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Research Article

**A CROSS-SECTIONAL RESEARCH ON PICTORIAL AND  
TEXTUAL HEALTH WARNINGS IMPACT ON THE SMOKERS  
OF LAHORE AMONG THE POPULATION (IN QUITTING,  
REDUCING OR NO CHANGE IN SMOKING PATTERN) OF  
PRIVILEGED AND UNDER PRIVILEGED SOCIETIES IN  
LAHORE**<sup>1</sup> Dr. Saira Munir, <sup>1</sup> Dr. Rabbia Rizvi, <sup>2</sup> Dr. Sadaf Ilyas<sup>1</sup>Services Hospital, Lahore<sup>2</sup>King Edward Medical University, Lahore**Abstract:**

**Objective:** The research was aimed at the measurement of the health warning impact reflected on the packs of cigarette on smokers in their act of smoking.

**Methods:** Our research was cross-sectional and it was carried out in Lahore from February to June, 2016, we focused on the male smokers and distributed a self-administrated questionnaire to all the smokers selected through continence non-probability method of sampling without accounting the educational aspect and data was analyzed through SPSS-22.

**Results:** We selected a total of 1500 smoker, warning was observed by 1330 smokers (88.7%); 730 smokers (54.8%) found the picture significant; 630 smokers (47.3%) made an effort to reduce smoking and 430 smokers (32.4%) made a real effort to quit smoking because of the picture and warning impact. In the group of smokers who tried to quit (430), 300 smokers (69.7%) were influenced by the picture.

**Conclusion:** There is no significant and determinant impact of the warning and picture printed on the cigarette packs being sold in Pakistan in quitting and reducing of smoking.

**Keywords:** Cross-Sectional Research, Pictorial, Textual Health Warnings, Smokers, Lahore, Privileged and Under Privileged Societies.

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**INTRODUCTION:**

Popular smoking form in Pakistan is smoking of the tobacco and billions of people are actively involved in this practice worldwide. This practice dates back in to 5000 – 3000 BC [1]. Common practice is cigarette smoking; whereas, other involved methods are bidis, pipes, hookahs, vaporizers and cigars. Deaths attributed to smoking are half of the smokers involved in the act of smoking since long duration. 4.9 million deaths are reported back in 2007 [2]. Loss of age in females is noticed as 14.5 year and males as 13.2 years [3]. Death due to lung cancer in the men was observed as 90% and in women as 80%. Fundamental information is to be provided to the consumers about the adverse effects as a right as states the WHO [4]. Health warning are mandatory to be published on the packs as observed in few countries.

Above sixty countries have included warning and pictures on the cigarette packs [5], first implemented in USA and then followed by few other countries including pictures and text [6]. Graphic warning was first used by Canada (2000) and later Brazil [7].

Moreover, legislation was passed in 2011 and forty-four countries of America, Europe, Eastern Mediterranean, Western Pacific and South East Asia regions included graphics of warning including Pakistan. Pakistan's number was 26 in the list of these countries [8]. The impact was eventual for habit of smoking as they pass more elaborative information and awareness. Psychological and emotional response was also attached to this effort. Limited literature is available on the subject in hand and our research aimed at the assessment and planning of the smokers' response measurement about the act of smoking.

**SUBJECTS AND METHODS:**

We conducted cross-sectional descriptive research in Lahore from February to June, 2016, after the ethical

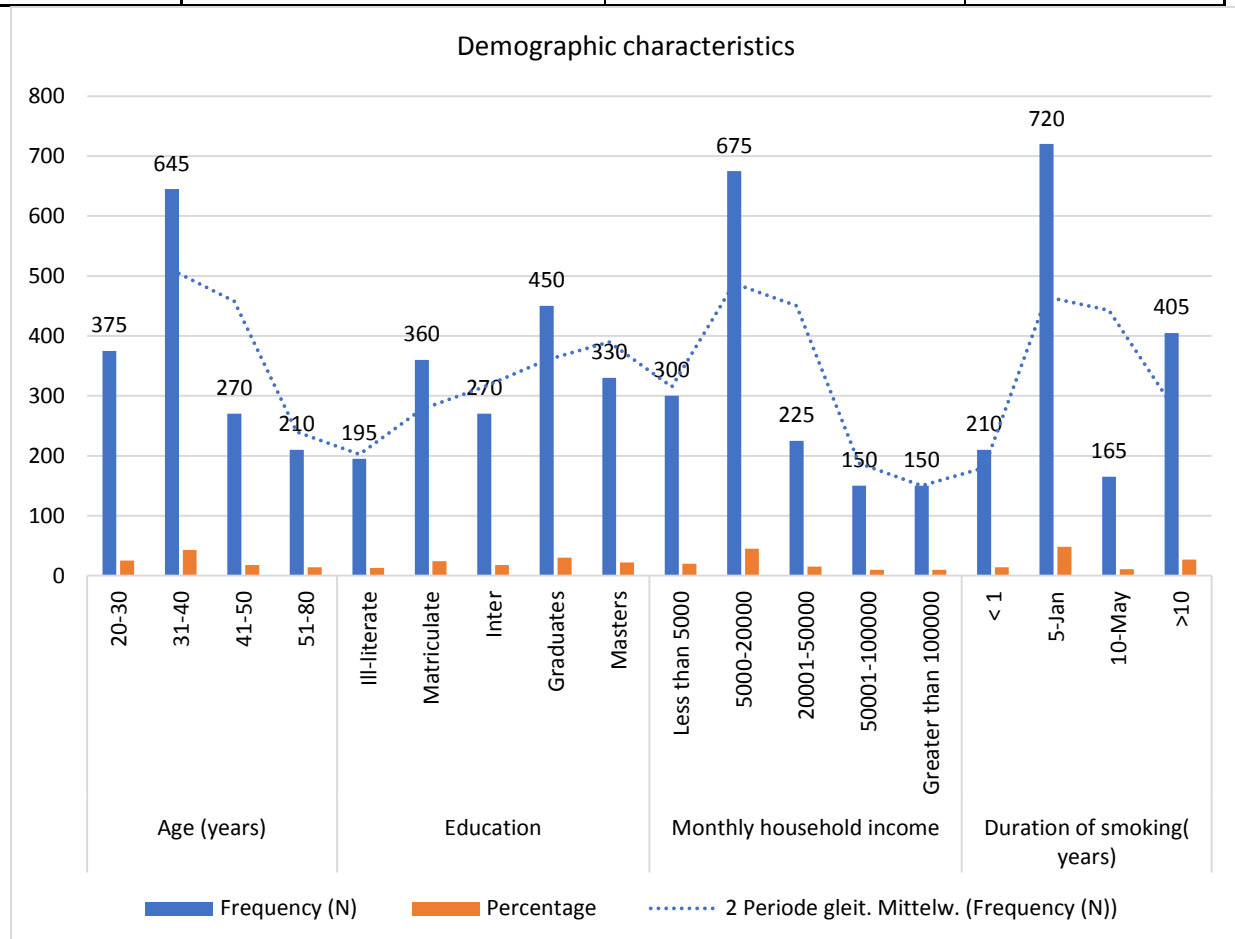
approval of Organization. Sample was marked for the determination of graphic warning impact on the target male smokers. Significant and Confidence limit was taken as 99.99 percent and 0.01 percent. Selected sample was in the age group of twenty years and no educational background was considered, research did not include any female smoker. Brief introduction of the research was given to the participants and a questionnaire was also given for the collection of participants' response and data. Urdu translation was also used for the participants unable to understand English for the purpose of accuracy. Demographic data, age, qualification, smoking duration, earning and routine consumption cigarette was also noticed. Multiple variables such as notice of warning, education, warning significance, tried to quit and habit development were also observed. SPSS-22 was used for the data analysis. Quantitative values such as percentage and frequency were calculated and educational qualification was observed through stratification through Chi-Square test with a significant p-value as ( $< 0.05$ ).

**RESULTS:**

Research sample was 1512 participants with twelve incomplete responses (0.8%) and they were not considered as a part of the research. The final research sample was limited to 1500; among these participants we observed that 375 smokers (25%) age group was in the limit of 20 – 30 years, 30 – 40 years age group had 645 smokers (43%), 40 – 50 years had 270 smokers (18%) and 50 above were 210 smokers (14%) with a mean age as ( $37 \pm 6.3$  years). Illiterate cases were 195 smokers (13%), matriculate were 360 smokers (24%), intermediate 270 smokers (18%), graduate 450 smokers (30%) and master's degree holders were 330 smokers (22%). In terms of income, per month income was observed as the income in the limit of 5000 – 20000 was observed in 675 smokers (45%). Smoking duration in the limit of 1 – 5 years was observed in 720 smokers (48%) as shown in Table – I.

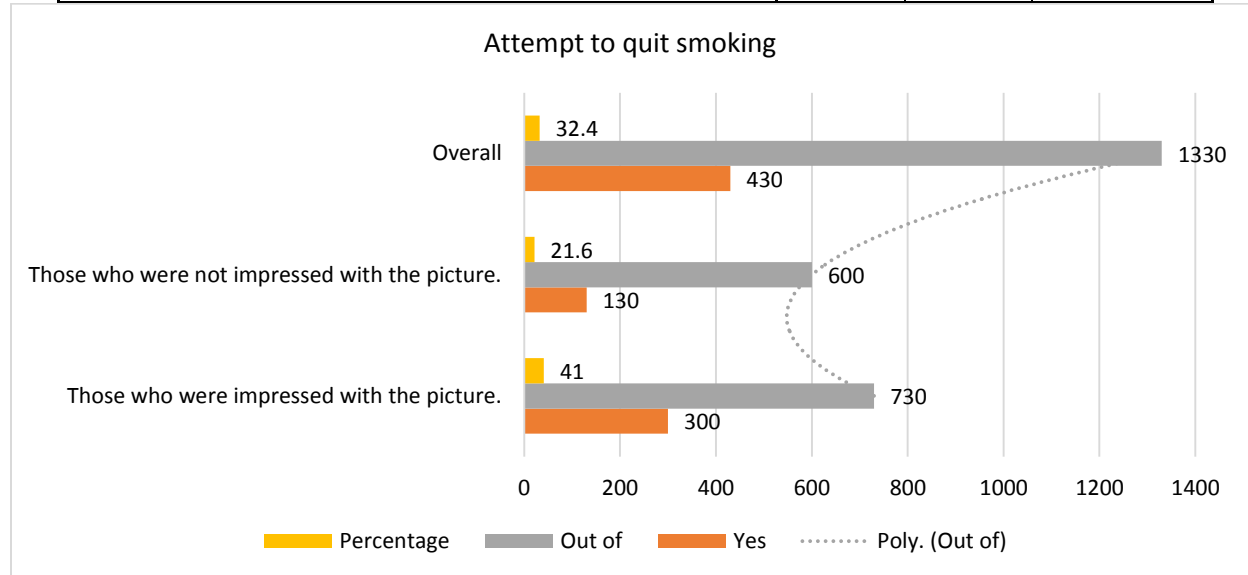
**Table-1:** Demographic characteristics

	Demography	Frequency (N)	Percentage
Age (years)	20 – 30	375	25
	31 – 40	645	43
	41 – 50	270	18
	51 – 80	210	14
Education	Ill-literate	195	13
	Matriculate	360	24
	Inter	270	18
	Graduates	450	30
	Masters	330	22
Monthly household income	Less than 5000	300	20
	5000 – 20000	675	45
	20001 – 50000	225	15
	50001 – 100000	150	10
	Greater than 100000	150	10
Duration of smoking (years)	< 1	210	14
	01 – 05	720	48
	06 – 10	165	11
	> 10	405	27



**Table-2: Attempt to quit smoking**

Description	Yes	Out of	Percentage
Those who were impressed with the picture	300	730	41
Those who were not impressed with the picture	130	600	21.6
Overall	430	1330	32.4



Notice of warning was taken by 1330 smokers (88.7%); whereas, no notice was taken by 170 smokers (11.3%) as shown in Figure. No visible difference was observed in the age group with a p-value as ( $> 0.05$ ). Significance of the image was considered by 730 smokers (54.8%); whereas, no impression of the image was observed in 600 smokers (45.2%). Likewise, decrease in the smoking was noticed in 630 smokers (47.3%); whereas, no change in the smoking habit was noticed in 700 smokers (52.7%).

Decrease of smoking after satisfaction through image were observed in 410 smokers (56%); whereas, no change was noticed in 220 cases (36.6%). In the smokers who noticed warning quitters were observed as 430 cases (32.4%); whereas, no change was observed in 900 smokers (67.6%). Impression of image was made on the smokers among them quitters were 300 smokers (41%) who tried to evade this habit. Without the impact of warning 130 smokers (21.6%) tried to escape from the smoking habit as shown in Table – II. In terms of the education status there was no statistical difference in the four groups with a significant p-value as (0.685).

### DISCUSSION:

Smokers attitude was noticed in this research and the attitude for the text and image was also observed that how it changed and how much changed the smoking pattern of the smokers. The changes on the pack were enforced by the Federal government. Textual labels were observed in the four countries as stated by the International Tobacco Control Policy in an evaluative research [9]. Furthermore, research also observed the effectiveness of the image over text in the modification of smoker's behavior. The outcomes of the research were consistent to our research study because number of smokers were observed with a positive response for the quitting of smoking.

Moreover, in the setting of those countries who made these images compulsory, formed a positive change in the adults [10]. In the outcomes of global adult survey health warning was observed by ninety percent of the cases such as Mexico as 83.5 percent and in Pakistan as our research states it is observed as 88%. Furthermore, above 65 years were less impressed by the image. Whereas, in the outcomes of our research the incidence was observed as 81% in the age above fifty years; whereas, young were more adherent to the warning and impression was made on the young. Space has no involvement in the

adherence or non-adherence as people do buy open cigarettes without packet so warning indication is out of question.

It was striking to observed that reduction was observed in only 47.3 percent of the cases in our research after the observation of the warning text and image. Even in the case of impression who tried quitting were 56%; whereas, only 41% smokers made a genuine attempt to quit. This speaks for the addiction of the smoking in the sample population and in general. We also observed a lack for the reduction or quitting of smoking.

According to GATS above 25% of the smokers were motivated by the warning signs [11, 14], same proportion was above fifty percent in Thailand, Vietnam, Ukraine etc. [12]. We observed that original attempt about the quitting was observed in 32.4% smokers. Awareness programs are mandatory for the achievement of better outcomes. Picture and text was noticed by eleven percent of the research population which is same as observed by another research held locally [13]. Moreover, in the research held at Qatar also highlights the lack of knowledge in the population about the warnings and associated adverse outcomes [14]. Few other authors also produced the same results in their research projects. Back in 2006, Thailand was the first country who introduced a 2<sup>nd</sup> pictorial set on the packets of cigarettes, which resulted 53% percent of the smokers really thought about the message being conveyed by those set of pictures as quitting attempt was observed in 44% smokers; similarly, a third set was also introduced by Brazil about the emphasis on the warning effectiveness in 2011 [17].

Canada enforced the tobacco regulations and seventy-five percent of the packet area was covered by warnings [18]. In the same way an author from Pakistan also conducted a research for the area covering and conveying the clear message for better understanding about the side-effects of the smoking in the regular and new smokers. Research also disclosed ignoring the warnings is inherited in the young smokers by their parents. Because father is the model for their children and they imitate them most of the time in their routine actions. Besides, people also thought about the warning as formality [19]. Therefore, it is suggested that Pakistan needs concrete and immediate measures in the regular smokers. We can achieve this target through increasing the awareness area on the covers of the packer and warning labels in the shape of text and images. The research was held in a single city which became its limitation. Secondly, we did not include

female as which is another limitation as they for fifty-one percent of the active society. This restricts the generalization of the outcomes on the total population.

### CONCLUSION:

There is no significance of the present warning printed on the pack of cigarette in Pakistan. It is proposed that graphical presentation should be printed on the packs at prominent and visible place for intentional and unintentional attention and also spread awareness about the cancer incidence caused because of smoking tobacco and the image should cover an fifty percent of the packet area, on the front side same as it has been observed in Brazil, Canada and Australia.

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