



A STUDY ON AWARENESS ABOUT HARMFUL EFFECTS OF TOBACCO USE AMONG RURAL POPULATION IN DEHRADUN DISTRICT OF UTTARAKHAND

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ABSTRACT

Background: Tobacco use is one of the leading preventable causes of premature death, disease and disability around the world. Objective of this study was to assess the awareness of current tobacco users towards harmful effects of tobacco in the rural population.

Method: In the rural area households were selected by systematic random sampling and all the current tobacco users in the selected house were personally interviewed about the harmful effects of tobacco by using a pre-structured and pretested schedule.

Results: Overall interviewed 993 current tobacco users (Males-84.3%, Female-15.7%), most (87.4%) were aware of the hazardous effects of tobacco. Most knew that tobacco consumption can lead to lung cancer and oral consumption of tobacco can lead to oral cancer. Television (46.2%) was the main source of this information. Males (87.7%) were found to be more aware as compared to females (62.2%) regarding the warning labels on tobacco packets.

Conclusion: Although current tobacco users were found to be aware regarding harmful effects of tobacco but still there is a need for initiating community awareness programmes targeting the rural population and making them aware of the various health consequences of tobacco use.

Key words: Awareness, Tobacco use, Harmful effects

INTRODUCTION

Human beings have been using tobacco since 600 A.D. Columbus who came to know about it from the Caribbeans during his historical journeys introduced it in Europe. The Portuguese introduced it in India. Harmful effects of tobacco have been recognized over the last 1000 years. Historically, three contemporary rulers, King James I of England, Shah Abbas of Persia and the Mughal

emperor Jahangir of India in 16th century had noticed the harmful effects of tobacco and tried to ban it.¹ The tobacco epidemic still remains one of the biggest public health threats and the leading cause of preventable mortality the world over. Tobacco use is one of the leading preventable causes of premature death, disease and disability around the world. An estimated 4.9 million deaths occurring annually can be attributed to

tobacco use.² This figure is expected to rise to about 10 million by the year 2020, if the current epidemic continues and more than 70% of these deaths are expected to occur in developing countries.³

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 price points, reflecting the varying socio-economic and demographic patterns of consumption.⁴ Tobacco is consumed in a variety of, both smoking and smokeless forms, e.g. bidi, gutkha, khaini, paan masala, hookah, cigarettes, cigars, chillum, chutta, gul, mawa, misri, etc. Tobacco is also a part of the socio-cultural milieu in various societies, especially in the Eastern, Northern, and North-eastern parts of the country.⁵ India is the second largest consumer of tobacco products and third largest producer of tobacco in the world. In order to facilitate the implementation of the tobacco control laws, bring about greater awareness regarding harmful effects of tobacco and fulfil obligation(s) under the WHO Framework Convention on Tobacco Control (WHO FCTC), the Government of India launched the National Tobacco Control Programme (NTCP) in the country.⁶

As per India's Cigarette and Other Tobacco Product Act 2003 (COTPA), selling tobacco to minors or selling of tobacco by minors (under the age of 18) is legally forbidden and violation of the same is a punishable offence.⁷ Same applies to selling of tobacco containing items within 100 yards radius of any educational premises.⁸

One of the main reason attributed to the late diagnosis of the mortality due to tobacco use has been the lack of people's knowledge about the harmful effects of tobacco use and thereby their late movement towards health facilities to seek treatment especially among the rural population. Hence the present study was conducted to know the awareness regarding the harmful effects of tobacco use among rural population of Dehradun.

METHODS

The present cross sectional study was conducted in the rural field practice area of Department of Community Medicine, Himalayan Institute of Medical Sciences, Dehradun. The total population covering the families registered with RHTC was 12588 in eight villages. Sample size of 993 was calculated based on the prevalence of cur-

rent tobacco use as 30.7% in Uttarakhand according to Global Adult Tobacco Survey (GATS) and relative error of 10% and non-response rate of 10%.⁶ Sampling interval was calculated to be 12.7 by dividing the total covering population of 12588 by sample size of 993 and assuming a family size of 5 per households, nth house was calculated as 3 i.e. every 3rd household by systematic random sampling was visited and all individuals consuming any form of tobacco in the selected household was interviewed.

The study was approved by institutional ethical committee and informed verbal consent was obtained from the study subjects. A pre-structured and pre-tested schedule was used for collection of relevant data pertaining to awareness regarding harmful effects of tobacco. Information was collected from the current tobacco users regarding knowledge about harmful effects of tobacco and source of information about harmful effects of tobacco use.

Responses were recorded on data recording form and were entered into SPSS 17.0 version and Non parametric tests like Chi-square test was applied to find out the association between the variables. A p value of less than 0.05 was considered as significant.

RESULTS

A total of 993 subjects out of 3145 were found to be currently using tobacco of which 837 were males and 156 were females thus giving an overall prevalence rate of 31.5%.

Table-1 shows the awareness of the current tobacco users regarding harmful effects of tobacco where among the 993 tobacco users, most of the tobacco users (87.4%) were aware of the hazardous effects of tobacco. 82.7% of men and 75.6% of women knew that tobacco consumption can lead to lung cancer. Majority of the tobacco users (85.1%) were aware that oral consumption of tobacco can lead to oral cancer. Majority (82.8%) were aware that consumption of tobacco leads to poor oral health.

Table-2 show the source of information regarding the harmful effects of tobacco where television (46.2%) was the main source of information about harmful effects of tobacco, followed by friends (38.1%) and newspaper (12.0%). The trend was similar in both males and females.

Table-1: Awareness regarding Harmful effects of tobacco

Awareness regarding tobacco	Male (n=837)	Female (n=156)	Total (n=993)	P value	χ^2 , df
Harmful for health	742(88.6)	126(80.8)	868(87.4)	P=0.006*	7.422,1
Lung cancer	692(82.7)	118(75.6)	810(81.6)	P=0.037*	4.329,1
Oral cancer	724(86.5)	121(77.5)	845(85.1)	P=0.004*	8.277,1
Poor oral health	705(84.2)	117(75.0)	822(82.8)	P=0.005*	7.857,1

(Parenthesis given in bracket is percentage) (*=statistically significant)

Table-2: Source of information about harmful effects of tobacco

Source of information	Male (n=837)	Female (n=156)	Total (n=993)
Newspaper	107(12.8)	2(1.3)	119(12.0)
Radio	25(3.0)	1(0.6)	26(2.6)
Television	374(44.7)	85(54.5)	459(46.2)
Friends	319(38.1)	59(37.8)	378(38.1)
Others	12(1.4)	9(5.8)	11(1.1)

(Parenthesis given in bracket is percentage)

Table-3: Awareness regarding statutory warning of tobacco/cigarette on packets

	Male (n=837)	Female (n=156)	Total (n=993)
Aware	734(87.7)	97(62.2)	831(83.7)
Not aware	103(12.3)	59(37.8)	162(16.3)

Parenthesis given in bracket is percentage; $p < 0.05$ which is statistically significant.

Males (87.7%) were found to be more aware as compared to females (62.2%) regarding the warning labels and this difference was found to be statistically significant. (Table-3)

DISCUSSION

In the present study, the prevalence of current tobacco use was found to be 31.5%. The findings are comparable to GATS (2009-10), which reported a national prevalence of current tobacco use to be 34.6%.⁶ Similarly, GATS Uttarakhand (2009-10), reported the prevalence of tobacco use in Uttarakhand as 30.7%.⁶ Other studies such as in Nepal in 2006 and Pakistan in 2008 have found the prevalence of tobacco use to be 30.3% and 16.5% respectively.^{9,10}

The awareness of the study subjects regarding the harmful effects of tobacco was very high (87.4%), which is comparable to a study carried out in Bangalore in 2009 in which 81.3% of the current tobacco users were aware of the harmful effects of tobacco.¹¹

Studies conducted in Jaipur in 2006 and Delhi in 2007 have shown that 80.0% and 99.2% of stu-

dents respectively were aware of the harmful effects of tobacco use on health.^{12,13} Males (88.6%) were found to be slightly more aware as compared to females (80.8%) about the harmful effects of tobacco in our study. Similar results were obtained in GATS India (2009-10) where overall 90.2% were aware of the harmful effects of tobacco, out of which males (91.5%) were found to be more aware than females (88.8%).⁶

The awareness regarding tobacco and lung cancer among the males and females in the present study was 82.6% and 75.6% respectively, compared to 87.2% and 82.5% respectively as found in GATS India.⁶ Another study in Thiruvananthapuram, Kerala in 2007 revealed low awareness (46.2%) among respondents regarding lung cancer.¹⁴

Overall the awareness of the study subjects regarding tobacco and oral cancer was high (85.1%), which is comparable to findings from international tobacco control policy carried out in Maharashtra and Bihar in 2006 where 77 % of the respondents had this awareness.¹⁵ However, the knowledge of the people regarding harmful effects of tobacco is merely not sufficient to stop them from taking it or continuing the habit. There is a need to develop a multifactorial tobacco quitting strategies, focussing on early age intervention and covering the addict along with his surrounding environment.

Television (46.2%) was the main source of information about harmful effects of tobacco in our study, which is comparable to a study in Bangalore in 2009, in which television (43.3%) was the main source of creating awareness regarding tobacco.¹¹ On the contrary, Radio (73.5%) was the main source of information, followed by television (44.3%) in a study done in Wardha district of Maharashtra in 2011 among tribal adolescents.¹⁶ This suggests the importance of these means in creating awareness and influencing the community regarding tobacco-related issues, as television in urban areas and radio in hilly, tribal and difficult to reach areas can convey the information effectively.

In the present study, majority of the current tobacco users (83.6%) were aware of the statutory warning on tobacco packets which is comparable to the findings of Wardha study (2011) and study in Davengere, Karnataka in 2011 where almost three-fourth (72.7%) and 69% of the tobacco users respectively were aware of statutory warning.^{16,17}

CONCLUSION

The above study revealed that although the awareness regarding harmful effects of tobacco use was found to be present but there is a further need for initiating community awareness programmes targeting the rural population and making them aware of the various health consequences of tobacco use. Also, the role of physician cannot be underestimated as they are the considered as the prime contact with the patients coming with any discomfort due to tobacco use. Effective counselling from them will aid in the de-addiction of the habit.

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