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# **Original Research Article**

# Awareness about cigarettes and other tobacco products act and impact of health warnings on smokers in a North Indian city

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#### **ABSTRACT**

**Background:** Tobacco use is a major preventable cause of morbidity as well as mortality worldwide. To combat the increasing trend of this problem, Government of India formulated the COTPA (Cigarettes and Other Tobacco Products Act) in 2003. The study aimed to assess the awareness about COTPA and impact of pictorial warnings among smokers attending outpatient services in a tertiary care hospital in Jammu.

**Method:** The present study was conducted among 320 patients attending the outpatient department of Internal Medicine, Government Medical College, Jammu who happened to be cigarette smokers. The questionnaire was developed by authors with the help of literature review and pilot tested before its final use. Information was elicited about demographic details, awareness about COTPA and impact of pictorial warnings on quitting of smoking.

**Results:** More than half of the respondents were in 30-50-year age group and were urban residents. Awareness about COTPA was good on some parameters but was relatively low on other parameters. Despite all, the respondents noticing pictorial warnings on tobacco packages, only 69.37% of them were contemplating to quit. About half of them were of the view that warning statements preferably be written in local languages.

**Conclusion:** Health and pictorial warnings on tobacco packages remain an important pillar in filling the gap of knowledge and communicating the health risks of tobacco use to the consumers. Only 69.3% of the respondents were planning to quit and awareness levels about COTPA were mixed.

Keywords: Awareness, Cigarettes and other tobacco products act, Health and pictorial warnings, Smokers

#### INTRODUCTION

Tobacco use, which dates back to as early as 5000 BC - 3000 BC has of late, become a serious and growing health threat. Currently, it is a leading cause of preventable death with about 6 million people dying from tobacco use each year. In the developed countries, rate of smoking have shown a declining trend while developed countries are showing a rising trend of smoking. The World Health Organization FCTC

(Framework convention on tobacco control) has called for warning labels covering up to 50% of the package in the form of pictures, pictograms or text. Evidence has shown that pictorial warnings are effective in promoting smoking cessation among users, informing people about adverse health consequences of tobacco use and arousing negative emotions such as fear and disgust.<sup>5-7</sup> Article 11 of FCTC recognized pictorial health warnings on tobacco products as one of the proven strategies to inform consumers about the harmful effects of tobacco.<sup>2</sup> The

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effect of pictorial warnings was found to be strongest on people belonging to the low socio economic status.<sup>8</sup> In India, mandatory pictorial warnings are an important feature of the cigarette and other tobacco product act (COTPA). These warnings appear as a picture of scorpion on smokeless forms of tobacco and a picture of diseased lungs, or an x-ray of lungs with cancer for smoking forms.<sup>9</sup> The union ministry of health and family welfare has mandated an increase in the size of pictorial warnings to 85% on both sides of the packet with effect from 1<sup>st</sup> April 2016. During review of literature, it was found that there was paucity of studies on awareness about COTPA and impact of pictorial health warnings on smokers in this part of India. It was in this context that the authors planned to conduct the present study.

#### **METHODS**

Cross sectional study design, study Population was smokers attending the outpatient department of internal medicine, Government Medical College Jammu. Study Period was four months with effect from 1st March 2019 to 30th June 2019.

#### Inclusion criteria

 Subjects aged 15 years and above and were established smokers (who smoke at least one cigarette per day) at the time of the survey.

#### Exclusion criteria

- Individuals who used smokeless form of tobacco.
- Persons younger than 15 years and those not willing to cooperate were excluded from the purview of the present study.

During this period, 320 patients who were smokers were interviewed. Informed verbal consent was obtained from all the participants before the start of the interview. The study was duly cleared from the institutional ethical committee. The questionnaire for the present study was prepared by the authors by reviewing the relevant literature. The questionnaire so developed was pilot tested on a sample of twenty smokers prior to the conduct of original study and these participants weren't part of the final study. The questionnaire consisted of three partsfirst part involved collection of socio demographic characteristics, second part elicited information on awareness about COTPA (cigarettes and other tobacco products act, 2003) and the third part related to impact of pictorial warnings on the outcome of tobacco usage. The feedback so obtained after the pilot study was duly incorporated before the conduct of the final study.

## Statistical Analysis

The data thus collected was entered into Microsoft Office Excel sheet and then analyzed with the statistical package for social sciences software (SPSS) and presented as proportions.

#### RESULTS

During the study period, a total of 320 smokers were interviewed. Majority of them (53.12%) were in 30-50 years age group. 64% of the respondents were residing in urban areas and 87.5% of them were literate. Regarding distribution on the basis of monthly income, 46.25% had monthly income in the range of 25,000-50,000(INR). 51.87% of the respondents were smoking since >10 years while 35.62% were using it since last 5-10 years and only 12.5% were smoking since <5 years. (Table 1).

Table 1: Socio-demographic profile of study population.

Variables	Frequency	Percentage	
Age (In years)	(n=320)	rercentage	
<30	52	16.25%	
30-50	170	53.12%	
>50	98	30.62%	
Residence	-	-	
Urban	205	64.06%	
Rural	115	35.93%	
Education			
Literate	280	87.5%	
Illiterate	40	12.5%	
Monthly income (inr)	-	-	
<25000	112	35.00%	
25000-50000	148	46.25%	
>50000	60	18.75%	
Duration of tobacco			
use (in years)		-	
<5	40	12.5%	
5-10	114	35.62%	
>10	166	51.87%	

Regarding tobacco consumption causing adverse effects on health, 93.12% replied in affirmative. About four-fifth of the respondents knew that smoking was banned in public places in India and about the minimum age limit to buy tobacco products in the country. However, knowledge about fine being levied for violation of law was on the lower side, as only 61.87% were aware of it. More than half of the respondents were aware that tobacco products should not be sold within the radius of 100 yards of educational institutions and also about loose cigarettes not to be sold (Table 2).

Although all the respondents had noticed the pictorial warning labels on tobacco packages, only 78.12% of them could spell out the correct warning statement. About 69.37% of the respondents replied that pictorial warnings would persuade them to quit smoking and 71.25% of them had a view that demonstrated pictorial warnings would have a negative impact on future

smokers. Majority of the respondents (96.87%) agreed that pictoral warnings send a stronger message than the already written statements on the cigarette packets. Only 53.12% of the respondents had talked about warning labels with the other people. The results further revealed

that more than half of the respondents (54.68%) opined that warning statement be written in local language. Majority of the respondents (93.12%) agreed that warnings on cigarette packets reflected serious health problems related to smoking (Table 3).

Table 2: Awareness about COTPA.

Question	Response			
1. Are very aware that takened consumption will cause advance affects?		Percentage	No	Percentage
1. Are you aware that tobacco consumption will cause adverse effects?	298	93.12%	22	6.87%
2. Do you know smoking is banned in public places in india?	256	80 %	64	20 %
3. Is there any fine levied if one violates the law?	198	61.86%	122	38.12%
4. Do you know the minimum age limit to buy tobacco products in our country?	248	77.5%	72	22.5%
5. Are you aware that tobacco products shouldn't be sold within the radius of 100 yards of educational institutions?	164	51.25%	156	48.75%
6. Are you aware that loose cigarettes are not to be sold?	169	52.81%	151	47.18%

Table 3: Impact of pictorial warnings.

Oversion	Response			
Question		Percentage	No	Percentage
1. Have you ever noticed warning labels on tobacco packages?	320	100%	0	0%
2.can you spell out the correct warning statement written on the cigarette packs?	250	78.12%	70	21.87%
3.pictorial warnings would persuade you to quit smoking	222	69.37%	98	30.62%
4.demonstrated pictorial warnings would have a negative impact on future smokers	228	71.25%	92	28.75%
5. Pictorial warnings send a stronger message than the already written statements	310	96.87%	10	3.12%
6. Have you ever talked about warning labels with other people?	170	53.12%	150	46.8%
7.in your opinion, statutory warning on tobacco products be written in local language?	175	54.68%	145	45.31%
8. What do you think about warnings on cigarette packets have to say?	Nothing serious	%	Serious health problems	%
	22	6.87%	298	93.12%

## **DISCUSSION**

Smoking remains a serious health hazard not only for the individuals who smoke but also to the people in their immediate surroundings through passive smoking. Government through regulatory approach has made it mandatory to print the text and pictorial warnings on cigarette packs for public awareness.

In the current study, majority (93%) of the respondents were well aware of adverse health effects of tobacco consumption which conforms to the findings reported by Ravi shanker TL et al, Rao AR et al, and Sharma et al. <sup>10</sup> Further 80% of the respondents in the current study were aware that smoking is banned in public places and these results were in agreement with those reported by

Ravi shankar TL, Annadurai K and Panda B. 10,13,14 Ban on smoking in public places eliminates dangers from second hand smoke, reduces environmental impact of cigarette butts and also helps in promoting good habits in children. Results revealed that 61.8% of the respondents were aware of penalty for violating the act which were similar to those reported by Ravi shanker TL et al, 10 However our findings were not in consonance with those reported by Rao AR and Shetty P About 77.5 % of the respondents were aware of the legal age of buying tobacco products and these results were in consonance with those reported by Ravishanker TL et al, and K Annadurai. 10,11,13,15 Tobacco use often begins before adulthood and evidence shows that high number of school children (13-15 years) are currently using or have tried tobacco. About 51.2% of the respondents were aware of tobacco not to be sold within radius of 100 yards of educational institutions. This rate was reported to be higher (78.6%) by Ravi shanker TL and lower (about 18%) by Rao AR and Kumar R. 10,11,15 The sale of tobacco is prohibited in an area within radius of 100 yards of any educational institution in order to restrict access of youth for tobacco products. In case of shop selling tobacco products in close to an educational institution, students are likely to have easy access to tobacco products leading to higher chances of experimenting with tobacco consumption.

The study results have revealed that all the respondents had noticed warning labels on tobacco packages and their results are in consonance with those reported by Talreja K.<sup>17</sup> In contrast, lower rates were reported by Mangat DS et al, and Shah VR et al, in their respective studies. 18,19 Pictorial warning labels do have an impact as 69.3% of the respondents were contemplating to quit which are similar to the results reported by Raina SK in a study conducted in Kangra, Himachal Pardesh.<sup>20</sup> Mangat DS reported this rate to be 85% while Shah VR reported this rate to be 82.2% among the respondents in their respective studies.<sup>18,19</sup> About half (53.12%) of the respondents discussed about the warning labels on tobacco products with other people and similar results were reported by Mangat DS et al. About 54.6% of the respondents wanted statutory warnings on tobacco products be written in the local language and these results were in conformity with the results reported by Mangat DS et al, Oswal et al, reported that about three fourth of the respondents favour health warning message to be in regional language.<sup>9,18</sup>

About 5500 youngsters in India commence tobacco on a daily basis and in this connection; the impact of pictorial warnings should be greater to control the incidence of smoking. Pictorial warnings are an early and economical method to create awareness among all strata of population including illiterate population.

#### **CONCLUSION**

Exposure to health warnings on tobacco packages remains an important factor in educating smokers about the adverse health risks as a consequence of tobacco smoking. By making the warnings bigger, clearer with visible contrast and easily interpretable, it is likely that remaining population of 31% respondents who is not contemplating to quit are reached to. Authors further recommend that statutory warnings be written in local dialect to make them more effective and comprehensible. Recently, GOI has decided to make the COTPA more stringent by enhancing the fine on violation of law and there is a plan to ban the sale of loose cigarettes.

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Institutional Ethics Committee

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