

## PICTORIAL WARNING ON CIGARETTE PACKETS IN TOBACCO CESSATION: A QUESTIONNAIRE SURVEY

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### ABSTRACT

**Objective:** Tobacco is the main risk factor for cancer and its incidence is increasing day by day. So government authorities are trying attentively to decrease the sale of tobacco products by implementing pictorial warnings on the cigarette packets. This study was conducted to verify the impact of pictorial health warning labels on smokers.

**Material and Methods:** This cross sectional study was conducted among patients coming to a dental check up camp organised in north Delhi. Those subjects aged 15 years and above and were established smoker (who smoke at least one cigarette per day at the time of the

survey were selected. A total of 640 subjects were investigated using a pretested, self administered multiple choice and close ended questionnaire Descriptive statistics were obtained and frequency distribution, means, standard deviation were calculated. The significance of difference was set at  $p < 0.05$ . **Results:** 81.6% of the participants had noticed health warning pictures on the cigarette packets and 59.4% had discussed regarding these warning effects with other people. Mostly people want warnings in their local lingua franca and also government should improve the quality graphic warnings. More than half of the respondents gave positive response in quitting this adverse habit. **Conclusion:** It was found that majority of the participants have noticed the health warning labels on the cigarette packets. Mostly people recognized the graphic warnings and still some were confused due to its clarity and wanted government to improve its quality.

**KEYWORDS:** Health warnings, Pictorial Warning, Smoking, Tobacco cessation.

## INTRODUCTION

Tobacco products both in smoking and smokeless form kill people. According to the Million Death Research, Smoking form of tobacco alone leads to 10% of all deaths. One among five adult male deaths and one among twenty adult female deaths in middle age group are due to smoking only.<sup>[1]</sup> In India, around 800,000 deaths annually are related to the use of tobacco, out of which 700,000 are due to smoking only.<sup>[2]</sup> Mostly people are not aware regarding the extent of damage that tobacco can cause. Being one of the most important preventable causes of many complicated diseases, it is extremely vital to communicate information concerning the harmful effects of tobacco use among people.<sup>[3]</sup>

Cigarette warning labels provide means of informing smokers about the health hazards associated with smoking. Warning labels are unique among tobacco control initiatives in that they are delivered at the time of smoking. Pictorial warning labels have benefits over only text matter labels as they increase the attention, as well as the recall of messages, and also lead to motivation to quit smoking. Recent studies have publicized that they are additional effectual in reducing passion to smoke, principally among youth smokers.<sup>[4-7]</sup>

The framework convention on tobacco control requires signatory countries to implement health warning on cigarette packs that are at a minimum large, clear and cover at least 30% of pack surface. Indian Parliament passed the Cigarette and Other Tobacco Products under Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution Bill for implementing pictorial warning on tobacco products. And the same was finally implemented on 31st May, 2009.<sup>[2]</sup>

Since there is limited data regarding the impact of newer warning labels on smoking cessation in India. So, this study was planned to recognize the impact of pictorial health warning labels on smokers.

## MATERIALS AND METHODS

The study was conducted among patients coming to the Oral health check up camp in north Delhi, India to examine the impact of the introduction of graphic health warnings on cigarette packs on adult smokers. Those subjects aged 15 years and above and were established smoker (who smoke at least one cigarette per day at the time of the survey were selected. Individuals who used smokeless form of tobacco and were not willing to participate were excluded.

A total of 640 subjects were investigated using a pretested, self administered multiple choice and close ended questionnaire including demographic profiles, information regarding number of cigarettes smoked per day, method of buying, health warning label's impact on health, willingness to change (time and the quantity of cigarettes they plan to decrease per day in quitting) and improvement in warning labels.

### DATA ANALYSIS

Data was analyzed using SPSS version 16.0. Descriptive statistics were obtained and frequency distribution, means, standard deviation were calculated. Student's t test and One way ANOVA were used to find the significance of difference at  $p < 0.05$ .

### RESULTS

The study was conducted among 640 participants including 576 males and 64 females. According to the education status, 263 were illiterate, 180 completed primary education and 197 had education above primary level. In this study, 81.6% of the participants had noticed health warning pictures on the cigarette packets and 59.4% had discussed regarding these warning effects with other people. Regarding the method of buying cigarettes, 43.4% said that they prefer to buy full packets and 56.6% usually buy loose cigarettes. 73.4% of the study subjects mentioned that statutory warnings on tobacco packets should be written in the local language so people can easily understand. 65.6% participants recommended that the health warning proposed by the government should be improved to convey very serious diseases like cancer.

The data stated that most of the study participants (40.6%) consume between 5 to 10 cigarettes per day followed by more than 10 cigarettes/day (31.9%) and 1 to 5 cigarettes/day (27.5%).

When it was asked about the warning status on the cigarette packet, mostly people observed that the picture depicts about the Lung (59.7%) and Oral (24.1%) cancer. However, very few participants pointed out about Heart diseases (5.9%) and Tuberculosis (2.2%). Around 8.1% said that the picture was not giving idea about any serious condition. When asked about reducing the number of cigarettes, more than half of the sample ready to decrease 1 cigarette/day, 16.8% ready to reduce 2 cigarettes/day, 8.3% ready to reduce 3 cigarettes/day and 3.2% ready to reduce 4 cigarettes/day. However 20.3% did not give any positive response for lessening the frequency of cigarette smoking.

Regarding the response of the participants to quit smoking, 56.9% said that they will quit in the coming six months and 4.6% answered that they will quit within a month. Whereas 16.3% were having no idea regarding giving up of tobacco.

## DISCUSSION

There is a famous Chinese proverb saying that “If I hear and I forget, I see and remember, I do and I understand. It means that a picture speaks thousand words. When a person sees something with their own eyes, it will remain in their memory forever.” The present findings stated that 81.6% of the participants had seen health warning labels on the cigarette packets.

Similarly Shah VR et al found that out of 776 tobacco users, 561 (72.3%) had observed warning over the tobacco products.<sup>8</sup> In an another study done by Karinagannanavar A et al, findings were almost similar as 72.5% of total participants had seen the graphic warnings.<sup>[9]</sup> However, study conducted by Talreja K et al observed that 97.5% people had idea of the pictorial warnings on cigarette packs and 18.2% of them were not able to understand the clear picture of pictorial warning.<sup>[10]</sup> These results were similar to the study conducted by Karibasappa GN et al, the reason behind not recognizing the warning label could be due to smaller size of packaging of the product.<sup>[11]</sup> The present study also showed that 59.4% of the study participants discussed about the health warning labels on tobacco packets with other people (including their family members and friends).

Pictorial warning labels do have an impact on changing behavior pattern of the smokers as around 80% of the participants were planning to reduce the frequency of smoking by one to four cigarettes per day. When they were asked about absolutely quitting this adverse habit, around 85% gave a positive response. These findings were in accordance with the study conducted by Karibasappa GN et al in people consuming both smokeless and smoking form of tobacco.<sup>11</sup> Similarly, Shah VR et al mentioned that 82.2% of the study participants had reduced the number of cigarettes after noticing the warning labels.<sup>[8]</sup>

It was revealed in the study that Impact of graphic warnings on cigarette packets increased with the advancing education level i.e. from illiterates to above primary level. Another comparable study mentioned that illiterates were not aware about the warning labels and as the level of education increases number of smokers with positive impact of warning labels increases.<sup>[11]</sup> Similarly stratification based on education mentioned that only 27.7% of illiterate participants have seen pictorial warning on smoked tobacco manufactured goods.<sup>[12]</sup>

Talreja K et al also said that 87.6% of the people needed education for proper understanding of ill effects due to tobacco.<sup>10</sup> Mostly the study participants were willing to see the warnings printed on the tobacco packets in their own mother tongue like Hindi. The results were comparable to the study by Oswal et al in an Indian community showing 73 to 75% people favor the pictorial warning message to be in regional language (Hindi and Marathi respectively).<sup>[12]</sup>

In India, approximately 5,500 youngsters commence using tobacco every day. So the warnings would have greater impact on the population to control the incidence of smoking.<sup>12</sup> As this is an easy and economical method to create awareness among the illiterate people.

### CONCLUSION

The findings concluded that majority of the participants have notice the health warning labels on the cigarette packets. Smokers mostly observed that the picture depicts about the Lung and Oral cancer, but still some were confused with Heart diseases and Tuberculosis due to poor quality of packaging. Therefore government should strictly recommend that the health warning must be improved to convey very serious diseases like cancer and also statutory warnings on tobacco packets should be written in the local dialect.

### REFERENCES

1. Cunningham R. Canada: Warnings with colour pictures required. *Tob Control*, 2000; 9: 359.
2. Hammond D, Fong GT, McDonald PW, Cameron R, Brown KS. Impact of the graphic Canadian warning labels on adult smoking behaviour. *Tob Control*, 2003; 12: 391-5.
3. ITC Project. ITC Thailand Survey Summary. Ontario, Canada: University of Waterloo, Institute for Population and Social Research, Mahidol University Salaya and Thai Health Foundation, Thailand, 2009.
4. Hammond D, Fong GT, McDonald PW, Brown KS, Cameron R. Graphic Canadian cigarette warning labels and adverse outcomes: Evidence from Canadian smokers. *Am J Public Health*, 2004; 94: 1442-5.
5. Thejus T, Jayakrishnan T. Pictorial warnings on tobacco products: How delayed and diluted in India? *Indian J Med Ethics*, 2009; 6: 105-6.

6. World Health Organization. WHO REPORT on the Global Tobacco Epidemic 2008. The MPOWER Package; 2008. Available from: [http:// www.who.int/tobacco/mpower](http://www.who.int/tobacco/mpower). [Last cited on 2013 Dec 22].
7. Rekha B, Anjum S. Effectiveness of pictorial warnings on tobacco packs: Hospital-based study findings from Vikarabad. *J Int Soc Prev Community Dent*, 2012; 2: 13-9.
8. Jha P, Jacob B, Gajalakshmi V, Gupta PC, Dhingra N, Kumar R, *et al.* A nationally representative case-control study of smoking and death in India. *N Engl J Med.*, 2008; 358: 1137-47.
9. Arora M, Yadav A. Pictorial health warnings on tobacco products in India: Sociopolitical and legal developments. *Natl Med J India*, 2010; 23: 357-9.
10. Ministry of Law and Justice, Government of India. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003. No. 34 of 2003, 2003. [reporting/Annexthreeindia.pdf](http://www.mca.gov.in/announcements/Annexthreeindia.pdf).
11. Grover V, Malhotra R, Bhatia A. Tobacco/smoking habits, oral health status and awareness about antismoking act in patients visiting to National Dental College and Hospital, Gulbargarh, Mohali, Punjab: A cross-sectional survey. *J Indian Assoc Public Health Dent*, 2009; 14: 122-34.
12. Hammond D, Geoffrey TF, Borland R, Cummings KM, McNeill A, Driezen P. Communicating risk to smokers: The impact of health warnings on cigarette packages. *Am J Prev Med.*, 2007; 32: 202-9.
13. Raute LJ, Pednekar MS, Gupta PC. Pictorial health warnings on cigarette packs: A population based study findings from India. *Tob Use Insights*, 2009; 2: 11-6.
14. Shastri A. Are Morbid Graphic Tobacco Label Warnings Effective Deterrents to Tobacco Consumption in India. Available from: <http://www.my-oral-14th-WCTOH.pdf/int/en/page>. [Last cited on 2013 Dec 24].
15. Kees J, Burton S, Andrews JC, Kozup J. Understanding how graphic pictorial warnings work on cigarette packaging. *J Public Policy Mark*, 2010; 29: 265-76.
16. Nascimento BE, Oliveira L, Vieira AS, Joffily M, Gleiser S, Pereira MG, *et al.* Avoidance of smoking: The impact of warning labels in Brazil. *Tob Control*, 2008; 17: 405-9.

17. Fong GT, Hammond D, Jiang Y, Li Q, Quah AC, Driezen P, *et al.* Perceptions of tobacco health warnings in China compared with picture and text-only health warnings from other countries: An experimental study. *Tob Control*, 2010; 19(2): i69-77.
18. Strasser AA, Tang KZ, Romer D, Jepson C, Cappella JN. Graphic warning labels in cigarette advertisements: Recall and viewing patterns. *Am J Prev Med.*, 2012; 43: 41-7.
19. Borland R, Yong HH, Wilson N, Fong GT, Hammond D, Cummings KM, *et al.* How reactions to cigarette packet health warnings influence quitting: Findings from the ITC four-country survey. *Addiction*, 2009; 104: 669-75.
20. O'Hegarty M, Pederson LL, Nelson DE, Mowery P, Gable JM, Wortley P. Reactions of young adult smokers to warning labels on cigarette packages. *Am J Prev Med.*, 2006; 30: 467-73.