



Original Article

Substance abuse in a Rural Community of Uttar Pradesh- Some Socio-demographic Correlates

Authors

Dr VS Nigam¹, Dr VK Srivastava²

¹Associate Professor, Dept of Community Medicine, Hind Institute of Medical Sciences, Ataria, Sitapur, UP

²Professor & Head, Dept of Community Medicine, Hind Institute of Medical Sciences, Ataria, Sitapur, UP

Email: vinods51@hotmail.com

Corresponding Author

Dr VS Nigam

Associate Professor, Department of Community Medicine, Hind Institute of Medical Sciences, Ataria, Sitapur, UP, India

Email: vsnigam.08@gmail.com

Abstract

In a study of 3307 individuals from the villages around Rural Health Training Centre, Satrikh of Hind Institute of Medical Sciences Safedabad, Barabanki, 1180 (35.7%) were found to be addicted to one or the other items. The commonest addiction was of smoking (16.6%) followed by betel chewing (9.4%), alcoholic intake (4.1%), tobacco chewing (2.8%), arecanut & catechu chewing (1.7%) and cannabis intake (0.6%). Addiction was more in males (27.8%) than in females (7.8%). It was more frequent amongst Muslims (42.7%) than in Hindus (34.4%). Addiction was higher in individuals of both upper and lower social class compared to middle class subjects and it was higher among illiterates.

Keywords: Addiction, Rural area, Prevalence, Smoking, Alcohol.

Introduction

Substance abuse and its associated problems are a global concern. A WHO estimate shows a burden of worldwide addiction habit of around 2 billion alcohol users, 1.3 billion smokers and 185 million drug users (The global burden of substance abuse, 2016). Substances such as tobacco, alcohol, cannabis and various allopathic drugs have been widely abused by students for various reasons despite their known ill effects. Studies conducted worldwide (Meressa et al, 2016; Epidemiologic trends in drug abuse, 2016) including India have estimated a prevalence rate of addiction habit to

be around 20-40 percent (Jagnany et al, 2008; Arora et al, 2016).

Tobacco use in different forms is one of the most common substance abuse indulged by adolescents world-wide. Nearly 6 million deaths due to tobacco use occur every year, which may increase to 8 million deaths/year by 2030. Of these, 70% deaths will occur in the developing countries, mainly China and India. Young people are the most vulnerable segment and adolescence is found to be the most susceptible time for initiating tobacco use (Bagchi et al, 2014).

Problematic drinking is frequently associated with persistent smoking, less success at quitting smoking and smoking relapse (Falk et al, 2996; Kessler et al, 2995), while the concurrence of smoking and drinking represents a significant risk factor for cancer-related illness and mortality (Lubin et al, 2009; Hart et al, 2010). Some community-based rural studies have shown the prevalence of tobacco and alcohol use as 31%-42% and 10%, respectively in those ≥ 60 years of age. As almost three-fourths of the elderly live in rural India, there is a need to know the prevalence of tobacco and alcohol use in these areas to plan for educational efforts directed towards this group (Swathi, 2016).

In India, tobacco is consumed in several forms, which include smoking as well as smokeless tobacco. While "bidis," which are small, thin hand-rolled cigarettes comprising of tobacco wrapped in tendu leaves, are predominantly smoked in rural India, other available varieties are hookah, chuttas, cigarettes, and cigars (Dillman et al, 2009). Tobacco is also chewed extensively in India; use of chewable tobacco is in the form of paan masala, gutka, and other locally prepared mixtures of tobacco, areca nut, and additives. Paan is made from piper betel leaf filled with sliced areca nut, lime, catechu, and other spices chewed with or without tobacco (Gupta, 2013). Chewing of paan with tobacco is a popular habit that has been integrated into customs and traditions in rural India. Habitual chewing of betel squid or use of tobacco in smoking or smokeless forms by men and women in India is due to less awareness of its health hazards or because of prevalent socio-cultural perceptions of its beneficial effects (Kahar et al, 2016).

The present study was planned to elucidate the pattern of tobacco and alcohol consumption in a rural community of Uttar Pradesh, India.

Material and Methods

This was a cross-sectional study design conducted in the villages under RHTC of Hind Institute of

Medical Sciences. The consent was taken from each participant before including in the study.

A total of 15 villages were covered comprising 3170 families with total population being 17816. Of these, 20% of the families were sampled (634 families) and 596 families were studied. A total of 3307 subjects were interviewed. The subjects under 5 years of age were excluded from the study.

Data collection

The data was collected on pre-designed questionnaire. The multi-stage sampling was used to select the study subjects. In first stage, the villages were selected. In the second stage, households were selected and in last stage, study subjects were selected. For the selection of households, a landmark was fixed in the village and then first household was selected. If there were no subject in the selected household, next household was selected, and the subjects were interviewed.

Data analysis

Descriptive statistics such as percentages is being presented.

Results

Out of the total 3307 studied subjects, 1180 (35.7%) were found to be addicted to one or the other addiction habit. Addiction was more in males (52.5%) than in females (16.7%). The commonest addiction was smoking (12.8%) followed by betel chewing (7.3%), alcoholic intake (4.1%), tobacco chewing (2.8%), arecanut & catechu chewing (1.8%) and cannabis intake (0.6%). There was much difference in smoking, betel chewing and alcohol intake between male and females being higher among males (Table-1). The addiction habit was observed to be more common among the subjects of age ≥ 25 (49.2%) followed by 15-24 (31.7%) and 5-14 (17.2%) years. The addiction habit was observed to be more common among Muslims (42.7%) compared to Hindu (34.4%) subjects. Out of those subjects belonging to Hindu community, the addiction habit was higher among upper caste (40.2%) than

scheduled caste (34.2%) and backward case (26.4%). The addiction was more common among the subjects of backward caste of Muslims. The addiction habit was observed to be higher among illiterates than other educational status. The

addiction habit was higher among the subjects belonging to social class I (63.1%) than IV (41.1%), II (39.2%), V (33.8%) and III (29.9%) (Table-2).

Table-1: Prevalence of addiction in relation to sex of the respondents

Type of Addiction	Male (n=1753)		Female (n=1554)		Both sexes (n=3307)	
	No.	%	No.	%	No.	%
Smoking	375	27.7	47	3.0	422	12.8
Betel chewing	178	13.2	63	4.1	241	7.3
Alcohol	128	9.5	8	0.5	136	4.1
Gutkha	126	9.3	69	4.4	195	5.9
Tobacco chewing	47	3.5	47	3.0	94	2.8
Arecanut & Catechu chewing	33	2.4	25	1.6	58	1.8
Cannabis	21	1.6	0	0.0	21	0.6
Others	13	1.0	0	0.0	13	0.4
Total	921	52.5	259	16.7	1180	35.7

Table-2: Prevalence of addiction in relation to socio-demographic profile

	No. studied	No. with addiction	Prevalence percent
Age in years			
5-14	862	148	17.2
15-24	978	310	31.7
≥25	1467	722	49.2
Religion/Caste			
Hindu	2787	958	34.4
Upper caste	908	365	40.2
Backward caste	640	169	26.4
Scheduled caste	1239	424	34.2
Muslim	520	222	42.7
Upper caste	450	177	39.3
Backward caste	70	45	64.3
Literacy status			
Illiterate	1124	552	49.1
Primary	789	251	31.8
Middle	679	190	28.0
High School	547	176	32.2
Technical	115	4	3.5
University/Higher	53	7	13.2
Social class*			
I	19	12	63.1
II	130	51	39.2
III	971	290	29.9
IV	1197	492	41.1
V	990	335	33.8

*Prasad (1970)

Discussion

In this study, a higher (35.7%) percentage of subjects were found to be addicted to one or the other addiction habit being higher in males

(52.5%). We found smoking was the most common addiction habit being 12.8% which was almost similar to a study from the rural area of Bangalore (13.3%) (Swathi et al, 2016). The

alcohol intake was 4.1% in this study which was lower than the study Swathi et al (2016) in which prevalence of alcohol use was 18.3%. However, a study in north India reported the prevalence of tobacco smoking being 56.5% (71.8% males 41.4% females) (Goswami et al, 2005). The addiction habit was higher among higher age groups which was similar to the study by Swathi et al (2016).

In another north Indian study addressing the same issue, the prevalence of alcohol consumption among the elderly men was 17% and 7% among their female counterparts (Dar, 2003). Even among the south Indian states there seems to be a variation in tobacco consumption, in rural Andhra Pradesh tobacco smoking is more prevalent than chewing (Gupta and Ray, 2003), where as in our study tobacco smoking was more common.

In the present study, the addiction habit was more common among illiterates. In a study, both tobacco chewing and smoking were more prevalent among illiterate population (Tomar et al, 2016). In a study by Rani et al (2003) found tobacco consumption was the highest in the least educated, lower socioeconomy-class. We also found the higher addiction habit in the lower social class.

Conclusion

In rural areas, people are very much addicted to addiction of tobacco and alcohol, so there is need to conduct effective interventions to control tobacco use. Thus, awareness about the ill effects of tobacco and alcohol use should be increased through national and local media and facilities be made available for those wishing to quit.

Conflict of interest: None

Funding: None

References

1. The global burden of substance abuse. Available from: http://www.who.int/substance_abuse/facts/
2. Meressa K, Mossie A, Gelaw Y. Effect of substance abuse on academic achievement of health officer and medical students of Jimma University, Southwest Ethiopia. *Ethiop J Health Sci* 2009; 19 : 155-63.
3. Epidemiologic trends in drug abuse. Proceedings of the Community Epidemiology working Group. National Institute on Drug Abuse. Available from: http://www.drugabuse.gov/sites/default/files/cewgjune09vol11_web508.pdf, accessed on May 11, 2016.
4. Jagnany VK, Murarka S, Haider S, Kashyap V, Jagnany AK, Singh SB, et al. Pattern of substance abuse among the undergraduate medical students in a medical college hostel. *Health Popul Perspect Issues* 2008; 31: 212-9.
5. Arora A., Kannan S., Gowri S., Choudhary S., Sudarasanan S. and Khosla P.P. Substance abuse amongst the medical graduate students in a developing country. *Indian J Med Res* 143, January 2016, pp 101-103
6. Bagchi Nilay Ranjan, Ganguly Samrat, Pal Sumita, Chatterjee Sukanta. A Study on Smoking and Associated Psychosocial Factors Among Adolescent Students in Kolkata, India. *Indian Journal of Public Health*, 2014; 58 (1).
7. Falk DE, Yi H, Hiller-Sturmhöfel S. An epidemiologic analysis of co-occurring alcohol and tobacco use and disorders. *Alcohol Res Health* 2006;29:162-71
8. Kessler RC, Chiu WT, Demler O, et al. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Co-morbidity Survey Replication. *Arch Gen Psychiat* 2005;62:617-27.
9. Lubin JH, Purdue M, Kelsey K, et al. Total exposure and exposure rate effects for alcohol and smoking and risk of head and neck cancer: a pooled analysis of case-

- control studies. *Am J Epidemiol* 2009;170:937–47.
10. Hart CL, Smith GD, Gruer L, et al. The combined effect of smoking tobacco and drinking alcohol on cause-specific mortality: a 30year cohort study. *BMC Public Health* 2010;10:789–800.
11. Dillman D. A., Smyth J. D., and Christian L. M., *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*, John Wiley & Sons, Hoboken, NJ, USA, 2009.
12. Gupta B., “Burden of smoked and smokeless tobacco consumption in India—results from the global adult tobacco survey India (GATS-India)—2009-2010,” *Asian Pacific Journal of Cancer Prevention*, vol. 14, no. 5, pp. 3323–3329, 2013.
13. Kahar Payal, Misra Ranjita, and Patel Thakor G. Sociodemographic Correlates of Tobacco Consumption in Rural Gujarat, India. *BioMed Research International*, 2016.
14. Swathi HN, Franco A, Issac D, et al. Prevalence of alcohol and tobacco abuse among the elderly in a rural area of Bangalore: A cross sectional study. *J. Evid. Based Med. Healthc.* 2016; 3(8), 228-230.
15. Goswami Anil, Reddaiah VP, Kapoor SK, et al. Tobacco and alcohol use in rural elderly Indian population Rural areas of Ballabgarh, Faridabad, Haryana. *Indian J Psychiatry* Oct-Dec 2005;47(4):
16. Dar Karim. Alcohol use disorders in elderly people - redefining an age old problem in old age UK. *British Medical Journal* Sep 2003;327(7416):664–667.
17. Gupta Prakash C, Ray Cecily S. Smokeless tobacco and health in India and South Asia. *Respirology* 2003; 8(4):419-431.
18. Rani M, Bonu S, Jha P, Nguyen S N, Jamjoum L. Tobacco use in India: prevalence and predictors of smoking and chewing in a national cross sectional household survey 2003
19. Tomar SP, Kasar P, Tiwari R, Rajpoot S, Nayak S. Study of Tobacco Chewing and Smoking Pattern and Its Socio-Demographic Determinants in a Tribal Village in Mandla District, Madhya Pradesh. *Ntl J Community Med* 2016; 7(3):204-207.
20. Prasad, B. G. (1970): Changes in social classification Indian families. *Jour of Ind. Med. Ass.* Sept. 16.1970. PP. 198-199. 55, Calcutta.