

Cancer illustrations and warning labels on cigarette packs: perceptions of teenagers from high socioeconomic status in LahoreAhsan Zil-E-Ali,¹ Noor Fatima Ahsen,² Humaira Iqbal³**Abstract**

Smoking is linked with adverse health outcomes and multi-organ diseases with six million deaths every year. The smoking population includes both genders and the habit is seen in minors as well. The cross-sectional study was conducted in Lahore among teenagers belonging to high socioeconomic class. A sample of 191 students was recruited by convenience sampling. The teenagers were questioned on their perceptions relating to prohibition labels, factors that led them to smoke, and ideas to make health warnings more effective. Overall, 66(34.55%) teenagers were smokers, and of them, 50(75.75%) were boys and 16(24.24%) were girls. Besides, 25(37.9%) smokers were of the view that smoking is a bad habit; 40(60.6%) said prohibition labels would not change the mindset of the smoker; 35(53%) believed that a smoker is completely uninfluenced by prohibition labels. Results suggest that the warning labels on cigarette packs should be made more comprehensible and alarming for smokers.

Keywords: Tobacco, Socioeconomic status, Teenage, Prohibition, Health education.

Introduction

Smoking is the inhalation of burnt tobacco in the form of cigarette, cigar, sheesha, pipe etc. A smoker is defined as a person who smokes more than 100 cigarettes in his life.¹ Tobacco use is a global threat, killing six million people every year out of which five million deaths are due to direct tobacco use.² Smoking has been attributed to various adverse health outcomes which are leading global health issues such as cardiovascular, pulmonary diseases and various cancers. It is well documented that smoking is the major aetiological factor of chronic bronchitis, emphysema, atelectasis, bronchogenic carcinoma, coronary artery disease (CAD), oral diseases, clotting disorders, infertility etc.³ Smoking not only affects active smokers, but passive smokers as well. Evidence

suggests that smoking harms passive smokers more than the active smokers.⁴ The US Surgeon-General report of 2014 stated that 20 million people in the United States have died because of smoking out of which 2.5 million were second-hand smokers. It was added in the report that every 3 teen smokers out of 4 become adult smokers.⁵

The prevalence of smoking is seen more in males than in females, but there are exceptions. It has been reported in Western Pacific region that a large number of young females (13-15 years) were consuming cigarettes and other tobacco products.⁶ A research carried out by Jinnah University, Karachi, concluded after collecting the data from various universities that 39% of the total students smoked once in their lifetime and 23% were current smokers.⁷ Research at National University of Modern Languages, Islamabad, revealed that psychological distress is the main cause of the rise in the number of smokers, followed by social influence and the urge to imitate celebrities.⁸

The current study was planned to investigate the perceptions of teenage students belonging to a high socioeconomic class pertaining to the health warning illustrations on cigarette packs.

Methods and Results

The cross-sectional study was carried out at four schools of Lahore, Punjab, in July 2013. The schools were: Lahore Grammar School (LGS), Johar Town; Lahore Grammar School Kabana Branch; Lahore Alma; and the National Grammar School (NGS). The questionnaire was devised in the light of literature.⁹⁻¹¹ The questionnaire was used in English language and was not translated as the study population could easily comprehend the questions. With a margin of error of 7% and confidence interval (CI) of 95%, considering response distribution of 50%, the sample size calculated was 193. The margin of error was set relatively high because it was assumed that most of the teenage students would be able to perceive the warning labels on cigarette packs. To account for possible incomplete data, the sample size was increased to 200.

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Table-1: Perceptions of smokers and non-smokers pertaining to the health warnings and illustrations provided on cigarette packs.

Variable	Smoker						Non Smoker						Total	
	Male	%	95% CI	Female	%	95% CI	Total	Male	%	95% CI	Female	%	95% CI	Total
Just a formality	26	52	38.1-65.9	8	50	25.5-74.5	34	39	60	48.0-71.9	28	46.7	34.1-59.3	67
Not a health hazard	15	30	17.3-42.7	3	18.8	0.3-37.9	18	12	18.5	9.06-27.9	10	16.7	7.3-26.1	22
Don't know	9	18	7.4-28.7	5	31.3	3.3-29.9	14	20	30.8	19.6-42.0	16	26.7	15.5-37.9	36
Total	50			16			66	65			60			125

Table-2: Distribution of smoking family members among smokers and non-smokers.

Family members	Smokers			Non-Smokers			Total	
	Male	%	Total	Male	%	Total	Male	%
None	8	18.2	14	52	59.1	76	8	12.1
Father	24	54.6	36	21	23.9	26	24	36.9
Mother	2	4.6	3	3	3.4	6	2	3.1
Brother	8	18.2	11	8	9.1	13	8	12.1
Sister	-	-	-	-	-	-	-	-
Grandparent(s)	1	2.3	1	3	3.4	6	1	1.5
Multiple	1	2.3	1	1	1.1	2	1	1.5
Total	44		66	88		125	44	

This was estimated by inquiry into school registers which indicated roughly 300 students aged between 13-18 years in each school. The sampling frame was based on age (13-19 years old) and teenagers whose parents could afford a tuition fee of more than Rs30,000 per month (about \$300).

The sampling technique was convenience sampling to recruit the participants in their break time without disrupting their daily academic school activities. Also, snowball technique was applied by which head of institutes were requested to enlist the schools that fulfilled our criteria. Data was collected from those schools in a similar way.

Four interviewing teams were formed and each was allocated a school for data collection. Presence of female research assistant was ensured in each group keeping in mind the cultural norms. The information collected by self-administered written questionnaire was transferred to SPSS 10.0 for analysis. Chi Square test was used as a statistical test. All categorical variables, including gender, distribution of smokers, reaction on pictorial warnings, number of cigarettes consumed per day and interpretation of prohibition labels, were presented as frequencies and percentages.

As for ethical considerations, clearance was obtained from the institutional review committee of Fatima Memorial Hospital College of Medicine. Written permission was taken from the governing body of the respective schools and a non-coercive approach was adopted while

collecting data and the students were asked to sign a written consent form in which confidentiality issues were addressed.

Of the 200 teenagers initially approached, 191(95.5%) completed the questionnaire, while 9(4.5%) declined to be part of the study. There were 115(60.2%) boys and 76(39.8%) girls. The mean age for boys and girls were 18.5 ± 0.8 years and 16.9 ± 1.09 years, respectively. The overall mean age was 17.7 ± 1.21 years (range: 15-19 years).

There were 66(34.55%) smokers, and, of them, 50 (76%) were boys and 16 (24%) were girls. Among the smokers, 34 (51.5%) believed that prohibition label were merely a formality, whereas 18 (27.3%) said the labels had no significant effect on them ($p=0.232$) (Table-1).

Besides, 25 (37.9%) subjects admitted that smoking is a bad habit; 15 (22.7%) said they smoked to impress the opposite gender; 9(13.6%) thought smoking helped them socialise; 9 (13.6%) had no opinion to express; and 8 (12.1%) considered it injurious to health.

To a question regarding the effect of prohibition labels on a smoker's mindset, 40(60.6%) smokers believed nothing could affect a smoker's mindset; 13(19.7%) thought the labels had an effect; and 13(19.7%) said they lacked knowledge about it.

To a query about how the effectiveness of labels can be enhanced, 35(53%) smokers said a smoker stays a smoker and nothing affects him/her; 14(21.2%) said the label can

be more effective if it is in an easy language; 9(13.6%) said the labels should be explained by the retailers to the buyers; and 8(12.2%) believed that the prohibition illustrations should be made more noticeable.

Finally, 36(55%) subjects had fathers who were smokers, while 3(5%) had mothers who were smokers ($p=0.0001$) (Table-2).

Discussion

In our study a significant number of teenage boys from high social class were smokers and yet majority of the smokers believed that the prohibition labels and warnings on cigarette packs are merely a formality. It appeared that a fair number of smokers accepted that smoking is a bad habit. Some smokers also stated that they smoked to impress the opposite gender; a finding recorded in both males and females which could be considered part of their adolescent behaviour. In both genders, smoking was considered to be appealing and exotic.

The most popular idea recorded was that the smokers thought that the prohibition labels or any such thing cannot change their mindsets. However, a few suggested that if the labels are made more easy-to-understand, the effectiveness of labels could be enhanced.

A study in Pakistan among teenage students concluded that majority of teenagers were not bothered about warning labels on cigarette packs.¹² A similar research was carried out in 4 different countries and emphasised that there was a reduction in tobacco marketing and less impulsive purchase of tobacco due to displayed ban at selling points.¹³

Another research at Qatar University reported that most of the people were not well aware of the pictorial warnings and a large portion of the sample had no knowledge about what these warnings said. The smokers and non-smokers who knew about these warnings said that these warning labels were of no use. The study concluded that legislation was required to decrease the number of smokers.¹⁴

In contrast, a paper published in Australia reported a different scenario, highlighting that graphical cigarette warnings led many smokers to quit.¹⁵

A research conducted in New Zealand showed participants considered that immediate social and physiological benefits are gained from smoking that outweighs the distant risks shown on warning labels on cigarette packs. The research highlighted that smokers receive instant physiological rewards from smoking as well as peer approval, therefore the asserted benefits of

cessation - a promise that they might live longer - are deferred. Thus, printing of prohibition labels makes little effect on smokers, especially teenagers.¹⁶

Another aspect noted by our study was that most teenage smokers had fathers who were smokers. As fathers act as role models for sons, this could be a contributory factor. The smoking behaviour of mothers was not a contributing factor possibly because the sample chosen had less smoking mothers.

The single-city nature of our study was its limitation as was the sample size which may not have been adequate to represent the respective population. A nationally representative study is required to know the prevalent perceptions about the pictorial warnings on cigarette packs and to understand their utility, so that a targeted health promotion method can be developed to limit this habit.

Conclusion

Though most of the teenagers accepted smoking as a bad habit, they thought that the warnings were merely a formality. Fathers need to be targeted to act as positive role models for their sons. In addition, a more targeted approach for these elite teenagers is needed. As these teenagers imitate showbiz celebrities, a media reform should also be encouraged to avoid showing celebrities smoking. Besides, there should be administrative actions against the teenagers at school and by government against the retailers selling cigarettes to minors by imposing fines.

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