



A STUDY ON PREVALENCE OF TOBACCO AMONG RURAL AGED 15 YEARS AND ABOVE AND THEIR KNOWLEDGE AND ANTI-TOBACCO MEASURES UNDER COTPA 2003 IN DISTRICT JHANSI

Dr Vimal Arya

Assistant Professor Department Of Community Medicine MLB Medical College Jhansi

Dr Ashish Kumar Singh*

Post Graduate Student Department Of Community Medicine MLB Medical College Jhansi. *Corresponding Author

ABSTRACT **INTRODUCTION:** Tobacco use is a major public health challenge in India. Government of India has taken various initiatives for tobacco control in the country. The “Cigarettes and Other Tobacco Products Act (COTPA)” has been formulated to control this epidemic. **MATERIAL AND METHODS:** A cross-sectional questionnaire based study was used and the study was conducted from April 2019- March 2020. Sampling method was used Multi Stage Random Sampling. Questionnaire was formulated in local language that included questions related to knowledge, attitude and actions towards tobacco control. **RESULTS:** The awareness of respondents in relation to COTPA ranges between 50-85% whereas, least awareness (51%) was seen in relation to loose cigarettes not to be sold. **CONCLUSION:** The present study indicates that participants have lesser and inappropriate knowledge and attitude towards COTPA and majority of not taken any step to implement COTPA in their work place

KEYWORDS : Knowledge, Attitude, COTPA, Tobacco.

INTRODUCTION

The tobacco epidemic is one of the biggest public health problems and tobacco use is the single largest preventable cause of death and disability worldwide. WHO's FCTC defines tobacco products as “products entirely or partly made of the leaf tobacco as raw material which are manufactured to be used for smoking, sucking, chewing or snuffing.”¹

Globally, cigarette smoking is the dominant form of tobacco use. In the Indian context, Tobacco use implies a varied range of chewing and smoking forms of tobacco available at different points, reflecting the varying socio-economic and demographic patterns of consumption.² According to estimates made by the WHO, currently more than 8 million people die every year around the world and more than 7 million of those deaths are the result of direct tobacco and around 1.2 million are the result of non-smokers being exposed to second-hand smoke.¹ By 2030 it is expected to kill more than 9 million people per year; half aged 35-69.³

Tobacco use is the major risk factor for Ischaemic Heart Disease (IHD), Cerebrovascular Disease, Lower Respiratory Infections, Chronic Obstructive Pulmonary Disease (COPD), Tuberculosis and Cancers (trachea, bronchus and lung).¹ According to Global Adult Tobacco Survey (GATS) fact sheet 2016-17, in India 42.4% of men, 14.2% of women and 28.6% of all adults currently use tobacco.⁴

WHO recommends MPOWER policies for controlling tobacco use : monitor tobacco use and prevention policies , protect people from tobacco smoke , offer help to quit tobacco use, warn about the dangers of tobacco, enforce bans on tobacco advertising ,promotion and sponsorship, Raise taxes on tobacco.⁵

METHODS

Study area -Study was conducted in the field practice area of Department of Community Medicine, MLB Medical College Jhansi UP. Jhansi district has 8 blocks in which 3 blocks (Moth, Badagaon, Chirgaon) are under our field practice area, out of which one block Chirgaon has been selected randomly. Five village panchayats were selected randomly to cover the required sample size. House to house visit was done to find the study subjects.

Study design -The study was done as a community based cross-sectional study.

Study period -The Study was conducted from April 2019- March 2020.

Study Population -Persons aged 15 years and above of both sexes living in rural areas of Jhansi district.

Sampling Methods -Multi Stage Random Sampling.

Sample Size -According to GATS fact sheet Uttar Pradesh 2016-2017 the prevalence of tobacco usage either smoked tobacco or smokeless tobacco among age > 15 years in Uttar Pradesh was 35.5 %.¹⁴ Sample size is calculated using the formulae

$$n = 4pq/d^2$$

Where p is the prevalence = 35.5%

q = 100-p = 100-35.5 = 64.5

d = Relative error (10% of p) = (35.5 × 10/100) = 3.55

By substituting the values in the above equation, sample size n = 726 was worked out.

Adding 10% non respondents, minimum sample size of 798 was calculated which was rounded off to 800.

(iv) Bedridden /severely ill patient.

DATA COLLECTION -

After getting approval from the ethical committee, the selected villages were visited and specified numbers of study subjects were selected. Data were collected by personal interview during house-to-house visit using a predesigned, pretested, and semistructured questionnaire. Informed consent was taken from the participants. The questionnaire consists of three sections:

DATA ENTRY AND ANALYSIS- Data were entered in Microsoft excel 2007 and analyzed using SPSS Version 20.0(trial version). Chi square test was used to find out the association between the factors.

RESULTS

It has been observed that the prevalence of smoking only and smokeless only in the present study was 11.5% and 22.3% respectively, while the prevalence of combined form was 3.5%. Overall 298 study subjects out of 800 were currently using tobacco in any form (smoke or smokeless), thus giving an overall prevalence rate of 37.3%.(Table 1)

Table 1 – Prevalence of current tobacco use

Current Users	Type of tobacco Use	No.	%	Total
	Smoker	92	11.5	
Smokeless	178	22.3		
Both	28	3.5		
Non- Users				502 (62.7%)
Total				800 (100%)

Table – 2 Awareness of ban on smoking in any public place among smokers

Source of Information	Male (n=80)	Female (n=40)	Total (n=120)
	No (%)	No. (%)	No. (%)

Aware	68 (85.0)	14 (35.0)	82 (68.3)
Not Aware	12 (15.0)	26 (65.0)	38 (31.6)
$\chi^2 = 30.80$, p = 0.00001			

Analysis of the current smoker about the awareness of ban on smoking in any public place was 68.3%. Males (85.0%) were more aware of the ban on smoking in public place as compared to females (35.0%) and this difference was found to be highly statistically significant (**p value = 0.00001**).

Table - 3 Awareness regarding statutory warning of tobacco / cigarette on Packets.

Source of Information	Male (n=202)	Female (n=96)	Total (n=298)
	No (%)	No. (%)	No. (%)
Aware	177 (87.6)	52 (54.2)	229 (76.8)
Not Aware	25 (12.4)	44 (45.8)	69 (23.1)
$\chi^2 = 40.93$, p = 0.00001			

Analysis shows that 76.8% of study participants were aware of the statutory warning on tobacco and cigarette packets. Males(87.6%) were found to be more aware as compared to females(54.2%) about statutory warning on tobacco packets and this difference found to be highly statistically significant (**p value = 0.00001**).

54.6% of current tobacco users had noticed anti tobacco information in last 30 days .More males (57.9) noticed anti tobacco information as compared to females(47.9).75.8% of current smoker were aware of the harmful effects of second hand smoke. Males (83.6%) were found to have more knowledge of second hand smoke as compare to female (60.0%) and this difference was found to be statistically significant (**p value = 0.004**). In this study 78.9% of current tobacco users knew that there was an age limit below which sale of tobacco products was banned.

DISCUSSION

The current study was done to estimate the prevalence of tobacco use in rural area of Jhansi district and to assess the socio demographic profile of tobacco use, study the comparative patterns of tobacco use, assess the knowledge regarding health hazard of tobacco consumption.

The prevalence of currently using tobacco in any form (smoke or smokeless) was 37.3%. This finding was little above the GATS-2 value which was 35.5% in Uttar Pradesh.⁴ A study conducted by Pandey and Chand among males above 15 years of age in Meerut district, it was observed that the prevalence of tobacco use is 54.68%, among which 28.12% are smoking and 26.56% are using smokeless form of tobacco.⁶ Similarly Mamta et al, Sreeramareddy et al in Nepal, Flora et al in Bangladesh found the prevalence of tobacco to be 31.1%, 30.0%, 36.6% respectively.^{7,8,9} The present study reveals that 68.3% % of the participants were aware of ban on smoking in public places which is similar to the findings from Kalaivani et al.¹⁰ and Bhuputra Panda et al.¹¹

CONCLUSION

The present study indicates that participants have lesser and inappropriate knowledge and attitude towards COTPA and majority had not taken any step to implement COTPA in their work place. Hence an effort has to be made to increase the awareness amongst these influential groups and involve them effectively in Tobacco Control Programmes

ACKNOWLEDGEMENTS

First of all, I give thanks to God through whose grace I have made it this far. My heartfelt appreciation and indebtedness go to my teachers for his timely and effective advice thorough my research. Lastly I appreciate all the respondents who took their time to participate in this study.

Funding: No funding sources

Conflict of interest: None

Declared Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. WHO tobacco fact sheet 2019. Available at <https://www.who.int/news-room/fact-sheets/detail/tobacco>. Accessed 9 March 2020.
2. John R.M, Roo R.K, Rao M.G. The Economics of Tobacco and Tobacco Taxation in India. Paris: International Union against Tuberculosis and Lung Disease; 2010.
3. World health reports 2002. Available at <http://www.who.int/tobacco/health-reports/2002/>. Accessed 10 March 2020.

4. Global Adult Tobacco Survey fact sheet India 2016-17. Available at https://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17. Accessed 25 March 2020.
5. WHO report on the global tobacco epidemic 2019. Available at https://www.who.int/tobacco/global_report/en/. Accessed 10 April 2020.
6. Pandey AK, Chand MIA. An epidemiological study of tobacco use among males above 15 years of age in an urban area of Meerut district. J. Evolution Med. Dent. Sci. 2016;5 (79):5911-5914.
7. Agrawal M, Jain S, Maitin N, Gupta T, Maitin S. Prevalence and predictors of tobacco use among general public of Gorakhpur district, India. J of oral bio and craniofacial research 2015; 5:16-20.
8. Sreeramareddy CT, Ramakrishnareddy N , HN Harsha Kumar , Sathian B and Arokiasamy JT. Prevalence, distribution, and correlates of tobacco smoking and chewing in Nepal: a secondary data analysis of Nepal Demographic and Health Survey. Subst Abuse Treat Prev Policy 2011; 6:33.
9. Flora MS, Taylor CGNM, Rahman M. Gender and locality differences in tobacco prevalence among adults Bangladeshis. Tobacco Control 2009; 18: 445-50.
10. Annadurai K, Danasekaran R, Mani G. Knowledge, attitude and practices on anti-tobacco measures imposed under the COTPA among adult males in rural areas of Tamil Nadu, India. Healthcare in Low-resource Settings. 2014;2:16-18
11. Panda B, Rout A, Pati S. Tobacco Control Law Enforcement and Compliance in Odisha, India - Implications for Tobacco Control Policy and Practice. Asian Pac J Cancer Prev. 2012;13:4631-4637.