# Original Article

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

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# **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% <sup>1</sup>.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 fond 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, X<sup>2</sup>=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.

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#### 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<sup>1,2</sup>. Schizophrenia is a serious

mental disorder, stigmatizing and chronic, and it has a multifactorial origin. According to the International Classification of Diseases, 10th edition<sup>3</sup>, 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 depression<sup>4</sup>. Schizophrenia is included as one of the main causes of disability among the youths and the adults, attacking approximately 1% of the world population<sup>5</sup>. In Brazil, between August, 2012 and August, 2013, the number of hospitalizations due to schizophrenia reached 93.364 with 364 deaths . 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 disorder. It should also be highlighted that several studies showed the importance of this disorder as a cause for the search of drugs<sup>8</sup>. Therefore, the chronic use of alcohol, cannabinoids among other toxic agents can be both an unleashing factor as well as a consequence of psychic condition<sup>9</sup>.It is estimated that approximately 3.5% of the addicted of alcohol and other drugs have this disorder as an additional psychiatric diagnosis<sup>9</sup>. Researches show that the chances of a person being schizophrenic and use drugs are 4.6 times bigger than the rest of the population <sup>10</sup>. 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 behavior<sup>11</sup>. 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 disease<sup>10</sup>. From 1990 on there were researches showing that the bearers of schizophrenia, are also more prone to use cannabinoids than the population in general<sup>15</sup>. Such studies showed that the drug, in most of the times, is associated to exacerbations of the disease and the acute psychotic episodes<sup>14</sup>, 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 disease 12. 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 cannabinoids<sup>15</sup>.

#### 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 26-30 31-35 36-40		15(26.78%)		
		25(44.64%)		
		7 (12.50%)		
		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%0		
Divorced		2(3.57%)		
	Occupation			
Employed		8(14.28%)		
<b>Un-Employed</b>		28(50.00%)		
Dependent		2(3.57%)		
Housewife		9(16.00%)		
Agricultural-Laborer		6(10.71%)		
	Own-business	3(5.35%)		
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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%0	
Tobacco+ Alcohol	7(14.28%)	
Cannabis +Alcohol	8(16.32%)	
Cannabis+ tobacco	9(18.36%)	

Overall Cannabis addiction was fond 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	Not regular	
	treatment and	treatment and	Total
	Follow up	Follow up	
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< 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 Unemployed 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 fond more prevalent i.e. Cannabis +Alcohol(16.32%), Cannabis+ tobacco (18.36%), other type of addcitiuon 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<sup>14</sup>. The corealtion between regularity of and follw up of the treatment and associated addcitions 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< p<0.002,  $X^2=9.524$ ) this could beacause 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  $\cos 5$  also Jagadisha Thirthalli *et al*<sup>15</sup> 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.

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