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Research Article

**ANALYSIS OF EFFECT OF CIGARETTE SMOKING AND
TOBACCO USE AMONG LOCAL CHILD POPULATION OF
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Abstract:

Introduction: Smoking is one of the leading causes of preventable death. According to World Health Organization (WHO) tobacco use is currently responsible for the death of one in ten adults' worldwide (about 5 million deaths each year). **Objectives of the study:** The basic aim of the study is to analyze the effect of cigarette smoking and tobacco use among local child population of Pakistan. **Methodology of the study:** This study was done at Services institute of medical sciences Lahore and CMH Lahore during August 2018 to Sep 2018. In this study we select the outdoor child patients who suffer from any kind of lung diseases and may be effected due to any kind of active and passive smoking. **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:

Smoking is one of the leading causes of preventable death. According to World Health Organization (WHO) tobacco use is currently responsible for the death of one in ten adults' worldwide (about 5 million deaths each year). Moreover, unless circumstances changes, within 25 years the annual death toll will double; millions more will prematurely develop tobacco related illnesses that lead to chronic disability [1]. Individuals who smoke cigarettes are 12 times more likely to die from lung cancer, two to four times more likely to develop coronary heart disease, twice as likely to have a stroke, and 10 times more likely to die from chronic obstructive lung disease [2].

In Pakistan, it is estimated that the prevalence of tobacco smoking is 36% for males and 9% for females. Among young adults especially the university students in Pakistan, the prevalence of smoking is 15% with the majority being male smokers. Approximately 1,200 children start smoking every day [3]. This represents a huge impact not only in terms of economic costs but it is slowly depriving the country of a healthy workforce and increasing the burden of disease in the already overburdened health sector. The reason young people start to smoke is complex and multi-faceted. It includes a host of interacting biological, genetic, psychological, economic and social variables [4]. Arguably the most modifiable determinants are social and environmental in nature, including exposure to smoking by parents, siblings, friends, and members of the general public. Parental smoking behaviours have been found to play a key role not only in youth initiation but also in the escalation of their smoking habits. Some studies indicate that youth having at least one smoking parent are more likely to begin smoking themselves. Others have suggested that children with at least one smoking parent are significantly more likely to progress to higher levels of smoking, compared to children whose parents do not smoke. In the present era, cigarette smoking is a major but preventable cause of death⁵. 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 habit¹. 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 [5].

Earlier reports have indicated that in young adults, relatively small amounts of cigarette smoke can cause deficit in lung functions. 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 [6].

Objectives of the study

The basic aim of the study is to analyze the effect of cigarette smoking and tobacco use among local child population of Pakistan.

METHODOLOGY OF THE STUDY:

This study was done at Services institute of medical sciences Lahore and CMH Lahore during August 2018 to Sep 2018. In this study we select the outdoor child patients who suffer from any kind of lung diseases and may be effected due to any kind of active and passive smoking.

Data collection

Youth male subjects aged 12 to 18 years participated in this cross-sectional study. The data was collected from 100 patients of both genders. 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.

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:

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

Table 02: Smoking habit analysis

	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%

Table 02 shows the results of analysis of questionnaire from the patients which shows very clearly about the awareness of people among smoking habits and its effect on health.

DISCUSSION:

Some studies have found that the use of graphic health warning labels may be an effective stimulus towards smoking cessation⁷. 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.

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 [8], tobacco consumption is on the rise. Indian studies have recognized tobacco use as a major health hazard [9]. 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 [10]. According to the national cross-sectional household survey, India has more than 200 million tobacco consumers; however, prevalence of smoking and tobacco chewing varies widely between different states, and has a strong association with individual's socio-cultural characteristics. A recent nationwide study on smoking and mortality in India estimated that smoking in persons between the ages of 30 and 69 years is responsible for about 1 in 20 deaths of women and 1 in 5 deaths of men, totaling to 1 million deaths per year [11]. Study of smoking pattern among middle age and elderly has received poor attention despite its proven implications on health.

Thus, the early stage of smoking among youths does

cause reduction in the lung function. Inhaled cigarette smoke has been shown to elicit acute changes in respiratory function including alterations in resistance to airflow, coughing, and irritation of the airways. Our research findings may encourage the implementation of smoking cessation counseling for adolescents. The spirometer is commonly used for measuring respiratory function for diagnostic and clinical purposes. However, fluctuations in our data may have been caused by miscommunication with the subjects [12].

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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