislature there are other factors that need to be considered for bringing the fairer sex to the network of education and thus employment for holistic all inclusive development of the society. Schizophrenia usually occurs at a higher age in females as compared to males and thus the educational achievement should show an upward trend in favour of females.[28] Present study finds a contradictory finding and it needs exploration.

One fourth of the study population had family history of psychiatric illness. The family history was not specific for schizophrenia and hence there is increased association but it was not significant. Presence of mental illness in family brings additional burden along with a better awareness about the condition and these may affect someone's help seeking nature.

The present study would have been better if it was correlated with different factors that directly influence help seeking nature e.g. availability, acceptability, accessibility, affordability of services and is done at community level with further exploration of pathways of care.

Conclusion

Our study findings indicate that schizophrenia is common disorder causing significant disability with its chronic course and relatively higher need of care. These help seeking nature may be influenced by many socio economic factors including availability and acceptability of services, gender, age, socio economic condition, educational status, marital status and clinical status of the patients.

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Conflict of Interest

Nil

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