

A Study on the Impact of Health Warnings on Tobacco Products for Tobacco Cessation

Nitish Bhat^{1*}, Rubeena Anjum¹, Rakesh Gupta², Mandeep Kaur¹, Nandini Bhardwaj³

ABSTRACT

Introduction: Tobacco is a well-known etiological agent in the causation of oral cancer but at the same time, it is freely available to the general population. Although government has framed several rules and regulations including adding health warning on packages in the form of text and pictographs which are among the most direct and prominent means of communicating with smokers, still the results of tobacco cessation by these methods remain uncertain. **Aim and Methodology:** The aim of the study was to investigate the awareness of people toward pictographs on tobacco products. A close ended questionnaire comprising of ten questions was framed and distributed among 800 people. The results were analyzed in the form of charts and graphs. **Results:** About 97.5% of people actively participated in the study. Pictorial health warnings seem to be significantly more effective than text warnings. Old aged people (43%) seemed to be more aware than the young generation (18%). **Conclusion:** Although several warning signs including text and pictographs have been added on the tobacco products, making these signs bold and impact full and adding other methods mostly focused on youth should be added as a part of the campaign.

Keywords: Cigarette, Pictographs, Public health with Oral Cancer, Tobacco, Youth

Asian Pac. J. Health Sci., (2021); DOI: 10.21276/apjhs.2021.8.3.37

INTRODUCTION

Tobacco usage is alarmingly arising as one of the biggest global health problems. It is among the most significant public health threat the world has ever faced. According to the World Health Organization (WHO) estimates, tobacco kills more than 8 million people globally each year, where in around 1.2 million are the result of passive smoking (exposure to second hand smoke).^[1] Graphic health warnings, which make the potential of smoking to cause diseases more real to smokers, can improve public knowledge and work to encourage cessation through the generation of concern stimulated by the emotionally charged messages.^[2]

Pictorial warnings have not only shown reduced tobacco use and consumption, but also increased smokers' cessation-related thoughts.^[3] Pictorial warning labels also constitute an important source of tobacco risks awareness to non-smokers.^[4]

As the theme of this world, no tobacco day in 2021 was based the impact of youth by companies manufacturing these products, so we framed a study to observe the impact of the pictographs on these products on the general population specially the young generation.

METHODOLOGY

The study was conducted in the form of an online survey. The survey was carried in a 2-month time span (November–December 2019). It was based on a self-structured online questionnaire consisting of ten questions regarding the effectiveness of pictographs on the tobacco products in awareness regarding the deleterious effects of tobacco. The questionnaire was then randomly distributed among the people taking in consideration the inclusion and exclusion criteria's through various social networking sites. The questionnaire was framed in English language. Participants were selected randomly from different parts of North India. Data thus collected were analyzed and then formulated in the form of charts and tables.

¹Department of Oral and Maxillofacial Pathology and Oral Microbiology, Indira Gandhi Government Dental College, Jammu, India.

²Department of Pedodontics and Preventive Dentistry, Indira Gandhi Government Dental College, Jammu, India.

³Department of Oral Pathology and Microbiology, Himachal Institute of Dental Sciences, Paonta Sahib, Himachal Pradesh, India.

Corresponding Author: Dr. Nitish Bhat, Department of Oral and Maxillofacial Pathology and Oral Microbiology, Indira Gandhi Government Dental College, Jammu, India. E-mail: nitishbhat04@gmail.com

How to cite this article: Bhat N, Anjum R, Gupta R, Kaur M, Bhardwaj N. A Study on the Impact of Health Warnings on Tobacco Products for Tobacco Cessation. *Asian Pac. J. Health Sci.*, 2021;8(3):217-219.

Source of support: Nil

Conflicts of interest: None.

Received: 04/04/21

Revised: 30/05/21

Accepted: 17/06/21

Inclusion Criteria

People participating willingly in the survey. People older than 18 years and younger than 65 years, people who use smartphones and can read and understand the questionnaires were included in the study.

Exclusion Criteria

People who are not willing to participate in the survey, people younger than 18 years or older than 65 years, and people who do not use smartphones were excluded from the study.

RESULTS

Among 800 questionnaires sent, we received answers to a total of 780 questionnaires which indicate 97.5% of people actively participated in the study. The study included a 288 females (37%) and 492 males (63%) out of which 346 were smokers 44% and 434 non-smokers 56% [Table 1]

Table 1: Number of participants on gender basis and smoking

Total	Male	% age	Female	% age	Smokers	% age	Non smokers	% age
780	492	63	288	37	346	44%	434	56

About 79.4% of participants knew about the ill effects of tobacco, 20.6% did not know the effect, taking in consideration about presence of warning signs on the tobacco product. About 77.2% of participant's had an idea about some type of warning while 22.8% said that they did not notice any warning sign. A total of ten questions were included in the questionnaire regarding the efficacy of warnings on tobacco packets with results included in Table 2.

Age also seemed to be an important variable for the study. About 43% old aged people seemed to be more concerned and 18% of young adults seemed to be least interested [Figure 1] about the knowledge of effect of tobacco on health. This could be the reason for tobacco companies focusing on the youth as described in the WHO campaign 2020.

DISCUSSION

India's tobacco problem is very complex, with a large use of a variety of smoking forms and an array of smokeless tobacco products.^[5] India accounts for 12% of the tobacco smokers in the world (267 million) and of the estimated 1 million tobacco-attributable deaths annually, smoking and exposure to second-hand smoke kill about 0.93 million people each year, while smokeless tobacco use kills an additional 0.02 million individuals in India annually, accounting for 74% of the global burden of smokeless tobacco.^[6] Bidis are mostly manufactured in the unorganized sector while cigarettes are mainly manufactured in large-scale industries.^[5] Tobacco smoking is a major risk factor for many non-communicable diseases such as cancer, respiratory diseases, coronary artery disease, and stroke.^[7] Tobacco consumption patterns are influenced by the demographic area, socioeconomic status, sociocultural, and religious influences. The use of pictorial warnings is of special relevance in countries with low literacy rate.^[8] In addition, the lung cancer warning discouraged adolescent non-smokers from wanting to smoke.^[9] Pictorial warning labels also constitute an important source of tobacco risks awareness to non-smokers. This translates into a well-informed society that pressures smokers to quit.^[10]

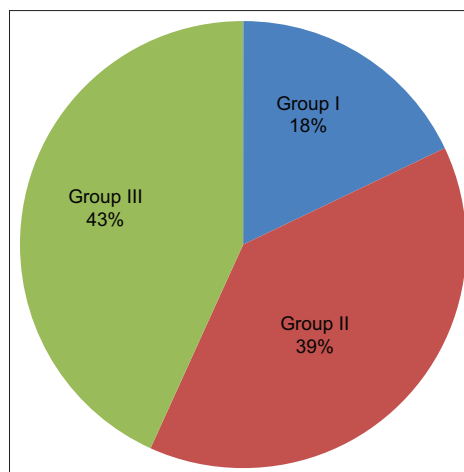
In our study, an active participation (97.5%) of individuals was seen. Elderly people seemed to be more interested in taking the survey as compared with the younger age groups. More males participated in the study as compared to the females. Awareness among the females was high considering the ill effects of tobacco on oral health.

A total of 602 individuals (77.2%) said that they had noticed the warning symbols on the tobacco products most of them belonging to the elder population. About 62% of people could directly relate the pictorial and text warnings with tobacco. This finding is comparable to the previous studies done to assess the awareness of health warnings which were found to be 89.9%, 74%, and 73.4% according to the study done by Raute *et al.*,^[11] Bhat and Kumar^[12] and Karibasappa *et al.*^[13], respectively

About 76.4% said that they were influenced by these warning signs mostly included the elderly people. About 83% considered these signs important on tobacco products. The study by Oswal *et al.* showed that more than 63% of the respondents felt that the

Table 2: Questionnaire included in the study

S. No.	Questions	Yes	No
1	Have you notice warning signs on tobacco products	77.2	22.8
2	Did you read the warnings	44.8	55.2
3	Were you able to relate warning signs with tobacco	62	38
4	Were you influenced by the warnings	76.4	23.6
5	Did you consider the warnings on tobacco products to be important	83	17
6	Were pictorial warnings more effective than text	91	9
7	Are you aware about harmful effects of tobacco on oral health	79.4	20.6
8	Will the warning signs be effective in tobacco cessation	57.6	42.4
9	Is there a need to improve the warnings	89.4	10.6
10	Are you willing to take active participation in tobacco cessation programs	53.5	46.5

**Figure 1:** Distribution of variables according to the age

warning labels were inadequate in conveying the adverse impact of tobacco use on health.^[14]

In our study, majority (91%) believed that the pictorial warnings on these products were much more effective than the text warnings. The results were consistent with studies in the USA found that recognition of warnings in pictorial health warnings was higher than those in text-only warning. Pictorial warnings have been found to be effective in deterring smoking, especially among the young.^[15] In fact, the use of images may be an effective educational strategy, since pictures improve learning, memory, and impact post-message attitudes.^[16]

In a study by Oswal *et al.*, about 45.5% of the participants opined that these pictorial warnings should be on top and the front surface of tobacco products and 39% of people opined for middle place on the front surface of tobacco products. About 94.8% of people opined that these images should be of larger size than present size of pictures on tobacco products.^[14]

People believing that only the presence of such signs could restrict the use of tobacco which was less and majority (89.4%) felt that even though the signs are beneficial a lot more improvement and awareness needs to be there to restrict its usage. The number of older individuals ready for participating in the tobacco cessation programs was more compared to the younger population. In a study by Dahiya *et al.*, 48.3% of tobacco users believe that presence of pictorial and text warnings had no impact on them. This indicated the fact that anti-tobacco programs should not be just limited to adding pictures and text warnings on tobacco products.^[17]

Unfortunately, the interference by the tobacco industry in health policy continues to be one of the greatest threats to the global tobacco treaty's implementation and enforcement. It was stated that the pictorial warning bearing skull and bone hurts religious sentiments and was replaced with revised warnings.^[18] Evidence from countries such as Canada, (58%), Brazil (67%), Thailand (44%), and New Zealand (67%) has shown that placement of pictorial warnings has motivated smokers to quit the habit, in these countries.^[19] Therefore, there is a need for stronger and more informative graphic health warnings in India.

CONCLUSION

After the commencement of the study, we arrived at a conclusion that the text warnings seemed less effective than the pictorials on the tobacco products. The younger age group was least concerned with the graphical warnings but the middle age group and older individuals seem to be concerned regarding health and few of them avoided the use of tobacco thereafter. The warnings over the tobacco products helped to limit tobacco use in non-smokers but had a little impact on the smokers. Hence, we think that the warning signs must be included on the tobacco products but there is a much needed awareness needed among the young generation to limit its use.

REFERENCES

1. Pinkas J, Kaleta D, Zgliczynski WS, Lusawa A, Wrześniewska-Wal I, Wierzbka W, *et al.* The prevalence of tobacco and e-cigarette use in Poland: A 2019 nationwide cross-sectional survey. *Int J Environ Res Public Health* 2019;16:1-12.
2. Fathelrahman AI, Omar M, Awang R, Cummings KM, Borland R, Samin AS. Impact of the new Malaysian cigarette pack warnings on smokers' awareness of health risks and interest in quitting smoking. *Int J Environ Res Public Health* 2010;7:4089-99.
3. Borland R, Yong HH, Wilson N, Fong G, 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.
4. Hammond D, Fong GT, McNeill A, Borland R, Cummings KM. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: Findings from the international tobacco control (ITC) four country survey. *Tob Control* 2006;15 Suppl 3:iii19-25.
5. Mishra GA, Pimple SA, Shastri SS. An overview of the tobacco problem in India. *Indian J Med Paediatr Oncol* 2012;33:139-45.
6. Chhabra A, Hussain S, Rashid S. Recent trends of tobacco use in India. *J Public Health* 2019;29:1-10.
7. World Health Organization. WHO Global Report: Mortality Attributable to Tobacco. Geneva, Switzerland: World Health Organization; 2012.
8. Balhara YP, Gupta R. Revised size of pictorial warning on cigarette packages a step in right direction. *Nicotine Tob Res* 2015;17:1401-2.
9. Peebles K, Hall MG, Pepper JK, Byron MJ, Noar SM, Brewer NT. Adolescents' responses to pictorial warnings on their Parents' cigarette packs. *J Adolesc Health* 2016;59:635-41.
10. Layoun N, Salameh P, Waked M, Bacha A, Zeenny RM, El Hitti E, *et al.* Motivation to quit smoking and acceptability of shocking warnings on cigarette packages in Lebanon. *Patient Prefer Adherence* 2017;11:331-42.
11. 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.
12. Bhat PK, Kumar A. Perception of pictorial warning present on cigarette packet used in India among graduating dental students of Bangalore city. *J Indian Assoc Public Health Dent* 2009;14:158-68.
13. Karibasappa GN, Nagesh L, Usha GV, Prakash S. Assessment of awareness about pictorial warnings on tobacco products among 15 years and above age in Davangere city, Karnataka, India-a cross sectional survey. *Indian J Stomatol* 2011;2:227-32.
14. Oswal KC, Raute LJ, Pednekar MS, Gupta PC. Are current tobacco pictorial warnings in india effective? *Asian Pacific J Cancer Prev* 2011;12:121-4.
15. Cameron LD, Williams B. Which images and features in graphic cigarette warnings predict their perceived effectiveness? Findings from an online survey of residents in the UK. *Ann Behav Med* 2015;49:639-49.
16. Hammond D. Health warning messages on tobacco products: A review. *Tob Control* 2011;20:327-37.
17. Dahiya P, Kamal R, Gupta R, Bhatt S, Didhra G, Bansal V. Assessment of awareness about pictorial warnings on tobacco products in tobacco users in Paonta Sahib, Himachal Pradesh, India. *Arch Med Health Sci* 2017;5:39-43.
18. Oswal KC, Pednekar MS, Gupta PC. Tobacco industry interference for pictorial warnings. *Indian J Cancer* 2010;47:101-4.
19. Fong G, Hammond D, Hitchman S. The impact of pictures on the effectiveness of tobacco warnings. *Bull World Health Organ* 2009;87:640-3.