

Original Research Article

Comorbid Tobacco Dependence among Patients with Schizophrenia

Reena George¹, Sajithkumar P², Raju S³, Alphonsa Ancheril⁴

¹Associate Professor & Head, Department of Mental Health (Psychiatric) Nursing, Malabar Institute of Medical Sciences College of Nursing, Malappuram, Kerala.

²Assistant Professor, Dept of Medical- Surgical Nursing, Government College of Nursing, Calicut, Kerala.

³Associate Professor & Head, Department of Psychology, University of Kerala, Trivandrum, Kerala.

⁴Professor & Head, Department of Mental Health (Psychiatric) Nursing, Athena College of Nursing, Mangalore, Karnataka.

Corresponding Author: Reena George

Received: 27/09/2016

Revised: 16/10/2016

Accepted: 24/10/2016

ABSTRACT

Comorbid Tobacco Dependence among patients with schizophrenia is a major health care issue in most of the psychiatric care settings. The patients who are already affected by mental illness and taking antipsychotics experience health care issues due to tobacco use which could be a modifiable risk factor. The main objectives of the study were to identify comorbid tobacco dependence among patients with schizophrenia and determine the correlation between comorbid tobacco dependence and selected demographic variables. The participants were 60 males, who were admitted in the setting during data collection. The results revealed that most of the patients (33.33%) using tobacco were in the age group of 36-45 years and 17% of the sample were in the age group of 18-25 years. Among 60 sample 60% of the tobacco users were married and staying with their spouses and children. Most of the sample (45%) were manual laborers and only 15% had a secure occupation like government job. 75% of the sample started tobacco use before the onset of illness whereas only 25% of the sample started using tobacco after the occurrence of mental illness. The findings show a Positive correlation between tobacco dependence and duration of tobacco use ($r=0.72$, $p=0.001$ level) and between age and tobacco dependence ($r=0.63$, $p=0.001$). 100% of the sample had desire to quit tobacco but were reported that they are not able to quit the habit due to high dependence to tobacco. Majority of the patients (80%) had relapse of schizophrenia and admitted in the setting more than 4 times and 65% were on antipsychotics from 7- 10 years. Mental health care professional should take active role in tobacco cessation strategies among patients for the effective action of medications and promotion of mental health of their patients.

Keywords: Comorbid, Tobacco Use, dependence, Schizophrenia.

INTRODUCTION

Addressing comorbid tobacco use among patients with schizophrenia is clinically relevant in the current scenario while considering the treatment outcome of the clients in psychiatry. A meta-analysis of forty-two studies across 20 nations consistently demonstrated the association between schizophrenia and tobacco smoking behaviour. Cessation rates were lower in

smokers with schizophrenia in comparison with the general population. ^[1]

Mortality from smoking-related diseases, such as pulmonary and cardiovascular diseases, is 2 to 6 times higher in patients with schizophrenia than in age-matched non psychiatric controls. ^[2] Smoking induces hepatic microsomal enzyme activity, which reduces blood levels of many antipsychotic medications. Smokers with schizophrenia are in need of

significantly higher doses of conventional antipsychotics than non-smokers. [3]

MATERIALS AND METHODS

A cross sectional descriptive study was conducted in a selected mental health care Centre at Calicut, Kerala using a demographic proforma and Tobacco (Cigarette) dependence scale (CDS-12) as data collection instruments. Population consisted of Patients with schizophrenia and have the habit of using tobacco. The sample comprised of 60 patients with schizophrenia who have the habit of using tobacco before or after the onset of mental illness, were admitted in selected psychiatric care setting for treatment and are ready to get discharged. The participants were selected through non-probability purposive sampling. The study excluded the patients

with schizophrenia who are in the initial stages of emergency treatment. The study is delimited to Patients with schizophrenia in the age group of 18 and above. The collected data were analyzed using descriptive and inferential statistics using SPSS.

RESULTS

The participants were 60 males, who were admitted in the setting during data collection. All the participants were males since no females were admitted in the setting during data collection. Among 60 sample 100% had desire to quit tobacco.

The data depicted in Figure 1 reveal that most of the patients (33.33%) using tobacco were in the age group of 36-45 years and 17% of the sample were in the age group of 18-25 years.

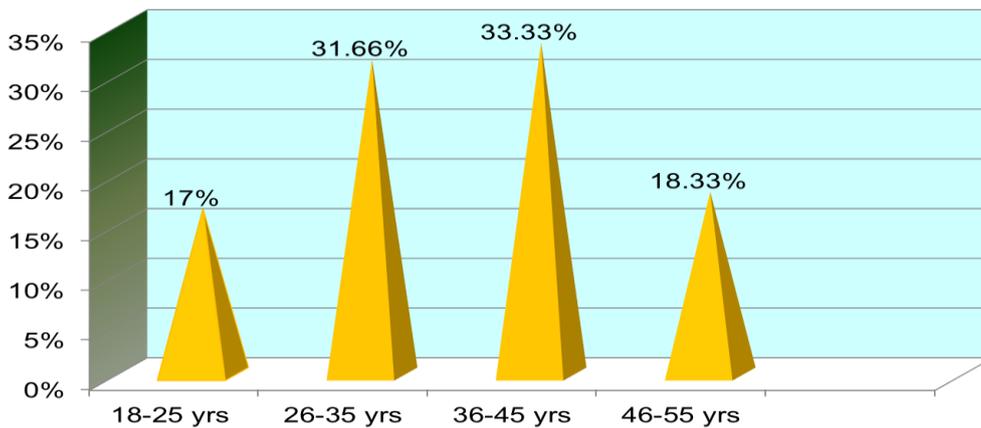


Figure1: Distribution of sample according to Age

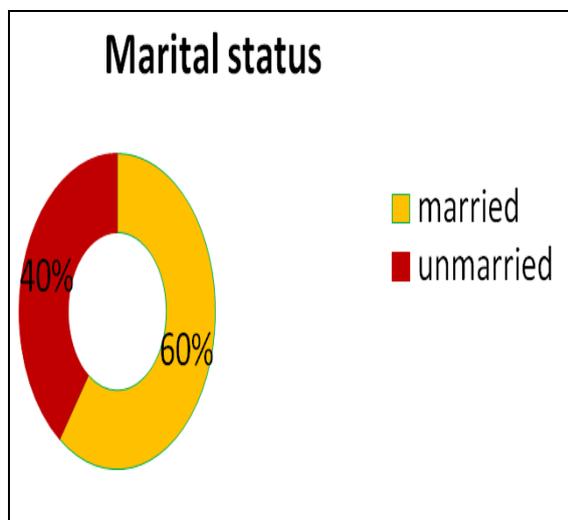


Figure 2. Distribution of sample with regard to marital status

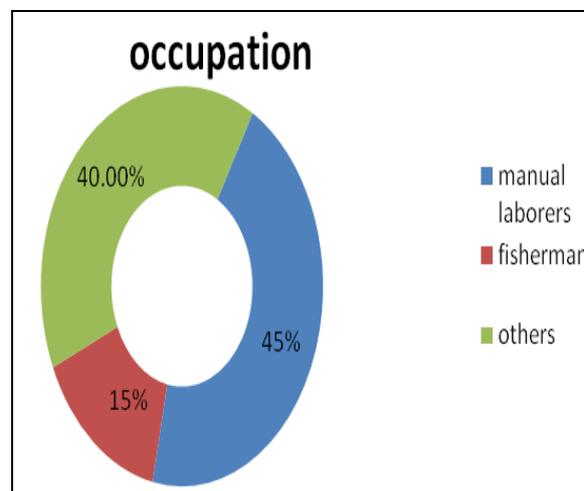


Figure 3. Distribution of sample based on with regard to occupation

Among 60 samples, 60% of the tobacco users were married and staying with their spouses and children.

The study reveals that most of the sample (45%) were manual laborers and only 15% had a secure occupation job like government job.

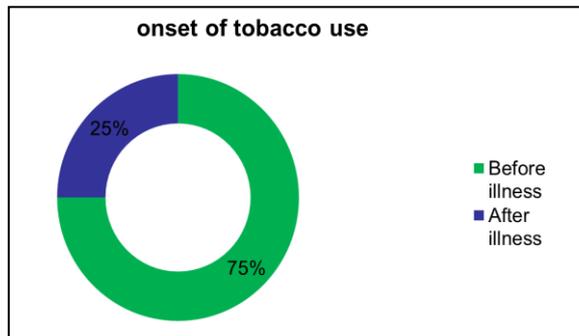


Figure 4. Distribution of sample with regard to the onset of tobacco use

The data in Figure 4 reveal that 75% of the sample started tobacco use before the onset of illness whereas only 25% of the sample started using tobacco after the occurrence of mental illness.

The study also shows that 100 % sample used tobacco in the form of smoking. The monthly family income of participants ranges between Rs.1500 to 19000. The duration of tobacco use is from 1 year to 30 years. 100% tobacco users were highly dependent on tobacco as measured by CDS-12. Sample who had onset of tobacco use before mental illness had greater CDS Score (39.47) compared to patients had smoking after the onset of illness (30.33), statistically significant by Mann-Whitney U test (165). The study revealed a Positive correlation between tobacco dependence and duration of tobacco use ($r= 0.72$, $p= 0.001$ level). The study also shows a positive correlation between age and tobacco dependence ($r=0.63$, $p=0.001$). Majority of the patients (80%) had relapse of schizophrenia and admitted in the setting more than 4 times and 65% were on antipsychotics from 7-10 years. The study revealed that tobacco use can be one of the factors contributing to the relapse in patients with schizophrenia.

DISCUSSION AND CONCLUSION

This study shows that majority (75%) of the patients were tobacco users before the onset of schizophrenia. This throws light that the use of tobacco could contribute to mental health problems among healthy adults. Patients with schizophrenia smoke more than those with a diagnosis other than schizophrenia 85% and 67%, respectively. [4] This finding is consistent with the present study that 100% of the tobacco users were diagnosed with schizophrenia. Nicotine dependence is determined by the use of 10 to 40 cigarettes per day, resulting in tolerance and the presence of withdrawal symptoms after smoking cessation. This study also revealed that the smokers with schizophrenia were less motivated to quit smoking than normal controls. [5] This finding is consistent with the present study that the 100% tobacco users were highly dependent on tobacco as measured by CDS-12 and were had less motivation to quit tobacco use.

Funding

This study was funded by the authors and not supported by any other agency.

REFERENCES

1. de Leon J, Diaz FJ. A meta-analysis of worldwide studies demonstrates an association between schizophrenia and tobacco smoking behaviors. *Schizophr Res.* 2005 Jul 15; 76(2-3):135-57.
2. Goff DC, Cather C, Evins AE, Henderson DC, Freudenreich O, Copeland PM, Bierer M, Duckworth K, Sacks FM. Medical morbidity and mortality in schizophrenia: guidelines for psychiatrists. *J Clin Psychiatry.* 2005 Feb; 66(2):183-94; quiz 147, 273-4.
3. Eden Evins. A. Nicotine Dependence in Schizophrenia: Prevalence, Mechanisms, and Implications for Treatment. *Psychiatric Times.* March 01, 2008. <http://www.psychiatrictimes.com/schizophrenia/nicotine-dependence-schizophrenia-prevalence-mechanisms-and-implications-treatment>
4. de Leon J, Dadvand M, Canuso C, White AO, Stanilla JK, Simpson GM.

Schizophrenia and smoking: an epidemiological survey in a state hospital. *Am J Psychiatry*. 1995 Mar; 152 (3):453-5.

5. Kelly DL, Raley HG, Lo S, Wright K, Liu F, McMahon RP, et al. Perception

of smoking risks and motivation to quit among nontreatment-seeking smokers with and without schizophrenia. *Schizophr Bull*. 2012; 38(3):543-51.

How to cite this article: George R, Sajithkumar P, Raju S et al. Comorbid tobacco dependence among patients with schizophrenia. *Int J Health Sci Res*. 2016; 6(11):198-201.

International Journal of Health Sciences & Research (IJHSR)

Publish your work in this journal

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website (www.ijhsr.org).

Submit your manuscript by email: editor.ijhsr@gmail.com OR editor.ijhsr@yahoo.com