

Prevalence of schizophrenia at psychiatry inpatient department of a tertiary care hospital: A descriptive study

Mayur Kiran Muthe^{1*}, Ulhas Yashwant Bendale²

¹Associate Professor, ²Assistant Professor, Department of Psychiatry, Dr Ulhas Patil Medical College and Hospital, Jalgaon, Maharashtra, INDIA.

Email: mayurmuthe@gmail.com

Abstract

Introduction: Schizophrenia is a multifactorial disease that belongs to the most genetically complex psychiatric disorders. Heredity of schizophrenia is variable, and the overall prevalence of the disease is approximately 1%¹. Gottesman and Bertelsen, in 1989, argued that the unaffected subject of a pair of identical twins has a 50% risk of developing the disease; relatives with the first degree of consanguinity have a risk of 5% to 16%, whereas second- and third-degree relatives exhibit a 2%-5% and 2% risk, respectively. Schizophrenia is a serious mental disorder, stigmatizing and chronic, and it has a multifactorial origin. According to the International Classification of Diseases, 10th edition

Aims and Objective: Present study done with the aim to study Prevalence and associated factors of Schizophrenia at Psychiatry inpatient department of a tertiary care hospital. **Methodology:** After approval from institutional ethical committee; This cross sectional study carried out tertiary care hospital during year Jan 2012 to Jan 2014 of the patients diagnosed as Schizophrenia by ICD-10 classification as given in international classifications of the diseases all the patients classifiable under ICD1-10 as schizophrenic were included during the study period of 2 years, total 56 patients were studied. Data was analyzed with Chi-square test. **Result:** Prevalence of the Schizophrenia patients was more common in 26-30 yrs age group i.e.44.64%, followed by 21-25yrs i.e. 26.78%, Was more common in Male as compared to female i.e. 64.28% and 35.71% also found more prevalent in un-Married population compared to Married, separated and Divorced i.e. 50.00%, Prevalence was more in Un-employed i.e. 50.00% as Employed, Agricultural-Laborer, Dependent , Own-business. Overall Cannabis addiction was found more prevalent i.e. Cannabis +Alcohol (16.32%), Cannabis+ tobacco (18.36%), other type of addiction found to be, Tobacco+ Alcohol (14.28%), Tobacco (30.61%), Cigarette (6.12%), Bidi (2.04%). Majority of the patients who were irregular in treatment were having significantly higher association of the additions. i. e . 35(79.54%) addicted patients were irregular in treatment and Follow up as compared to not addicted patients 4(33.33%) (p< p<0.002, X²=9.524). **Conclusion:** Addicted patients were irregular in treatment and Follow up as compared to not addicted patients and Treatment with antipsychotics is associated with significantly less disability so de addictions therapy in form of rehabilitation would great useful for the normal living the patients .

Keywords: Schizophrenia, Addictions associated in Schizophrenia.

*Address for Correspondence:

Dr. Mayur Kiran Muthe, Associate Professor, Department of Psychiatry, Dr. Ulhas Patil Medical College & Hospital, N.H.No.6, Jalgaon-Bhusawal Road, Jalgaon, Khurd, Jalgaon-425309 Maharashtra, INDIA.

Email: mayurmuthe@gmail.com

Received Date: 28/07/2015 Revised Date: 18/07/2015 Accepted Date: 22/08/2015

Access this article online

Quick Response Code:	Website: www.medpulse.in
	DOI: 06 November 2015

INTRODUCTION

Schizophrenia is a multifactorial disease that belongs to the most genetically complex psychiatric disorders. Heredity of schizophrenia is variable, and the overall prevalence of the disease is approximately 1%¹. Gottesman and Bertelsen, in 1989, argued that the unaffected subject of a pair of identical twins has a 50% risk of developing the disease; relatives with the first degree of consanguinity have a risk of 5% to 16%, whereas second- and third-degree relatives exhibit a 2%-5% and 2% risk, respectively^{1,2}. Schizophrenia is a serious

mental disorder, stigmatizing and chronic, and it has a multifactorial origin. According to the International Classification of Diseases, 10th edition³, it can be classified into nine different types, all of them present as a common process the disaggregation of the personality of the patient. Its main manifestation can occur through various symptoms, such as delirium and hallucinations, apathy, isolation, disorder of attention, concentration and memory, anxiety and depression⁴. Schizophrenia is included as one of the main causes of disability among the youths and the adults, attacking approximately 1% of the world population⁵. In Brazil, between August, 2012 and August, 2013, the number of hospitalizations due to schizophrenia reached 93,364 with 364 deaths⁶. Among the causal factors involved, it is known that genetics and the environmental influences have an important role, and the abuse of drugs is considered one of the possible factors which accelerate the disorder⁷. It should also be highlighted that several studies showed the importance of this disorder as a cause for the search of drugs⁸. Therefore, the chronic use of alcohol, cannabinoids among other toxic agents can be both an unleashing factor as well as a consequence of psychic condition⁹. It is estimated that approximately 3.5% of the addicted of alcohol and other drugs have this disorder as an additional psychiatric diagnosis⁹. Researches show that the chances of a person being schizophrenic and use drugs are 4.6 times bigger than the rest of the population¹⁰. The abusive use of these drugs can anticipate the beginning of schizophrenia, exacerbate the psychotic symptoms, reduce the adhesion to the treatment and increase the cognitive deficits, the frequency of relapses, and the risk of suicide and acquire infectious and contagious diseases, besides intensifying the violent behavior¹¹. So, it can be concluded that the abuse of these substances is an aggravating factor regarding the prognosis of the schizophrenic patients, configuring a challenge in the treatment of this disease¹⁰. From 1990 on there were researches showing that the bearers of schizophrenia, are also more prone to use cannabinoids than the population in general¹⁵. Such studies showed that the drug, in most of the times, is associated to exacerbations of the disease and the acute psychotic episodes¹⁴, anticipations of the beginning of the symptoms in 2 to 4 predisposed patients, besides provoking harmful effects in the results and in the clinical course of the disease¹². Although, in the long term range, the cannabinoids can have severe effects in some users, it was shown that just a minority of these subjects developed psychosis. This low incidence can be attributed to several factors, particularly the degree of exposition to the drug, genetic predisposition, environmental factors of risk and the age of the first use of the cannabinoids¹⁵.

AIMS AND OBJECTIVE

Present study done with the aim to study Prevalence and associated factors of Schizophrenia at Psychiatry inpatient department of a tertiary care hospital.

METHODOLOGY

After approval from institutional ethical committee; This cross sectional study carried out tertiary care hospital during year Jan 2012 to Jan 2014 of the patients diagnosed as Schizophrenia by ICD-10 classification as given in international classifications of the diseases all the patients classifiable under ICD1-10 as schizophrenic were included during the study period of 2 years, total 56 patients were studied. Data was analyzed with Chi-square test.

RESULT

Table 1: Prevalence of the Schizophrenia Patients With Respect To Various Socio Demographic Characteristics

Age		
	15-20	5 (8.92%)
	21-25	15(26.78%)
	26-30	25(44.64%)
	31-35	7 (12.50%)
	36-40	3(5.35%)
	>40	1(1.78%)
Sex		
	Male	36 (64.28%)
	Female	20(35.71%)
Marital Status		
	Un-Married	28 (50.00%)
	Married	22(39.28%)
	Separated	4(7.14%)
	Divorced	2(3.57%)
Occupation		
	Employed	8(14.28%)
	Un-Employed	28(50.00%)
	Dependent	2(3.57%)
	Housewife	9(16.00%)
	Agricultural-Laborer	6(10.71%)
	Own-business	3(5.35%)

From the Table 1: Prevalence of the Schizophrenia patients was more common in 26-30 yrs age group i.e.44.64%, followed by 21-25yrs i.e. 26.78%, Was more common in Male as compared to female i.e. 64.28% and 35.71% also found more prevalent in un-Married population compared to Married, separated and Divorced i.e. 50.00%, Prevalence was more in Un-employed i.e. 50.00% as Employed, Agricultural-Laborer, Dependent, Own-business.

Table 2: Distribution of the Addictions pattern in the patients

Tobacco	10(30.61%)
Cigarette	3(6.12%)
Bidi	1(2.04%)
Alcohol	6(1.22%)
Tobacco+ Alcohol	7(14.28%)
Cannabis +Alcohol	8(16.32%)
Cannabis+ tobacco	9(18.36%)

Overall Cannabis addiction was found more prevalent i.e. Cannabis +Alcohol(16.32%), Cannabis+ tobacco (18.36%), other type of addiction found to be, Tobacco+ Alcohol (14.28%), Tobacco(30.61%), Cigarette (6.12%), Bidi (2.04%)

Table 3: Distribution of the Patients as Per the Associated Addiction and Regularity of the Treatment

Associated addiction	Regular treatment and Follow up	Not regular treatment and Follow up	Total
Yes	9(20.45%)	35(79.54%)	44(100%)
No	8(66.67%)	4(33.33%)	12(100%)
Total	17(30.35%)	39(69.64%)	56(100%)

(Percentages in bracket indicates horizontal percentages), $X^2=9.524, p<0.002$, Highly Significant (HS). From Table 3: Majority of the patients who were irregular in treatment were having significantly higher association of the additions. i. e. 35 (79.54%) addicted patients were irregular in treatment and Follow up as compared to not addicted patients 4 (33.33%) ($p<0.002, X^2=9.524$).

DISCUSSION

In our study we have found that Prevalence of the Schizophrenia patients was more common in 26-30 yrs age group i.e.44.64%, followed by 21-25yrs i.e. 26.78%, Was more common in Male as compared to female i.e. 64.28% and 35.71% also found more prevalent in un-Married population compared to Married, separated and Divorced i.e. 50.00%, Prevalence was more in Un-employed i.e. 50.00% as Employed, Agricultural-Laborer, Dependent, Own-business. These findings are similar to Zayda Lorena *et al*¹⁴. Overall Cannabis addiction was found more prevalent i.e. Cannabis +Alcohol(16.32%), Cannabis+ tobacco (18.36%), other type of addiction found to be, Tobacco+ Alcohol (14.28%), Tobacco(30.61%), Cigarette(6.12%), Bidi (2.04%) this finding was also similar to Zayda Lorena *et al*¹⁴. The correlation between regularity of and follow up of the treatment and associated additions was studied we found that Majority of the patients who were irregular in treatment were having significantly higher association of the additions. i. e. 35(79.54%) addicted patients were irregular in treatment and Follow up as compared to not addicted patients 4(33.33%) ($p<0.002, X^2=9.524$) this could be because of the reason that; from research it is proved that approximately 60% of the bearers of schizophrenia do not adhere completely to the treatment. Such fact can be related in the process of the diseases which, because it presents a chronic character, requires prolonged and prophylactic (non-curative) treatment and that many times does not guarantee a satisfactory response as well as the factors which are directly linked

to the patient, such as the adverse effects of the medication, difficulty to remember to take the medicine and the lack of knowledge regarding the disease itself. The non-adhesion is still associated to the increase of the chances of relapses and re-hospitalization, a worse prognostic and greater costs⁵ also Jagadisha Thirthalli *et al*¹⁵ observed that irregular treatment is associated with bad prognosis and Treatment with antipsychotics is associated with significantly less disability, there is an urgent need to bring schizophrenia patients under the umbrella of treatment.

REFERENCES

- Gottesman II, Bertelsen A. Confirming unexpressed genotypes for schizophrenia. Risks in the offspring of Fischer's Danish identical and fraternal discordant twins. *Arch Gen Psychiatry*. 1989 Oct; 46(10):867-72.
- Austin J. Schizophrenia: an update and review. *J Genet Couns*. 2005 Oct; 14(5):329-40.
- International Statistical Classification of Diseases and Related Health Problems 10th Revision- ICD- 10. Version: 2010. [Internet] 2010 [cited 2013 Nov 13]. Available from: <http://apps.who.int/classifications/icd10/browse/2010/en>
- Arantes-Gonçalves F, Marques JG, Coelho R. O papel da apoptose na esquizofrenia. *Psiquiatr Clin*. 2012; 33(1):5-15.
- Nicolino PS, Vedana KGG, Miaso AI, Cardoso L, Galera SAF. Schizophrenia: adherence to treatment and beliefs about the disorder and the drug treatment. *Rev Esc Enferm USP*. 2011; 45(3):708-15.
- Ministério da Saúde (BR). Informações de saúde - epidemiológicas e morbidade [Internet] 2008 [citado 13 Nov 2013]. Disponível em: <http://www2.datasus.gov.br/DATASUS/index.php?area=0203andVObj=http://tabnet.datasus.gov.br/cgi/defthtm.exe?sih/cnv/nr>
- Gururajan A, Manning E, Klug M, Buuse M. Drugs of abuse and increased risk of psychosis development. *Aust N Z J Psychiatr*. 2012; 46(12):1120-35.
- Asher CJ, Gask L. Reasons for illicit drug use in people with schizophrenia: Qualitative study. *BMC Psychiatr*. 2010; 10(94):1-15.
- Scheffer M, Pasa GG, Almeida RMM. Dependência de álcool, cocaína e crack e transtornos psiquiátricos. *Psicol Teor Pesq*. 2010; 26(3):533-41.
- Mackowick KM, Heishman SJ, Wehring HJ, Liu F, McMahon RP, Kelly DL. Illicit drug use in heavy smokers with and without schizophrenia. *Schizophr Res*. 2012; 139(1-3):194-200.
- De Hert M, Wampers M, Jendricko T, Franic T, Vidovic D, De Vriendt N, et al. Effects of Cannabis use on age at Onset in schizophrenia and bipolar disorder. *Schizophr Res*. 2011; 126(1-3):270-6.
- Sugranyes G, Flamarique I, Parellada E, Baeza I, Goti J, Fernandez-Egea E, et al. Cannabis use and age of diagnosis of schizophrenia. *Eur Psychiatry*. 2009; 24(5):282-6.

13. Casadio P, Fernandes C, Murray RM, Di Forti M. Cannabis use in young people: the risk for schizophrenia. *NeurosciBiobehav Rev.* 2011; 35(8):1779-87.
14. Zayda Lorena CorredorRozo, Mayely Paola Sánchez Espinosa, Milena Rondón-Lagos, Paola LilianaPáez Rojas, Carolina Cortés Duque, Ruth Maribel Forero Castro. Descriptive study of 20 patients with schizophrenia in Boyacá, Colombia.2013 *IATREIA*; 26(3): 245-256.
15. Jagadisha Thirthalli, Basappa K. Venkatesh, Magadi N. Naveen, GanesanVenkatasubramanian. Do antipsychotics limit disability in schizophrenia? A naturalistic comparative study in the community?. A naturalistic comparative study in the community. *Indian J Psychiatry* 2010; 52:37-41.

Source of Support: None Declared
Conflict of Interest: None Declared