Original Article

A CROSS SECTIONAL STUDY OF SUBSTANCE USE AMONG INPATIENTS OF A TERTIARY CARE HOSPITAL

Vinod G. Kulkarni[1], Shashidhara Hittur Lingappa[2]
[1]Professor and Head, [2]Associate Professor, Department of Psychiatry,
S. S. Institute of Medical Sciences and Research Centre, Davangere, Karnataka, India.

Received: 07/06/2018 Revised: 22/07/2018 Accepted: 25/08/2018

ABSTRACT:

Background:
All over the world substance abuse has been on the rise. Substance abuse is known to cause medical as well as psychological disorders. There are many evidences to show the pathological correlation between substance use and medical illness. By recognizing the substance abuse patterns in in-patients of different wards of a hospital, we can focus on prevention of substance use and thereby prevention of medical illnesses.
Objectives: To study the pattern of substance use among inpatients of a tertiary centre.
Materials and Methods: The study included 100 in-patients from medical, surgery and orthopaedic wards of a tertiary care hospital. ICD 10 was used to diagnose the pattern of substance use.
Results: About 65% of the sample used substance. Alcohol use was seen in 50%, cannabis in 9%, nicotine use in 59%, and prescribed medication in 7% of studied population.
Conclusion: By decreasing the use of these substances general health standards of the population can be increased, thereby increasing the quality of life of the population.

Keywords: Substance, abuse, tertiary care hospital

INTRODUCTION

Substance use in many forms is on the rise all over the world. Drug abuse is of public health concern, causing significant toll on human lives and productivity. An estimated 183,000 drug related deaths were reported in 2012 corresponding to a mortality rate of 40.0 per million in the global population of those aged 15– 65 years.[1]

Address of Correspondence:
Dr. Shashidhara Hittur Lingappa,
Associate Professor, Department of Psychiatry,
S.S Institute of Medical Sciences & Research Centre, NH4 By-Pass road,
Davangere 577005, Karnataka, India.
Mobile: +91-9844089068,
Email: hlshashidhara@rediffmail.com

Addiction changes the brain, disturbing the normal hierarchy of needs and desires.2 Substance abuse is known to cause general medical condition, which lead to hospital related admissions, leading to increased morbidity and mortality.

Heavy chronic drinking affects virtually every organ in the body and substantially increases the likelihood of developing serious, potentially fatal medical problems. In some cases, abstinence or drinking less can reverse the damage alcohol does to the body. Alcohol use also can interfere with the treatment of many illnesses and interact in dangerous ways with medications used to treat

these illnesses. Nicotine addiction, use of illegal drugs and misuse of prescription drugs frequently accompany heavy drinking.

Around 12 million people inject drugs. 1.6 million people who inject drugs are living with HIV, 6.1 million with Hepatitis C, 1.3 million people are living with both.[3]

OBJECTIVES

In this background, we intend to study the patterns of substance use present in patients admitted to a tertiary care hospital.

MATERIAL AND METHODS

The study was conducted in in-patient wards of SS Institute of Medical Sciences, Davanagere, Karnataka. All the patients above 18 years of age admitted to the wards of Medicine, General Surgery and Orthopedics for the treatment of various physical problems were screened for the study. The sample size was limited to 100.

The patients whoever consented voluntarily for the study were clinically interviewed by Psychiatrist to know about the patterns of substance use. Initially an author designed semi structured interview schedule was used to obtain socio-demographic details. And the different patterns of substance use were diagnosed by using ICD 10

RESULTS:

Socio-demographic details

A total of 100 patients were studied. About 67% (N=67) were male and 23% (N=23) were female. Two third of the study population were of rural background. About half of them were illiterates. 81% were married. 93% were currently doing occupation (Table-1). About 15% of subjects were already diagnosed to have substance use disorder.

About 52 patients were from Medicine ward, 37 were from Surgery ward and 11 from Orthopaedic ward were taken into the study.

Table 1. Demographic characters of the patients.

Sl. No	Demographic characters		Number
1 2	Gender	Male	67
		Female	33
3	Place	Rural	76
		Urban	24
4	Education	Upto 10th std	28
		PUC	12
		Graduates	10
		Illiterates	50
5	Occupation	Farmer	67
		Teacher	03
		Labourer	14
		Others	09
		Unemployed	07

Pattern of Substance Use

About 35% were found to have used no substance in their life time. However another 65% were found to have used and were current users of substance of addiction. Alcohol and nicotine were found to be the common substances of abuse (Table-2). Cannabis and prescribed medicine abuse was also found. No opium users were found (Table-3)

Table-2: Types of substance used

Type of Substance Used		Abuse	Dependence	Multi drug use
Alcohol		29	8	13
Nicotine		6	40	13
Cannabis		4	2	3
Prescribed Medications	BZD	5		
	Ultracet	2		

Table-3: Types of substance used

Type of substance used	Abuse	Dependence
Alcohol (N=13)	4	9
Nicotine (N=13)	2	11
Cannabis (N=3)	2	1

DISCUSSION

The study showed a overall substance use among major in-patient wards at 65%, with about 35% subjects having not used any of the substances of addiction in their lifetime. About 82% of the substance users were males. About two-third of the study population was from rural background and about 93% being currently having a job and half of them being educated. People aged below 25years constituted to about 33% of overall substance using population. Alcohol use was found in about 50 people, out of which 29 had abuse pattern and 8 were dependents and 13 had multiple drug abuse. Nicotine usage was seen in 59% of the studied population. About 40% had dependency pattern and 6% had abuse pattern and 13% had multiple substance use pattern along with alcohol. Cannabis usage was found to be about 6%. About 4% had used in their lifetime and 2% had dependence pattern. Prescribed medications were seen to be abused by about 7% of the population. Benzodiazepine was the predominant drug to be abused, followed by Ultracet which accounted for 2%.

In our study, about 82% of the substance users were males, which corresponds to the global pattern of drug use showing male preponderance, with only one in five being women who seek treatment.[4] About two-third of the study population was from rural background and about 93% being currently having a job and half of them being educated. This corresponds to studies done in the states of Punjab and Delhi.[5] Alcohol was the most common substance of abuse in this study. This could be because of the easy availability of alcohol in rural areas of Karnataka. National Household Survey of Drug Use in the country in 2004 also shows that alcohol was the primary substance used.[6] A study in Southern rural India by John A et al showed that 14.2% of the population surveyed had hazardous alcohol use.[7] A similar study of admitted patients in a tertiary hospital showed that 17.6% had hazardous alcohol use.[8] In our study nicotine usage was seen in 59% of the studied population. About 40% had dependency pattern and 6% had abuse pattern and 13% had multiple substance use pattern along with alcohol. Nationwide household survey, the National Family Health Survey (NFHS), in its second round (1998-1999), found that tobacco use among men was 46.5% and among women 13.8%.[9] The major findings of the National Sample Survey Organization (NSSO) also found 51.3% males and 10.3% of females to be regular tobacco users.[10] In our study, cannabis usage was found to be about 6%. About 4% had used in their lifetime and 2% had dependence pattern. It is comparable to the other studies where it was found that globally about 2.8% to 4.5% of the population aged 15-64 used cannabis at least once in the past year.[11] In our study, prescribed medications were seen to be abused by about 7% of the population. Benzodiazepine was the predominant drug to be abused, followed by Ultracet which accounted for 2%. An overall abuse rate of 12.3% is observed in people aged above 65.[12] However, the lower levels in the present study could be because of the non-availability of the benzodiazepines in rural areas, as most of the study sample was from rural areas.

Strength and limitations: Strength of the study is the detailed study of the substance use and the pattern of its use. The limitations include being the cross-sectional nature of study and the sample being taken only from medicine, surgery and orthopaedic ward.

CONCLUSION

Drug abuse is a global phenomenon which is on the rise. There is a definitive relationship between

substances of abuse and medical illnesses caused due to them. By decreasing the use of these substances general health standards of the population can be increased, there by increasing the quality of life of the population.

REFERENCES

1. United Nations Office on Drug and Crime (UNDOC). World Drug Report 2014. United Nations Publications Sales No E.14.XI.7 1400 Vienna Austria.
2. U.S.Department of Health And Human Services. National Institute on Drug Abuse (NIDA) Research Report Series 2010.
3. United Nations Office on Drug and Crime (UNDOC). World Drug Report 2017. Vienna, 16 June 2017.
4. World Drug Report 2018: opioid crisis, prescription drug abuse expands; cocaine and opium hit record highs. June 27, 2018 By UN India.
5. Rumani Saikia Phukan. Drug Problem: The Government's Survey in Punjab and Delhi. June 26 2018.
6. Ray R. the extent, pattern & trends of drug abuse in India, National survey, Ministry of Social Justice & Empowerment, Govt of India & UN Office on Drugs & Crime, Regional Office for South Asia, 2004.
7. John A et al. Hazardous alcohol use in rural Southern India. Nature, prevalence & risk factors. Natl Med Journal of India 2009; 22: 123-5.
8. SK Sampath, PK Chand, P Murthy. Problem Drinking Among Male Inpatients in a Rural General Hospital. Indian Journal of Community Medicine 2007; 32: 93.
9. Srivastava A., Pal H., Dwivedi S.N., Pandey A. and Pande J.N., National Household Survey of Drug and Alcohol Abuse in India (NHSDAA, New Delhi: Report accepted by the Ministry of Social Justice and Empowerment, Government of India and UN Office for Drug and Crime, Regional Office of South Asia (2004)
10. Prevalence and Pattern of Tobacco Consumption in India. Int. Res. J. Social Sci. Soni Preeti1 and Raut D.K. 2012; 1(4): 36-43.
11. United Nations Office on Drug and Crime (UNDOC). Cannabis, a short review. 2009.

Shalini Singh, Siddharth Sarkar. Benzodiazepine abuse among the elderly. Journal of Geriatric Mental Health. 2016; 3(2): 123-130.

How to Cite this article :

Vinod G. Kulkarni, Shashidhara Hittur. A Cross Sectional Study of Substance Use Among Inpatients of A Tertiary Care Hospital. J Pub Health Med Res 2018;6(2):15-18

Funding: Declared none Conflict of interest: Declared none