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Research Article

**ANALYSIS OF EFFECTS OF CIGARETTE SMOKING AMONG  
LOCAL POPULATION OF PAKISTAN**Mubbarik Hussain<sup>1</sup>, Syeda Aiman Zahra Naqvi<sup>2</sup>, Ammar Zafar<sup>3</sup><sup>1</sup>Rural Health Centre Akhtarabad, District Okara<sup>2</sup>Tehsil Headquarter Kahna Nau Indus Hospital, Lahore<sup>3</sup>Government Mian Meer Hospital, Lahore

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**Abstracts:**

**Introduction:** In the present era, cigarette smoking is a major but preventable cause of death. Despite being aware of its harmful and hazardous effects, many young adults begin experimenting with cigarettes at a very early age and then adopt it as a regular habit. **Objectives of the study:** The basic aim of the study is to analyze the effects of cigarette smoking among local population of Pakistan. It is basically aimed to provide the awareness to the local population of Pakistan regarding hazardous of smoking. **Material and methods:** This study is conducted in Government Mian Meer Hospital, Lahore during February 2019 to August 2019. This study was done in medical and pulmonology ward of Mayo hospital and all the patients who were admitted in these wards was selected for this study. **Results:** In all, 100 participants were found to be currently smoking, giving an overall prevalence of current smoking to be 24.6% (95% CI 21.90 - 27.49) in the study population. History of ever smoking was reported by 31.5% participants (95% CI 28.57 - 34.59). More male participants were found to be currently smoking 40.1% in comparison to females 8.8%, and the association between tobacco smoking and gender was statistically significant ( $P < 0.001$ ). **Conclusion:** It is concluded that most of the people started smoking in young age due to environmental and social factors. It is also observed that smoking has also shown a rising trend with age emphasizing that initiation into the habit may occur at any age and not just among young people.

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**INTRODUCTION:**

In the present era, cigarette smoking is a major but preventable cause of death. Despite being aware of its harmful and hazardous effects, many young adults begin experimenting with cigarettes at a very early age and then adopt it as a regular habit<sup>1</sup>. Cigarette smoking is an important worldwide health problem, and it has been reported that 1.7 million Thai youths currently smoke. This problem is compounded by the fact that the rate of cigarette smoking in young people continues to steadily increase. Cigarette smoking carries major health risks with the most cause-specific mortalities being those of respiratory and cardiovascular diseases. Therefore, smoking habits may affect the respiratory function of youths<sup>2</sup>.

Earlier reports have indicated that in young adults, relatively small amounts of cigarette smoke can cause deficit in lung functions<sup>3</sup>. Smoking 15 cigarettes per day in males has been associated with 4% decline in forced mid expiratory flow as compared to those who never smoked. Since inhaling cigarette smoke has been shown to produce acute changes in the lung including alterations in resistance to airflow, cough, and irritation of the airway, the early stage of smoking might affect the respiratory function of youths<sup>4</sup>. However, there have been few studies which have investigated the effect of smoking on pulmonary function in adolescents. In previous studies, cigarette smoking was found to have an effect on the lung function of the adolescent boys and girls. Those studies found that FEV<sub>1</sub>/FVC decreased in adolescent smokers of both sexes. Only the pulmonary function test with a spirometer was measured in those studies<sup>5</sup>. Therefore, to clarify the effect of smoking on the respiratory function of smoking and non-smoking youths, we measured and compared their chest expansion, the lung function test using a spirometer, and respiratory muscle strength to learn more about the dangers of cigarette smoking<sup>6</sup>.

Tobacco smoking in Pakistan is legal, but under certain circumstances is banned. The habit is mostly found in the youth of Pakistan and in farmers, and is thought to be responsible for various health problems and deaths in the country. Smoking produces many health problems in smokers. According to some surveys, 40% of males and 8% of females are regular smokers<sup>5</sup>. Pakistan has the highest consumption of tobacco in South Asia. The Pakistan Health Education Survey 1992-93 estimated that there were about 22,000,000 smokers (every third adult) in the country at the time of the survey. In 1983, 50000

acres of fertile land were used for tobacco cultivation in Pakistan. Most of the tobacco grown in Pakistan is consumed within the country, and most of it is smoked in the form of cigarettes. The tobacco industry in Pakistan is expanding at a rate of 5% per year, a rate higher than Pakistan's annual population growth rate of 3%. The number of smokers in the country is rising. Moreover, Pakistani cigarettes contain amongst the highest levels of tar and nicotine in the world.

**OBJECTIVES OF THE STUDY:**

The basic aim of the study is to analyze the effects of cigarette smoking among local population of Pakistan. It is basically aimed to provide the awareness to the local population of Pakistan regarding hazardous of smoking.

**MATERIAL AND METHODS:**

This study is conducted in Government Main Meer Hospital, Lahore during February 2019 to August 2019. This study was done in medical and pulmonology ward of Mayo hospital and all the patients who were admitted in these wards was selected for this study.

The data was collected from 100 patients from which 55 were smokers and 45 were non smokers. This is basically a cross sectional study and questionnaire was designed for the collection of data. Socio-demographic values and medical history of the selected patients were recorded clearly. Prior to participation in this study, each subject signed an informed consent form to comply with the ethical guidelines. The information on smoking habits was obtained through interviews. Subjects who currently smoked cigarettes were classified as smokers and those without a history of smoking cigarettes were classified as non-smokers. The respiratory function test consisted of the measurement of chest expansion, the lung function test using spirometry, and respiratory muscle strength. For chest expansion measurements of circumference and diameter, subjects were instructed to fully inhale and exhale in the standing position.

**STATISTICAL ANALYSIS:**

The data of respiratory function were compared between the smoker and non-smoker groups using the independent t-test for normally distributed data or the Mann-Whitney U test for other distributions. Differences were considered statistically significant at  $p < 0.05$ .

**RESULTS:**

	Awareness of smoking and disease (N=100)		
	Yes	No	Not sure
Smoking effect on health	96%	3%	1%
Smokers are dependent on smoking	92%	5%	3%
Do You Think Smoking Is Enjoyable	90%	7%	3%
Is There A Safe Way Or Brand To Smoke	85%	8%	7%
Is Cigarette Smoking Really Addictive?	37%	37%	27%
Do You Know About Nicotine?	21%	41%	38%
Does Smoking Cause Cancer?	81%	10%	9%
Does Smoking Affects The Heart?	47%	23%	30%
Do You Think That Smoking Affects The Economy?	20%	60%	20%
Does Smoking Affect The Bones?	21%	65%	14%

In all, 100 participants were found to be currently smoking, giving an overall prevalence of current smoking to be 24.6% (95% CI 21.90 - 27.49) in the study population. History of ever smoking was reported by 31.5% participants (95% CI 28.57 -

34.59). More male participants were found to be currently smoking 40.1% in comparison to females 8.8%, and the association between tobacco smoking and gender was statistically significant ( $P < 0.001$ ).

**Table 01:** Distribution of participants according to smoking level

Smoking status	Total (%)	P-value
Current smokers	24.6	<0.001
Ever smokers	32	<0.001
Non smokers	68.5	<0.001

**DISCUSSION:**

Some studies have found that the use of graphic health warning labels may be an effective stimulus towards smoking cessation<sup>7</sup>. Although graphic health warning labels have been in circulation in Singapore since 2004, by demonstrating statistically significant differences in those experiencing no disgust ( $P=0.036$ ) and those experiencing the strongest level of fear ( $P=0.034$ ), this study shows that graphic health warning levels appear to retain their effectiveness in encouraging the public to avoid smoking. Furthermore, there was no significant difference between the two samples in the amount of motivation the labels provided against picking up or quitting smoking, which adds weight to this argument<sup>8</sup>.

Tobacco use is a leading public health problem all over the world with 82% of the world's 1.1 billion smokers residing in low and middle income countries and where, in contrast to the declining consumption in high-income countries, tobacco consumption is on the rise. Indian studies have recognized tobacco use as a major health hazard<sup>9</sup>. Tobacco consumption has overall been a major contributor to deaths due to circulatory diseases, pulmonary and malignant diseases in India. Smoking also increases the incidence of clinical tuberculosis, is a cause of half the male tuberculosis deaths in India, and of a quarter of all male deaths in middle age. Information on

prevalence of tobacco use in India is available from surveys carried out in general community<sup>10</sup>.

**CONCLUSION:**

It is concluded that most of the people started smoking in young age due to environmental and social factors. It is also observed that smoking has also shown a rising trend with age emphasizing that initiation into the habit may occur at any age and not just among young people. This implies that tobacco control policies will have to focus on almost all age groups up to the 50 plus age. In this regard, health education can play a pivotal role and can have a lasting impact on reduction of tobacco smoking by improving awareness levels of the population. This can be done through mass media and through school and community-based education programs.

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