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#### **ORIGINAL ARTICLE**

### COMPLIANCE OF ANTI-SMOKING REGULATIONS BY CIGARETTE INDUSTRY IN PAKISTAN

Ahsan Rasool, Shehraz Ahmad\*, Umer Farooq\*\*, Maleeha Rasool, Zahika Shah, Muhammad Hammad, Ashfaq Utmanzai, Fazli Wahab, Irum Sadique, Jawad Ahmad Medical Students, \*Department of Medicine, Unit 'B', \*\*Department of Community Medicine, Ayub Medical College, Abbottabad

Background: The hazards of cigarette smoking and its increasing consumption are well known despite the ongoing tussle between the tobacco industry and global governments. To curb the menace of smoking, anti-smoking laws have been enforced from time to time by various governments. In 2003, Ministry of Health (MoH) Government of Pakistan has imposed certain regulations on cigarette manufacturing industry. The aim of this study was to highlight the compliance of the industry with these regulations. Methods: A cross-sectional study of major cigarette selling shops was conducted in Abbottabad. It was aimed at determining the availability of total cigarette brands and their compliance with the regulations and also to find out attributes of cigarette customers. Results: A total of 39 varieties of 18 cigarette brands are available in Abbottabad city, out of which 71.8% are imported varieties. A total of 38.4% varieties have displayed health warnings (28.2% pictorial health warning, 10.2% have written health warning. Majority of cigarette customers are between 20–40 years of age, while 5.6% customers include youngsters between 10–20 years of age. Female customers, accounting for 8% of total cigarette customers, buy only those brands which have not displayed the health warning. Conclusions: Observed compliance with governmental regulation for displaying health warning is 39% which is far less than desired. Sale of cigarette to children is also practiced. Ministry of Health (MoH) should assure the display of these warnings on all the brands so that smokers must be fully aware about the risk involved in smoking

**Keywords:** Cigarette smoking; anti-smoking regulations; protection of non-smoker health.

#### INTRODUCTION

The pros and cons of cigarette smoking have been a topic of great discussion since long. Its detrimental nature can be well assessed from the fact that there are 35 known human carcinogens in the cigarette smoke<sup>1</sup>, making smoking major risk factor for lung cancer<sup>2</sup>. Cancers caused by cigarette smoking also include oral

cancers caused by cigarette smoking also include oral cancer<sup>3</sup>, laryngeal cancer<sup>4</sup>, renal cancers<sup>5</sup>, oesophageal cancer<sup>6</sup>, and bladder cancer<sup>7</sup> etc. The more a person smokes, the more he is vulnerable to ailments.

In year 2009, 91% ling cancer death in men and 71% in women were attributed to smoking in developed countries. The plight of developing countries is obviously even worse. According to an analysis there were 22 million smokers in Pakistan, among them36% were adult males and 9% adult females. Sixty-thousand people die annually from tobacco-related diseases in Pakistan. Fifty-five percent Pakistani households have at least one smoker among them, making cigarette one of the largest selling commodities in the country.

Its frequency of consumption, despite its hazardous nature, is a clear indication that general public is unaware about its detrimental effects. This state leads to the desperate need for advertising the hazards involved in cigarette smoking. Reviewing the efforts made by Ministry, of Health in curbing this emerging anathema and protecting the general public from its harmful effects, shows many anti-smoking policies, aimed at advertising the high risks involved in

cigarette smoking. In a similar vet, in 2003, the ordinance. Prohibition of Smoking and Protection of Non Smokers Health Ordinance 2002' was implemented which included printing of pictorial health warnings on cigarette packs.

However no studies have been published regarding the compliance of cigarette manufacturers with these regulations. This study is aimed at highlighting the compliance of industry with governmental directives.

#### MATERIAL AND METHODS

The present study aimed to assess the efficiency of governmental health authorities in enforcing the antismoking ordinance. The objectives included determining the compliance of available cigarette brands with the anti-smoking health warnings and to document the attitudes of cigarette smokers towards the antismoking regulations. The study was conducted into two parts:

First a major cigarette distributor of Abbottabad was approached. He was explained about the study and was asked to give information regarding daily sale of different cigarette brands and their varieties.

Secondly, a cross-sectional survey based on convenient sampling was conducted in Cantonment area of Abbottabad in January, 2012. To begin with this survey, one point was chosen at random. From there

every fifth retailer shop was selected for the study. After selection of the shops on this criterion, the respective shopkeepers were approached and objectives of the study were explained to them to gain their agreement to cooperate. In this way, out of ten retailer shops that fulfilled the criterion, only six agreed to cooperate.

Data collected included name of brands and their varieties (local, semi-imported and imported), compliance of brands for displaying health warnings, types (pictorial or written) of health warnings, if present, daily sales of each brand and respective variety (packs sold per day), approximate age and gender of customers.

#### **RESULTS**

The study was conducted in the cantonment areas of district Abbottabad. The data collected from the major whole seller showed that a total of 39 cigarette varieties, being marketed by 18 brands are available for sale in Abbottabad. Out of these, 9 (50%) brands are imported, 3 (17%) are semi-imported, while 6 (33%) are local brands. Eleven (28%) of the total 33 varieties available are local while 28 (72%) are imported and multinational brands.

All the brands and varieties of cigarettes were screened for presence or absence of the health warnings which if present was considered as compliance of the regulations set by Government of Pakistan. The results showed that only 15 (38.5%) varieties of cigarettes exhibit any health warning (Figure-1). The warning was mainly of two types. One was the pictorial and written warning as shown in Figure-2. The second type of warning was a written statement "Smoking Kill" & "Smoking is injurious to health". The written statement was both in English and Urdu languages. Out of the 15 varieties exhibiting the warnings 11 (73.3%) were pictorial display while 4 (26.6%) had a written warning statement.

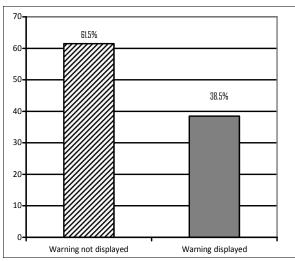


Figure-1: Graph showing percentage of cigarette brands displaying health warnings



Figure-2: Warning displayed on cigarette brands

The cigarette sellers were asked for the attributes of their daily customers. The results showed that every day around 125 customers belonging to different age and gender buy cigarettes in different quantities. Majority (115, 92.0%) of the customers were male while only 10 (8%) were female. The majority (72, 57.6%) of the customers were in age group 20–40 years, followed by 26 (20.8%) in 41–60 years age group, and below 20 years age group was (5.6%) (Table-1).

**Table-1: Attributes of the cigarette smokers** 

Attribute	Type	Frequency	Percentage
Gender	Male	115	92.0
	Female	10	8.0
Age (years)	<20	7	5.6
	20-40	72	57.6
	41-60	26	20.8
	>60	20	16.0

#### DISCUSSION

In order to access the efficacy of anti-smoking regulations, attributes of cigarette customers and compliance of cigarette industry with the regulations should be brought to light. Various efforts have been made from time to time for the protection of non-smokers health and prohibition of smoking. These include anti-smoking laws like such as Railways Act 1890<sup>14</sup>, Juvenile Smoking Act 1918, Bahawalpur State<sup>15</sup>, West Pakistan Juvenile Smoking Ordinance<sup>16</sup>, and Cigarettes (Printing of Warning) Ordinance 'Prohibition of Smoking and Protection of Non- smokers Health Ordinance No. LXXIV' 2002<sup>17</sup>. In brief the law says:

- no smoking or use of tobacco in any form at public places and public vehicles
- restriction on tobacco advertisements
- prohibition of sales and storage of tobacco products near educational institutions
- printing of pictorial health warnings on cigarette packs
- no 'Designated Smoking Areas' anywhere

However no clear-cut report on this compliance is available depicting that there is no close monitoring for non-compliance of industry.<sup>11</sup>

This study shows that compliance of cigarette industry with pictorial display of health warning is only 39%. Also all the complying brands have printed same unclear picture of oral cancer despite the fact that smoking is major risk factor for lung cancer.<sup>2</sup>

Smoking habits in Pakistan have been indicated by Khurrum *et al*<sup>11</sup> and Nasir K *et al*<sup>12</sup>. Highest prevalence of cigarette smokers was seen amongst people aged between 25 to 44 years. This data is consistent with our study as 58% of cigarette customers are between 20–40 years of age. The epidemiology of smokers on basis of gender has been indicated by Alam SE<sup>13</sup> stating that 9% of total smokers are females. The result of our study is consistent with this data indicating female customers to be 8% of the total.

However, on account of the nature of the subject, retailers could not cooperate fully. Also due to time and resource constraints, representative sampling was not possible. Both of these factors decreased the reliability of data so forth obtained. Approximate age and gender of customers cannot be applied to general population. Thus the data obtained is not ideal and we recommend further study with bigger sample size.

#### **CONCLUSION**

The compliance with governmental regulations was far less than optimum. The brands not displaying the health warnings have a greater sale, depicting that smokers consider them less hazardous. Sale of cigarette to children and young adolescents is also practiced. The concerned department should assure the compliance at all levels to minimise the harmful effects involved.

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#### **Address for Correspondence:**

Ahsan Rasool, 2<sup>nd</sup> year MBBS, Ayub Medical College, Abbottabad, Pakistan. Cell: +92-301-5251690 Email: ahsanrasool.dr@gmail.com