Research Paper

Role of Demographical Factors in Relapse of Patients with Schizophrenia

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ABSTRACT

Schizophrenia is one of the most serious psychiatric condition in all the mental illness, relapse is very common in psychiatric disorder, which increases the economic burden on the healthcare system especially on the family. The present study was aimed to find out the role of demographical factors in relapse of schizophrenic patients. Methods & material: Data were collected from the outpatient door (OPD) and inpatient door (IPD), department of psychiatry Post Graduate Institute of Behavioral and Medical Sciences (PGIBAMS), Raipur, Chhattisgarh. The only diagnosed case as per the international classification of diseases -10 (ICD-10) were included in the study. A semi-structured demographical data sheet (e.g. age, gender, religion, residence, etc.) was administered. Majority of the patients were male (58.3%), married (65.0%), Hindu by religion were (96.7%), most of them hailed from rural areas (66.7%), educated up to secondary (48.3%) and (71.7%) belonging to the nuclear family. Results of the study can be concluded that more than one factors are responsible for the relapse in patients with schizophrenia and study also pointed out that there is need to develop a better health care facility in the rural area.

In the health profession, a relapse means to "become ill again after apparent recovery; the return of ill health after an apparent or partial recovery" (Collins English Dictionary, 1991). Mwaba and Molamu (1998) define relapse as "a worsening condition of a psychiatric outpatient". Often, this is due to patients stopping medication on their own against the advice of a multi-disciplinary team. Psychiatric issues, including relapse, impose a burden on the economy. Return of symptoms of the condition that the medication was treating is called relapse. Relapse may also be defined as a violation of the contract or terms of the behaviour cessation or reduction program. Sometimes it is defined as a return to pretreatment levels of the problem behaviour.

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Schizophrenia is a chronic and disabling illness that affects approximately 1% of the world's population. It is often accompanied by relapse even while on treatment (Gelder, Lopez & Andreasen, 2000). Relapse rates vary from 50% to 92% (Suzuki et al., 2003) and are similar in developed and developing countries, despite the former having well-established mental health services. Relapse in schizophrenia is broadly recognized as the reemergence or the worsening of psychotic symptoms. More specifically, certain criteria are used to define relapse; they include aggravation of positive or negative symptoms, hospital admission in the past 6 months, and more intensive case management and/or a change in medication (Almond et al., 2004). Relapse may result in hospitalization, treatment resistance, cognitive impairment owing to progressive structural brain damage, personal distress, incarceration, and interference with rehabilitation efforts (Piggotet al., 2003). Relapse increases the economic burden on health care systems because of its associated morbidity and re-admissions to hospital. Prevention of relapses could have significant therapeutic and socio-economic implications (Almond et al., 2004; Knapp et al., 2004). Internationally, the factors commonly associated with relapse include poor adherence to treatment, substance abuse, co-morbid psychiatric illness, a co-morbid medical and/or surgical condition, stressful life events, and the treatment setting (Harris et al., 2005).

METHOD& MATERIALS

The study was a hospital based cross-sectional study conducted at the inpatient door (IPD) and outpatient door (OPD) departments of Psychiatry, Post Graduate Institute of Behavioural & Medical Sciences, Raipur, C. G. A total of 60 patients aged 18 years to 65 years, who were diagnosed as patient with schizophrenia, according to international classification of Disease - 10 (ICD-10) were purposively selected for the study. Data was collected over the period of 6 months from November 2012 to April 2013. The inclusion criteria for such patients were a diagnosis of schizophrenia as per ICD-10 criteria, consented for the study (patient & caretaker), male and female both. Exclusion criteria for such patients were patients not consented for the study, aged below 18 years, patients with mental retardation, patients with suffering organic disorders, patients with psychiatric disorder due to psychoactive substance abuse and patients with other psychiatric comorbid conditions. Only those patients who met all the inclusion and exclusion criteria. All the consecutive patients were approached to participate in the study during the study period. The study was approved by the ethics committee. A self-made structured consent form was given to each of the caretakers as well as patient and explained about the purpose and nature of the study. A self-made semi-structured socio- demographic sheet especially designed for the study was used to collect information regarding patient's age, sex, marital status, religion, domicile, education, type of family, occupation, monthly income, socio- economic status, diagnosis, age of onset, mode of onset, course of illness, progress of illness, treatment, mode of treatment, past medical illness, past psychiatric illness, family history of psychiatric illness and insight of the patient.

Data was entered in MS Excel sheet. Descriptive statistics such as mean, standard deviation (SD), frequency and percentage were used for quantitative and categorical data respectively. The analysis was performed through the Statistical Package for Social Sciences version 16.0 software (SPSS inc., Chicago, IL, United State).

RESULTS

Table 1 (a) Showing the mean and SD of the age of sample group:

Variable	N	Mean	SD
Age (in years)	60	35.70	11.293

Above table shows the mean and SD of schizophrenic patients to be 35.70 and 11.293 respectively.

Table 1 (b): Showing frequency and percentage (%) of the socio-demographic profile of schizophrenic patients:

Variables		frequency	%
Sex	Male	35	58.3
	Female	25	41.7
Marital status	Married	39	65.0
	Unmarried	16	26.7
	Divorced	1	1.7
	Widower	4	6.7
Religion	Hindu	58	96.7
	Muslim	2	3.3
Domicile	Rural	40	66.7
	Urban	18	30.0
	Semi-urban	2	3.3
Education	Illiterate	5	8.3
	Primary	12	20.0
	Secondary	29	48.3
	Graduation	11	18.3
	Pg and above	3	5.0
Type of family	Nuclear	43	71.7
	Joint	17	28.3
Occupation	Govt job	8	13.3
	Pvt. Job	4	6.7
	Business	2	3.3
	Labour	5	8.3
	Farmer	16	26.7
	Student	6	10.0
	Unemployed	12	20.0
	Others	7	11.7
Monthly income	Upto 5000/-	15	25.0
	5000/- to 10,000/-	42	70.0
	10,000/- and above	3	5.0
Socio economic status	Lower	15	25.0
	Middle	45	75.0

Table 1(b) shows the frequency and percentage of the total sample about various socio-demographic variables. Among the sample majority of the patients were male (58.3%), married (65.0%), Hindu by religion were (96.7%), most of them hailed from rural areas (66.7%), educated up to secondary (48.3%) and (71.7%) belonging to nuclear family and rest of them (28.3%) were from joint family, higher percentage of the patients (26.7%) were farmer by occupation. Similarly, a higher percentage (70.0%) of the patient's family income was between the Rs 5000/- to Rs 10,000 and (75.0%) came under middle socioeconomic status.

Table 2: Showing the mean and SD, frequency and the percentage of clinical variables of schizophrenic patients:

Variable	N	Mean	SD
Age of onset (in years)	60	28.85	9.382

Variables		frequency	%
Mode of onset	Acute	15	25.0
	Insidious	45	75.0
Course of illness	Episodic	60	100.0
No. of relapses	1	45	75.0
	2	12	20.0
	3	2	3.3
	4	1	1.7
Progress of illness	Improving	16	26.7
	Fluctuating	44	73.3
Treatment	Present	59	98.3
	Absent	1	1.7
Mode of treatment	Only drugs	16	26.7
	Drugs and ECT	43	71.7
	Faithhealer	1	1.7
Past medical illness	Present	5	8.3
	Absent	55	91.7
Past psychiatric illness	Present	60	100.0
Family history	Present	14	23.3
	Absent	46	76.7
Insight	Complete denial of illness	37	61.7
	Slight awareness of being sick but denying at the same time	6	10.0
	Awareness of being sick but blaming it on external factors	3	5.0
	Awareness that illness is due to something unknown in the pt	2	3.3
	Intellectual insight	12	20.0

Table 2 shows the frequency, percentage and mean, SD of clinical variables of schizophrenia patients. Mean and SD of the age of onset of the schizophrenia patients were 28.85 and 9.38 respectively. Majority of them have insidious onset (75.0%), episodic course (100.0%), most of them had second episode (75.0%), fluctuating progress (73.3%), in (98.3%) cases treatment history was present in which (71.7%) were on drugs and ECT, majority of the patients had no past medical illness (91.7%), but all (100.0%) cases had past psychiatric illness, (76.7%) were having no family history of psychiatric illness, and (61.7%) have the insight of grade level 1 i.e. complete denial of illness.

DISCUSSION

The present study was conducted to find out the role of demographical factors in relapse of schizophrenic with patients. For this purpose 60 schizophrenic patients, both male and female were included in the study.

Socio-demographic details:
Analysis of Socio-demographic details (Table 1a & b) shows that the mean age of the patients of schizophrenia was 35.70 and the SD was 11.29. These findings are supported by the study conducted by Lan et al (2003) also have found the similar mean age of 35.3 and SD 10.2 in their study. Majority of the patients were male (58.3%), this finding is similar to the study conducted by Mahamba (2009) which shows that 56.5% were male & that 75% of the respondents agree that it is normal for men to be hospitalized more frequently than women for psychiatric conditions. It is in consistence with various previous researches, though the percentage varies from study to study males were found to be consistently more than females. It is observed that the higher percentage of the male population register at the psychiatric facilities. It may not be indicative of higher morbidity in males but this may be due to lack of education, the presence of superstitions, reluctance on the part of the women folk because of social stigma and bleak chances of matrimonial placement in our culture (Sethi et al., 1978). In addition to the above reasons, it may be because of it that male members are the main earning member in the family and to avoid financial problems they are being admitted to the hospital for treatment purpose. Beebe (2002) refers to Castle and Murray who maintain that generally, men have more schizophrenia, something that makes them prone to more relapse. The majority, 65% of patients were married and similar findings were by Chawane which shows that 54% were married. In his study, Hopper (2004) found that in India there are many more married people with schizophrenia as compared to western countries. Among the stressors, marital disturbances were found to be the precipitating factors for schizophrenia and related psychosis (Barua et al., 2006). In the subjects belonging to the research group, high majority belonged to the Hindu religion (96.7%), this might be due to the catchment area of the institute from where the sample was drawn. The dominance of the Hindu population in this area is reflected in the results. In the present study, most of the patients belong to a rural area (66.7%). The findings are supported by other studies of Martyns-Yellow, 1992 studied the burden of schizophrenia on the family in Nigerian perspective. They found that rural families experience more burdens and are more prone to psychiatric morbidity. In another study by Mahmood et al (2006) in Pakistan, it was found that 67% of

patients from a rural area. These findings are quiet similar to the study done by Rohayah and Hasanah in 2007, where urban patients consisted of 17.5% and rural consisted of 82.5%. Most of the patients in this study were educated upto secondary (48.3%) followed by primary education (20%). Similar findings are reported by Kazadi, Moosah&Jinaah (2008) in their study about 30.6% of patients who relapsed had achieved a primary level of education and 48.5% a secondary level of education. In the present study, one of the reasons may be that the majority of the patients belonged to a rural area, where higher education is not easily available. Secondly, schizophrenia causes cognitive deficits that might have obstructed further studies. Poorer educational achievement is associated with individuals with schizophrenia. However, this may be attributed to the attentional deficit, learning disabilities, major neurological conditions, or onset of schizophrenia before the age of 18 years (Tsuang et al., 2001). Schizophrenia tends to have an early age of onset and a chronic course with relapses and a declining level of functioning that contributes to early school drop-out (Kazadi et al., 2008).71.7% of the cases lived in the nuclear family, this is consistent with reviews of the role of the family in relation to mental health that have found that the nuclear family structure is likely to be associated with psychiatric disorders than joint family (Sethi et al., 1990). In India, Kolenda (1968) observed that while most of the rural people live in joint family households of one type or another the majority of the households in rural India are nuclear in structure. 35% were farmer or laborers by occupation followed by unemployed (20%). This may be due to the fact that the majority of the population belonged to a rural area and their earning is through farming. Unemployment may be because of the nature of the illness that causes functional deterioration. Majority of the patient's monthly income comes under Rs 5000/- to Rs 10000 (70.0%) and the majority of them belonged to middle SES (75%). Perhaps this may be due to the relationship between downward mobility and the debilitating effects of the illness. (Versola-Russo, 2006). Schizophrenia leads to significant impairment in functioning and social isolation for sufferers and creates a substantial financial burden to society, both directly and in loss of productivity (Rossler et al., 2005).

Clinical details:

Results related to clinical details (Table 2) shows that majority of the patients have insidious onset (75.0%). All patients had the episodic course as we have taken patients only who have at least 2nd episode of illness. Majority of the patients have 2nd episode (75.0%), and a number of relapses was mostly one (75%), it is similar to the study done by Mahmood et al (2006). According to Kazadi et al (2008), the most common outcome of schizophrenia is usually a remitting course with one or multiple relapses in 50 - 92% of cases. Majority of the patients have fluctuating progress (73.3%), it may be due to their discontinuation of the treatment. Most of the patients (98.3%) have treatment history and 71.7% them were on Drugs and ECT, majority of them had no past medical illness (91.7%), but past psychiatric illness was present in all cases (100.0%) because for this study we have taken patients those who have atleast one earlier episode. 23.3% had a family history of psychiatric illness. Family studies have confirmed the familial nature of schizophrenia (Gottesman, 1991). Majority of the patients had poor insight i.e. of grade level 1(61.7%). It is consistent with other studies. Fenton et al (1997) found that poor insight contributed to a 5.2-times increase

in the risk of relapse. However, other researchers argue that the relationship between insight and adherence is not always straightforward and may be without a direct relationship. Olfson et al., 2000 viewed that it is possible that the lack of insight in this population might be related to a lower level of formal education and a lack of understanding of mental illness and its phenomena.

CONCLUSION

From the discussion, it can be concluded that more than one demographical factors are playing role in relapses of patients with schizophrenia such as gender, religiosity, residence, educational qualificationsocio-economic status and unemployment. Mode of onset, the course of illness, progress, history of illness and mode of treatment are the clinical factors could cause a relapse. The study pointed out that there is a need for better healthcare facility in the rural area and a quality psychoeducation is much needed to caregivers during the discharge from the hospital.

This study was limited to a single and a private hospital with a small sample size. A multicentric study on a larger sample with the inclusion of both (Government and private) hospitals can be a plan for the better generalization of the study results.

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