# Adolescent's Perception about the Introduction of New Cigarette Packaging and Plain Packaging of Cigarette Packs: A Qualitative Study

Archana Bhat, K. B. Shilpashree, Archana Krishnamurthy, C. Manjunath, R. Shwetha, S. Madhusudhan

Department of Public Health Dentistry, The Oxford Dental College, Bengaluru, Karnataka, India

## Abstract

**Introduction:** Larger health warning labels on cigarette packages were introduced in India in 2016 to more clearly inform consumers about the health risks associated with tobacco use. The aim of this study was to know the adolescent's perception on the introduction of new cigarette packaging and plain packaging of cigarette packs. **Methodology:** A qualitative study was carried out among adolescents aged 16–19 years. Eighteen participants were selected using purposive sampling technique. Three focus group discussions with the first group consisting of 6 smokers and the second and third groups consisted of 6 quit smokers and 6 nonsmokers were conducted. The data were later transcribed and analyzed using grounded theory approach. **Results:** Nearly all participants were aware of tobacco products, brand names, colors, and pictorial warnings on tobacco products. While the nonsmokers perceived fear was greater regarding warning and the pictorial messages, the current smoker's perceptions were unaffected by fear appeals. Almost all participants reported that new cigarette warning labels were more visible, informative, and scarier than the older ones. **Conclusion:** Positive impact of warning labels was seen among nonsmokers and few quit smokers whereas the current smoker's perceptions were unaffected.

Keywords: Adolescents, health warning, plain packaging, qualitative study, tobacco

# INTRODUCTION

Quick

「発売

Smoking is the most important preventable cause of premature death and disease, being projected to be responsible for a billion deaths in the 21<sup>st</sup> century.<sup>[1]</sup> Cigarette warning labels are a key element in most countries public health campaigns designed to inform and persuade consumers about the negative consequences associated with smoking. Tobacco companies utilize misleading brand imagery such as brand descriptors (light, mild, and ultra-light) and pack colors (lighter shades to signify milder product and darker shades to signify stronger product) which has the potential to distract attention from the health warnings imprinted on tobacco packs.<sup>[2,3]</sup>

To counter such industry tactics, plain packaging has been proposed under the framework convention on tobacco control (FCTC). Australia became the first country to legislate a ban on the use of colors, corporate logos, trademarks, and misleading descriptors on tobacco packages. Manufacturers would still be required to print required health warnings and

Access this article online	
k Response Code:	Website: www.ijem.org.in
	DOI: 10.4103/ijcm.IJCM_97_18

other legally mandated information such as toxic constituents, tax seals, or pack contents together with the brand name in a mandated size, font, and location.<sup>[2]</sup>

The Cigarettes and Other Tobacco Act (COTPA), the tobacco control legislation in India, came into force in India since the year 2004. India became a Party to the WHO FCTC on February 27, 2005.

The Section 7 of COTPA included mandatory specified pictorial health warnings. On May 31, 2009, the government implemented mandatory pictorial health warnings on all tobacco packs in India. The guidelines require the warnings to consist of:

Address for correspondence: Dr. Archana Bhat, Department of Public Health Dentistry, The Oxford Dental College, 10<sup>th</sup> Milestone, Hosur Road, Bommanahalli, Bengaluru, Karnataka, India. E-mail: bhatarchana03@gmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

**How to cite this article:** Bhat A, Shilpashree KB, Krishnamurthy A, Manjunath C, Shwetha R, Madhusudhan S. Adolescent's perception about the introduction of new cigarette packaging and plain packaging of cigarette packs: A qualitative study. Indian J Community Med 2018;43:S47-51. **Received:** 11-04-18, **Accepted:** 21-08-18

S47

- Graphic warning
- Textual warning.

The warning required 40% of the principal display area of the tobacco pack to contain specified health warnings [Figure 1a and b]. On October 15, 2014, the government proposed warnings that cover 85% of front as well as back of the pack, with 25% dedicated to text and 60% to the picture. The word, "warning," is required in white font color on a red background, and the words, "smoking causes throat cancer," are required in white font color on a black background. Above the text, a pictorial depiction of the ill effects of tobacco use on health is mandated by the rules. During the first 12-month rotation period, the picture depicts throat cancer. During the second 12-month rotation period, the picture depicts neck cancer. The resolution and intensity of color are also specified. The health warning must be located on the top edge of the package. The larger warnings were initially scheduled to come into effect April 1, 2015, but the deadline was extended until April 1, 2016 [Figures 2a and b].<sup>[2,4]</sup>

Health warnings and plain packaging is a prominent source of health information and has an important position among tobacco control initiatives. However, little is known about its perception among adolescents. There is a need to know if the warnings on the cigarette packets have had any impact on adolescents and if there will be an impact if the plain packaging were to be introduced in India. Hence, the aim of this study was to know the adolescent's perception on the introduction of new cigarette packaging and plain packaging of cigarettes.

## METHODOLOGY

## Study design

The study was a grounded theory, qualitative research which was done among adolescent students (16–18 years) in the university of private educational institute of Bengaluru City between December 2016 and February 2017. This study is reported according to the Consolidated Criteria for Reporting Qualitative Research.<sup>[5]</sup>

Ethical clearance was obtained from the ethical review board of a Dental College, Hospital and Research Center, Bengaluru.

## Sampling

Purposive sampling technique was used to identify individuals with characteristics relevant to the study in order to facilitate the exploration of particular aspect of behavior.

#### **Data collection and analyses**

Study question guide was pilot tested and necessary modifications were done. Open-ended, semi-structured questions were used for collecting all relevant data. Three focus group discussions were held, 6 members in each group. The focus group discussions were guided by a moderator and discussions were audio recorded and footnotes were taken at the end of each discussion. The participants were ensured confidentiality and verbal consent was taken. The interviews were conducted till the data saturation was obtained. The discussions were transcribed verbatim. The data were familiarized through multiple readings before analysis. The analysis was done using classic grounded theory method described by Glaser, Strauss (1967).<sup>[6]</sup> Initial open coding was done after reading through the data several times. Axial coding was done to identify relationships among the open codes followed by selective coding to finalize the themes and subthemes.

## RESULTS

In total, 18 adolescents participated in the study. Three focus group discussions, using common question guide [Table 1], were held for 1–2 h till data saturation was attained. The first group consisted of 6 smokers. The second and third groups consisted of 6 quit smokers and 6 nonsmokers. All of the smokers and quit smokers were males. There were 4 male and 2 female among nonsmokers. The mean age of the participants was 17.5 years.

## Knowledge about the existing tobacco packet

The participants were aware of the brand names, color, manufacturing, health warnings, cost, and textual warning on tobacco products. They recalled specific brand names for smoked tobacco products. They were aware of the number of cigarettes present in a packet. They could differentiate the old pack from the new.

*Ahhh warning is written, name, manufacturing is there and ah cost also.* <sup>*s*</sup>

## Perceptions about health warning labels

The nonsmokers and quit smokers expressed fear while looking at the warning labels; whereas, the smokers were indifferent to it.

It's showing people how effectively harmful it is. It's better compared to previous packet really, because it shows how more injurious it is to health. The picture is on both the sides.<sup>s</sup>

## Pictorial health warnings

Nearly all participants were aware of the warnings on tobacco pack and could easily describe the picture of the damaged throat. They found it disturbing and avoided eye contact with

# Table 1: The questions guide included the following contents

Addiction to smoking Views on plain packaging Perceptions on the color of the cigarette packets Least attractive color of the cigarette packet Most attractive color of the cigarette packet Perception about the introduction of the new cigarette packs Perception about the pictorial warning on cigarette pack Perception about the textual warning on cigarette pack Fear perception about the warning labels Change in behavior after the introduction of the new cigarette packet Attempt to quit smoking Motivation to quit Suggestions to further make changes in the cigarette packet



Figure 1: (a) Cigarette warning label 2013 (b) Cigarette warning label 2013

it. Participants reported that new cigarette warning labels were more visible, informative, and scarier than the older ones. Almost all participants noticed pictorial health warnings first when they looked at a tobacco pack. The nonsmokers claimed that they were scared when they first looked at the pictorial health warning, whereas smoker's perceptions were unaffected by fear appeals. The quit smokers said the pictorial warning in one way made them quit smoking but the impact of pictorial warning was minimal. Quit smokers explained that the reason they quit smoking was due to health issue related to smoking such as shortness of breath, reduction in work out time, fatigue, coughing, and burning sensation in the stomach.

Few of the participants believed that the picture had low resolution and looked unreal.

It's demon looking. How do I explain? I feel so disgusted looking at it. You can see the whole digestive system in the cigarette packet getting damaged and all. So, I feel it's not good. <sup>NS</sup>

I prefer this packet; like, when you smoke it doesn't give me a scare (about the old packet). That one is scary; this shows so much vulgarity (about the new packet). It shows what happens when you smoke. See the throat and all, it's kind of scary. <sup>QS</sup>

### The textual warning

The nonsmokers claimed that the textual warning created fear in them, while few smokers said they would continue smoking regardless of the warning given. According to the participants, the pictorial warning was more effective than the textual warning. They felt that the size and color of the textual warning is clear and good enough and no further changes were required.

The responses were:-

Everyone knows it kills you so it's okay, it doesn't matter, we find it everywhere. <sup>s</sup>

*No, look at that I think it gives you a pretty good picture about what happens when you smoke.* <sup>NS</sup>

This is fine, the initiative what they have taken is good. What more can they do apart from this? Anyways, smokers are going to smoke.  $Q^S$ 

#### Brand value among participants

Most smokers and quit smokers were brand conscious. Participants felt that better cigarette brands were more



Figure 2: (a) Cigarette warning label 2016 (b) Cigarette warning label 2016

prestigious. Every individual was attached to certain brand. Participants felt that various tobacco brands are different in their flavor and taste. While few participants said that the brand does not matter once you are addicted to smoking. The responses were:

I feel brand matters, like if you see \*\*\* and other classy branded cigarettes, classy people use it. I think smoking is classy.  $^{\rm S}$ 

I see a brand. I get fixed to the brand, then irrespective of the facts, color, and change of pics. They enlarge and make everything big. If they cover the whole thing with cancer also I go and buy cigarettes. So, the pack doesn't interest me. The thing is I go for the brand. QS

## Plain packaging of cigarettes

## Role of plain packaging in tobacco control

None of the participants were aware of plain packaging before being recruited for the focus group discussion. Few participants gave positive response toward plain packaging and believed that it will reduce tobacco usage, especially among the beginners. While others said, plain packaging will have no effect on smoking trend.

*You know the people who are already smoking; it will have no impact on them. But for the beginners, it will have an impact.* <sup>*s*</sup>

It'll affect the profit of the company, right? They have their own what do u say? They have their own identification. People start thinking. So, it'll affect the sales of the company.<sup>NS</sup>

### Attraction toward tobacco packaging

The participants said that the cigarette packets were attractive and shiny. Few nonsmokers found the cigarette packs tempting and attractive. One of the participants said:

It's rather attractive, it's pretty shiny leaving out the picture and leaving out the warning, it's pretty attractive.<sup>NS</sup>

#### Color perception

Dull colors (e.g., light gray, white, and pink) were seen as least attractive while dark colors such as red and black were most favored. The female participants found pink attractive whereas the male participants said pink and purple would be unattractive. One of the participants stated:

*Pink is girlish; I would not prefer it. When you hold a cigarette in your mouth, it must look manly.* <sup>s</sup>

## **Response to addicted smokers**

The health warning labels did not affect most of the smokers. They were aware of the harmful effect of smoking. However, it was difficult to quit and some did not want to quit.

*I mean; people do see everything. They won't fix themselves. They just need a cigarette in their hand.* <sup>s</sup>

Yeah! The picture you know it's pretty clear. People who are addicted you know, they don't care about it. Whenever the picture is there is, they will go have a cigarette. But, that could be more effective (pointing into new packet).<sup>QS</sup>

I think nobody cares about the warnings. Every year the smokers are increasing. Even after increasing the price, like 1 or 2 rupees per cigarette. It doesn't matter to us.  $^{s}$ 

## Selling of single cigarettes

Most participants claimed that they do not get to see the cigarette packs as they ask for a single cigarette at a time. It was convenient for them to buy 1 or 2 cigarettes a time rather than the whole packet. Most of the smokers claimed that they never really get to see the packet.

Cigarette packet.... I usually didn't look into those when I used to smoke. I just get into shop and I'll be like hey get me whatever brand I used to smoke. I never really saw the pack. I never brought it on bulk or something. I used to smoke one or two cigarettes per day, not like a chain smoker. If you are into things like that. You'll keep a cigarette pack for yourself. I didn't buy a pack. QS

*We don't buy cigarettes packs. We never you know, consume full packs…we will just take one cigarette or two.* <sup>*s*</sup>

# DISCUSSION

This study explored the adolescent's perception about the introduction of larger warning labels on the cigarette pack and attitude of toward plain packaging cigarette packs.

In our study, participants expressed that they were aware about the existing tobacco packet. This was in accordance with a study done by Arora *et al.* in 2013 and Karinagannanavar *et al.*<sup>[2,7]</sup>

In this study, almost all participants reported that new cigarette warning labels were more visible, informative and scarier than the older ones. The nonsmoker's claimed to be scared when they first looked at the pictorial health warning, whereas few smoker's perceptions were unaffected by fear appeals. Yong *et al.* in his study said that the new pictorial Thai health warnings, which were larger and contained pictorial images, covering 50% of the front and back top panel of the packs, were more effective than its old smaller text-only warnings.<sup>[8]</sup>

A study done by Vardavas *et al.* showed that adolescents rated the graphic warning labels as more effective in preventing them from smoking.<sup>[9]</sup> A study done by Shah *et al.* showed that not all the tobacco users were aware about the warning labels. But among the tobacco users who did notice the warning labels, positive impact was seen among them.<sup>[10]</sup> Hence, the tobacco packaging may have an impact on casual or undecided smokers, than on addicts. This was the first qualitative study in India which compared the new and old cigarette packets. Further quantitative research is required to know the effectiveness of new cigarette packaging among youth.

Participants reported that plain packaging would reduce the attractiveness and promotional value of tobacco products. An experimental study conducted in Australia suggested that smoking cigarettes from plain packs was perceived to be less satisfying by smokers compared with smoking cigarettes from packs with full branding and other imagery (Wakefield et al.) Plain tobacco packs, by removing the "style statement" associated with attractive tobacco packs, would prevent initiation of tobacco among nonusers.<sup>[11,12]</sup> Lund and Scheffels in their study found that shift from branded to plain cigarette packaging would result in a reduction in positive user images related to smoking among adolescents and young adults.<sup>[13]</sup> This was in accordance to a study done by Arora et al. and Doxey and Hammond<sup>[2,14-16]</sup> Experimental study done by Hammond et al. has shown that adolescents perceive cigarettes from plain packs as "tasting cheap" compared with cigarettes from fully branded packs.<sup>[17]</sup> Mays et al. in 2015 stated that on plain packs without industry branding, warnings combining pictorial depictions of health risks with gain-framed message text generated stronger motivation to quit.<sup>[18]</sup> In our study, most of the smokers and quit smokers were brand conscious. Participants felt that better cigarette brands were more prestigious. Kate Babineau and Clancy reported that even with the inclusion of larger dual-sided text and pictorial warnings as mandated by the European Tobacco Products Directive guidelines, branded packs are thought to be more attractive, contain healthier cigarettes, and used by more popular people than the standardized packs.<sup>[19]</sup> Over the 34-month postimplementation period of plain packaging from December 2012 to September 2015, it was estimated that the 2012 packaging changes resulted in 108,228 fewer smokers. Since then, France, Ireland, and the United Kingdom and Northern Ireland all have implemented the plain packaging of cigarettes. Even though many studies concluded that the plain packaging makes brand less appealing for the customers, there is a lack of evidence-based literature in support of plain packing in these countries. It is important that more studies be conducted to see the effectiveness of the plain packaging in the countries where it has been implemented. We need evidence to also see if the same would work in the Indian scenario.<sup>[20]</sup>

Single cigarettes promote the sale of illicit cigarettes and neutralizes the effect of pack warnings and effective taxation, making tobacco more accessible and affordable to minors.<sup>[21]</sup> Lal *et al.* in their study estimated that nearly 75% of all

cigarettes every year in India are sold as loose cigarettes, which translates to nearly half a billion US dollars or 30% of India's excise revenues from all cigarettes.<sup>[21]</sup> Thrasher et al. conducted a similar investigation among adult Mexican smokers and found that 38% of adults purchased single cigarettes in the past month, although it was illegal to sell single cigarettes during the time of the study.<sup>[22]</sup> Frances Stillman et al. found that most state and local laws prohibiting the sale of single cigarettes, enforcement of this Act takes place solely in the retail environment. However, in many urban and low socioeconomic status communities, this practice is endemic within and outside of retail stores, with little to no enforcement efforts; considerable community involvement and public health efforts will be needed to eliminate this behavior.<sup>[23]</sup> However, in a retrospective study done by Singh et al., it was seen that loose cigarette buying is associated with decreased in smoking intensity. This may be due to increased taxes leading to increased buying of single cigarettes.<sup>[24]</sup> There is an urgent need for high-quality qualitative and quantitative studies to know the effect of sale of single cigarettes and smoking.

## CONCLUSION

Health warnings on tobacco packages were implemented to raise awareness of the health risks of tobacco and to encourage consumers to quit. In India, due to its diverse culture, where people use several languages, the pictorial warning surpasses the language barrier. The plain packaging can be an efficient solution to this problem associated with "style" factor.

To the best of our knowledge, this was the first qualitative study in which the comparison was done between new and old cigarette packets. There is a need for further quantitative research that addresses behavioral, environmental, and political conditions influencing smoking among youth.

# Financial support and sponsorship Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

## REFERENCES

- Salloum RG, Goma F, Chelwa G, Cheng X, Zulu R, Kaai SC, et al. Cigarette price and other factors associated with brand choice and brand loyalty in Zambia: Findings from the ITC Zambia survey. Tob Control 2015;24 Suppl 3:iii33-40.
- Arora M, Tewari A, Grills N, Nazar GP, Sonrexa J, Gupta VK, et al. Exploring perception of Indians about plain packaging of tobacco products: A Mixed method research. Front Public Health 2013;1:35.
- Hughes N, Arora M, Grills N. Perceptions and impact of plain packaging of tobacco products in low and middle income countries, middle to upper income countries and low-income settings in high-income countries: A systematic review of the literature. BMJ Open 2016;6:e010391.
- 4. Available from: http://www.tobaccolabels.ca/countries/india/. [Last

accessed on 2018 Sep 03].

- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19:349-57.
- Glaser BG. Basics of Grounded Theory Analysis: Emergence vs Forcing. Mill Valley, CA, USA: Sociology Press; 1992.
- Karinagannanavar A, Raghavendra B, Hemagiri K, Goud TG. Awareness about pictorial warnings on tobacco products and its impact on tobacco consumers in Bellary, India. Asian Pac J Cancer Prev 2011;12:2485-9.
- Yong HH, Fong GT, Driezen P, Borland R, Quah AC, Sirirassamee B, et al. Adult smokers' reactions to pictorial health warning labels on cigarette packs in Thailand and moderating effects of type of cigarette smoked: Findings from the international tobacco control southeast Asia survey. Nicotine Tob Res 2013;15:1339-47.
- Vardavas CI, Connolly G, Karamanolis K, Kafatos A. Adolescents perceived effectiveness of the proposed European graphic tobacco warning labels. Eur J Public Health 2009;19:212-7.
- Shah VR, Dave VR, Sonaliya KN. Impact of anti-tobacco warning labels on behaviour of tobacco users in one of the cities of Gujarat, India. J Prev Med Hyg 2013;54:109-13.
- Wakefield MA, Germain D, Durkin SJ. How does increasingly plainer cigarette packaging influence adult smokers' perceptions about brand image? An experimental study. Tob Control 2008;17:416-21.
- White V, Williams T, Wakefield M. Has the introduction of plain packaging with larger graphic health warnings changed adolescents' perceptions of cigarette packs and brands? Tob Control 2015;24:ii42-9.
- Lund I, Scheffels J. Young smokers and non-smokers perceptions of typical users of plain vs. Branded cigarette packs: A between-subjects experimental survey. BMC Public Health 2013;13:1005.
- Doxey J, Hammond D. Deadly in pink: The impact of cigarette packaging among young women. Tob Control 2011;20:353-60.
- Moodie C, Bauld L, Ford A, Mackintosh AM. Young women smokers' response to using plain cigarette packaging: Qualitative findings from a naturalistic study. BMC Public Health 2014;14:812.
- White CM, Hammond D, Thrasher JF, Fong GT. The potential impact of plain packaging of cigarette products among Brazilian young women: An experimental study. BMC Public Health 2012;12:737.
- Hammond D, Dockrell M, Arnott D, Lee A, McNeill A. Cigarette pack design and perceptions of risk among UK adults and youth. Eur J Public Health 2009;19:631-7.
- Mays D, Niaura RS, Evans WD, Hammond D, Luta G, Tercyak KP, et al. Cigarette packaging and health warnings: The impact of plain packaging and message framing on young smokers. Tob Control 2015;24:e87-92.
- Babineau K, Clancy L. Young people's perceptions of tobacco packaging: A comparison of EU tobacco products directive & Ireland's standardisation of tobacco act. BMJ Open 2015;5:e007352.
- Available from: http://www.health.gov.au/internet/main/publishing. nsf/content/tobacco-plain-packaging-evaluationhttp://www.health. gov.au/internet/main/publishing.nsf/content/tobacco-plain-packagingevaluation. [Last accessed on 2018 Sep 03].
- Lal P, Kumar R, Ray S, Sharma N, Bhattarcharya B, Mishra D, *et al.* The single cigarette economy in India – A back of the envelope survey to estimate its magnitude. Asian Pac J Cancer Prev 2015;16:5579-82.
- 22. Thrasher JF, Villalobos V, Dorantes-Alonso A, Arillo-Santillán E, Cummings KM, O'Connor R, *et al.* Does the availability of single cigarettes promote or inhibit cigarette consumption? Perceptions, prevalence and correlates of single cigarette use among adult Mexican smokers. Tob Control 2009;18:431-7.
- 23. Stillman FA, Bone LR, Milam AJ, Ma J, Hoke K. Out of View but in Plain Sight: The Illegal Sale of Single Cigarettes. Journal of Urban Health: Bulletin of the New York Academy of Medicine 2014;91:355-65. doi:10.1007/s11524-013-9854-3.
- Singh M, Dogra V, Kumar R, Kumar AM. Loose' cigarettes association with intensity of smoking: A secondary data analysis from Global Adult Tobacco Survey, India, 2009-10. J Sci Soc 2017;44:26-30.

S51