## **Original Research Article**

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20173841

# An epidemiological study to assess prevalence and behavior related to substance abuse among urban Bikaner population Rajasthan

## Asif Ahmed Qureshi, Rekha Acharya\*, Gaurav Sharma, Renu Sethia, Kirti Shekhawat, Abhishek Kawatra

Department of Preventive and Social Medicine, Sardar Patel Medical College, Bikaner, Rajasthan, India

Received: 07 July 2017 Revised: 03 August 2017 Accepted: 08 August 2017

### \*Correspondence: Dr. Rekha Acharya,

E-mail: rekhaacharya@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

### **ABSTRACT**

**Background:** Substance abuse exists in the world since time immortal; it has become a serious global problem in recent times.

**Methods:** This was a cross sectional community based study performed from March 2016 to August 2016 among resident of UHTC Mukta Prasad dispensary (urban health and training center) attached to Sardar Patel Medical College, Bikaner.

**Results:** Overall prevalence was 25.14%. Majority of people were using only tobacco (67.07%) while 20.12% people were consuming tobacco and alcohol both, only alcohol was used by 10.98% people and rest (1.83%) were having other types of substances like Doda-post etc.

**Conclusions:** Almost 1/4<sup>th</sup> of study population was abusing one or the other substance. Most commonly abused substances were tobacco and tobacco+alcohol.

Keywords: Tobacco, Substances, Abuse

#### INTRODUCTION

Substance abuse exists in the world since time immortal; it has become a serious global problem in recent times. <sup>1,2</sup> Substance abuse is a complex and multidimensional problem and result of interaction between individual, drug and community. The traditional way of giving emphasis on biological and pharmacological factors involved with substance abuse has diverted attention away from important socio-demographic issues. Changing cultural values, increasing economic stress and dwindling supportive bonds have much important role into initiation of substance use. People are most likely to begin Substance abuse during adolescence and young adulthood. <sup>3</sup> 51.73% of rural and 45.9% of urban Indians

are below 24 years can be considered at risk for substance abuse and is an alarming situation.<sup>4</sup>

The present study is an effort to find out prevalence of substance abuse among urban population of Bikaner alongside addressing their socio-demographic variables.

## Objective

- 1. To find out prevalence of substance abuse among study population.
- To study association of the socio-demographic factors with substance abuse.

#### **METHODS**

This was a cross sectional community based study performed from march 2016 to august 2016 among resident of UHTC Mukta Prasad dispensary (Urban health & training center) attached to Sardar Patel Medical College, Bikaner. After taking permission from IEC (institutional ethical committee) and IRB( institutional research board) eligible study population was selected through systematic random sampling. Among selected Households those who gave informed verbal consent and were willing to participate are administered a pre-tested pre-structured questionnaire. Performa containing question related to socio demographic information administered to resident of selected households thereafter to the person who answer yes for substance abuse questionnaire administered. Data Analysis was done through SPSS 22.0.

## **RESULTS**

In the study 250 households were visited and they had a population of 1305. In the study 81.84% respondents

were Literate. Substance abuse prevalence was 40.71% and 7.11% among males and female respectively. Overall prevalence was 25.14% (Figure 1). Majority of people were using only tobacco (67.07%) while 20.12% people were consuming tobacco and alcohol both, only alcohol was used by 10.98% people and rest (1.83%) were having other types of substances like Doda-post etc.

On studying socio-demographic profile of substance abusers, in present study majority belonged to non-nuclear households (59.45%), 86.28% belonged to Hindu religion, substance abuse was highest among married (79.57%). In present study highest number of substance abuser were illiterate (27.74%) Substance abuse was highest among self-employed population.

Association between substance abuse behavior and structure of household, caste category, socio-economic class, marital status, gender, age group, education and occupation were found statistically significant (p<0.05) but was found not significant with religion (p>0.05) (Table 1).

Table 1: Socio-demographic profile of substance abusers (N=1305).

S. No.	Socio-demographic	Substance ab	use				
	character	Never used		Ever used		$\chi^2$	P
	(n=328)	No.	%	No.	%		
1	Structure of household						
	Non-nuclear	518	72.65	195	27.35		
	Nuclear	459	77.54	133	22.46	3.843	0.05
2	Religion						
	Hindu	847	74.95	283	25.05		
	Muslim	79	75.96	25	24.04	0.419	0.811
	Sikh	51	71.84	20	28.16		
3	Category						
	Unreserved	406	77.93	115	22.07		
	Other backward class	370	75.36	121	24.64		
	Schedule caste	150	76.53	46	23.47	28.55	0.0001
	Schedule tribe caste	51	52.58	46	47.42		
4	Socio-economic status						
	Class-I	260	81.5	59	18.5		
	Class-II	368	81.42	84	18.58		
	Class-III	135	69.23	60	30.77	50.167	0.0001
	Class-IV	83	69.75	36	30.25		
	Class-V	131	59.55	89	40.45		
6	Marital status						
	Married	501	65.75	261	34.25		
	Single	451	89.48	53	10.52	93.304	0.0001
	Divorced/widow/widower	25	64.1	14	35.9		
7	Gender						
	Male	415	59.29	285	40.71		
	Female	562	92.89	43	7.11	193.001	0.0001

8	Age group						
	0-10	183	98.92	2	1.08		
	11-20	199	88.44	26	11.56		
	21-30	204	73.91	72	26.09	133.54	0.0001
	31-40	149	69.63	65	30.37		
	41-50	97	59.51	66	40.49		
	51-60	90	63.38	52	36.62		
	>60	55	55	45	45		
9	Education (n=1206)						
	Illiterate	128	58.45	91	41.55		
	Literate	750	75.98	237	24.02	26.971	0.0001
10	Occupation (n=1069)						
	Housewife	346	90.58	36	9.42		
	Student	168	97.67	4	2.33		
	Employed	205	47.56	226	52.44	296.242	0.0001
	Retired	15	34.88	28	65.12		
	Unemployed	13	31.71	28	68.29		

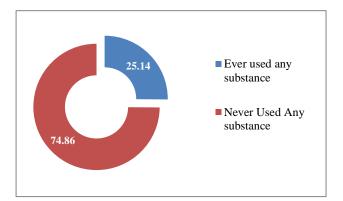


Figure 1: Prevalence of substance abuse in study population (n=1305).

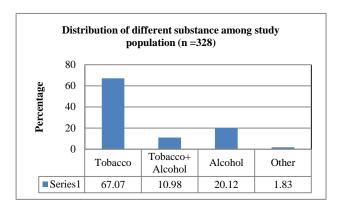


Figure 2: Distribution of different substance among study population.

### **DISCUSSION**

Substance abuse prevalence in present study was 25.14%. (Figure 1) which is similar finding as studied by Dube S et al substance abuse prevalence (30.83%), Kokiwar et al (32.7%), Joyal et al (31.3%), but in contrast to study Ranjan et al prevalence (49.7%) and Mahi et al prevalence (39.3%).<sup>5-9</sup>

On studying socio-demographic profile of substance abusers, 86.28% belonged to Hindu religion, 79.57% were married, 27.74% were illiterate. Maximum 22.67% self-employed population was abusing substance followed by laborers (18.32%).

Association between substance abuse behavior and structure of household, caste, category, socio-economic class, marital status, education and occupation were found statistically significant (p<0.05) but was not significant with Religion (p>0.05) (Table-1). Similar findings were observed by Ranjan et al, Hazarika et al, Kar et al, Jannu et al, Kadri et al etc. 8,10-13

Maximum number of substance abusers belong to 21 to 30 year age group (21.95%) followed by age group 41 to 50 (20.12%) and 31 to 40 (19.82%). The findings are consistent with study by Kadri et al, Singh et al. 13,14 Substance abuses were higher in illiterate show role of education in understanding substance abuse hazards and health awareness.

Unemployed having more substance abuse may be due to financial instability, lack of confidence and lack of social involvement.

The differences in results can be contributed to the reason that the studies mentioned were carried out in different geographical, cultural and social environment than those of my study.

#### **CONCLUSION**

Almost 1/4<sup>th</sup> of study population was abusing one or the other substance. Most commonly abused substances were tobacco and tobacco+alcohol. Education and type of occupation are still significantly associated with higher substance abuse prevalence. Mass community awareness campaigns and one to one counseling sessions are needed.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

#### **REFERENCES**

- 1. Vossius C, Testad I, Skjaeveland R, Nesvag S. The use and costs of health and social services in patients with longstanding substance abuse. BMC Health Serv Res. 2013;13:185.
- 2. Rather YH, Hussain S, Farhat S. Socio-demographic and Clinical Profile of opioid Abusers among patient presenting to a Regional Drug De-addiction Centre in tertiary care hospital, Kashmir, India. J Basic Clin Pharma. 2015;6(3):94.
- 3. National institute of drug abuse. Department of Health and Human Services USA. Introduction 2016. Available at: Drugabuse.gov Accessed on 3 June 2016.
- 4. Sharma R. Demographic dividend at its peak. The Hindu. 2013 Available at: http://www.thehindu.com/news/national/demographic-dividend-at-its-peak/article5102093.ece. Accessed on 3 June 2016.
- Dube S, Chaudhary A, Mahajan R, Purohit R, Singh G, Soni. Prevalence of Opiate Abuse in a Rural Area of Punjab. Internet J Health. 2014;14(1):12-4.
- 6. Kokiwar PR, Jordan GS. Prevalence of substance use among male adolescents in an urban slum area of Karimnagar district, Andhra Pradesh. Indian J Public Health. 2011;55:42-5.
- 7. Juyal R, Bansal R, Kishore S, Negi KS. In pattern of substance abuse among students in a district of Uttranchal. IJPSM. 2007;38(3):24-6.
- Ranjan DP, Chaturvedi NRM. study of prevalence of drug abuse in aged 15 yrs. & above in urban slum

- community of Mumbai. Indian J Prev Soc Med. 2010;41(1):12-3.
- 9. Mahi R, Sharma A, Sharma K, Sidhu B. An Epidemiological Survey of Alcohol and Drug Dependence in a Village of district Sangrur, Punjab. Delhi Psychiatry J. 2011;14(2):314-22.
- 10. Hazarika NC, Dipankar B, Phukan R, Mahanta J. Prevalence and pattern of substance abuse at Bandardewa, A border area of Assam and Arunachal Pradesh. Indian J Psychiatr. 2000;42(3):262-6.
- Kar K, Mishra K, Mohapatra B, Panda M, Patil GB. Substance abuse among the jail inmates. Indian J Prev Soc Med. 2006;37(3):42-6.
- 12. Jannu R, Jha P, Muraleedhar M. Knowledge, attitude and practices on use of tobacco use in adolescent students in Warangal district, Andhra Pradesh. J Evol Med Dental Sci. 2013;2(38):7293-6.
- 13. Kadri A, Bhagyalaxmi A, Kedia G. A study of socio-demographic profile of substance abusers attending a de-addiction center in Ahmedabad city. Indian J Community Med. 2003;28(2):74-6.
- 14. Singh P, Juneja T. Patterns of Tobacco Use in Rural and Urban Populations of Jhunjhunu District, Rajasthan: Indian J Med Specialities. 2010;1(2):71-4.

Cite this article as: Qureshi AA, Acharya R, Sharma G, Sethia R, Shekhawat K, Kawatra A. An epidemiological study to assess prevalence and behavior related to substance abuse among urban Bikaner population Rajasthan. Int J Community Med Public Health 2017;4:3338-41.