

COMPARISON OF POPULATION SURVEY OF MULTAN ABOUT CIGARETTE SMOKING WITH SURVEY OF ABBOTTABAD

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Background: There are different pollutions in the environment e.g. Water pollution, dust pollution, pollen pollution, noise pollution and smoking pollution. As smoking from different sources is a pollution and injurious to health therefore we decided to conduct epidemiological study of smoking in Multan. **Methods:** The study was carried out on 1100 subjects residing in different localities of Multan. A specifically designed questionnaire was filled and the responses computed. The results were then compared with similar survey conducted in Abbottabad and reported earlier. **Results:** Out of the study population 40.02% were found to be smoking different kinds of tobacco. Out of 442 smoking persons 36.66% are smoking for just company while 57.01% for anxiety and remaining for other reasons. 20-40 cigarettes of different brands per day are used by different occupation persons. The expenditure for cigarette smoking is in the range of Rs. 300–2000 per month. Among smoking persons 292 (66.06 %) complained of Nocturnal cough, 96 (21.72%) during day and 54 (12.22 %) at both time. 125 smokers (28.28 %) complained of sputum, while 43 subjects (9.73 %) complained of occasional or frequent blood stained sputum. 24 (5.43 %) smokers reported of symptoms or diagnosis of Ischemic heart disease. 35 smokers (7.92 %) smoke during fasting of Holy Ramadan. 290 smokers (65.61 %) do not hesitate to smoke at public places.

INTRODUCTION

Airway hyper-responsiveness, the sensitivity of the airways to a variety of pharmacological and physical stimuli that induce bronchoconstriction, is common in general population¹. Airway hyper-responsiveness is associated with an increased risk of developing respiratory symptoms and asthma²⁻⁴ and more rapid than normal decline in lung function⁵⁻⁸. The presence of airway hyper-responsiveness worsens the prognosis of patients with chronic obstructive pulmonary disease (COPD)⁹. Airway hyper-responsiveness is also known to be associated with cigarette smoking and reduced lung function¹⁰, which are in turn associated with mortality¹¹⁻¹².

The standard smoking-machine test for cigarettes has a strong and regrettable power over cigarette sales and public health. The official test determines which cigarettes are called low-tar, light or ultra light. Such a test establishes which cigarettes meet the European Union (EU) maximum of 12 mg tar, and will confirm compliance with a proposed change in maximum tar to 10 mg and 1.0 mg nicotine. The promotion of official low-tar cigarettes helps keep health-conscious smokers smoking¹³⁻¹⁴ and is arguably the cigarette industry's main response to the disease risks of smoking. Whether such low-tar cigarettes offer any reduction in risk of death and disability is doubtful¹⁵. The smoking-machine procedure (a 35 mL puff of 2sec duration every 60 sec) originated in 1936 for manufacturer testing of tobacco blends. At that time, cigarettes were generally 70 mm and unfiltered and all brands were similar to each other. Today, cigarettes vary greatly in length (70–120 mm) width, tobacco blends, and degree of filter ventilation (0% to more than 80% air dilution).

Public health authorities around the world have been considering a change in the way cigarettes are tested for tar and nicotine. The Commonwealth of Massachusetts in USA has tested cigarettes to reflect a more intensive smoking regimen (a 45 ml puff of 2s duration every 30s, with 50% of filter vents blocked) than used by the Federal Trade Commission. In British Columbia and Canada the authorities have added more intensive puffing settings as well as tests for selective toxins in smoke. Independent experts have recommended that cigarettes also be tested for nicotine content of tobacco¹⁶. The industry recognizes that the use of more intensive smoking settings has little effect on the ranking of cigarettes.

More than 4,000 individual compounds have been identified in tobacco and tobacco smoke. Among these are about 60 compounds that are carcinogens, tumor initiators (substances that can result in irreversible changes in normal cells) and tumor promoters (substances that can lead to tumor growth once cell changes begin). Some of these compounds are tar, carbon monoxide, hydrogen cyanide, phenols, ammonia, formaldehyde, benzene, nitrosamine, and nicotine.

The exposure of nonsmokers to environmental tobacco smoke (ETS) is referred to as involuntary smoking, passive smoking and secondhand smoke. Nonsmokers who are exposed to environmental tobacco smoke (ETS) absorb nicotine and other compounds just as smokers do, and the greater the exposure to environmental tobacco smoke (ETS), the greater the level of these harmful compounds in the body. These findings promoted recommendations that environmental tobacco smoke (ETS) be eliminated from the environment of small

children. Thus smoking should not be allowed in day care centers, nurseries or other settings where infants and young children are cared for.

We conducted a survey of smoking pattern in the population of Multan, Pakistan and compared it with the results of our previous similar study in Abbottabad.²⁶

MATERIALS AND METHODS

A total number of 1100 subjects were interviewed for their habit regarding smoking. These subjects belonged to different areas of Multan and were engaged in different professions. A questionnaire regarding their personal and specific information about smoking was filled. The results were then analysed and compared with the results of Abbottabad reported in our earlier published study²⁶.

Questionnaire for Population Survey of Multan about Cigarette Smoking

PERSONAL INFORMATION

Name Age Sex Occupation Marital Status Height Weight Address

SPECIFIC INFORMATION ABOUT SMOKING

How many family members are engaged in smoking?

Which type of smoking is used?

Huka	Cigarette	Cigar
Anxiety	For the sake of company	Casually

Why you started to smoke?

How many cigarettes you smoke per day?

Which brand of cigarette you smoke?

How much money do you spend on smoking per month?

Do you complaint of cough?

No Yes

If Yes,

Nocturnal During Day Both

Do you complaint of sputum?

Yes No

If yes, is the sputum

Blood stained Without blood

Do you have symptoms of dyspepsia?

Yes No

Do you suffer from Ischeamic Heart Diseases?

Yes No

If Yes Do you take any medicine?

Yes No Medicine

Smoking during fasting of Holy Ramadan.

Yes No

Do you smoke in public places?

Yes No

RESULTS

The study was done on 1100 subjects residing in different localities of Multan, out of them 442 persons were found to be indulged in smoking. Among 442 smoking persons, some persons also used Huka (Hubble Bubble) and cigar along with cigarette or without cigarette. As a whole 40.02% people were indulged in smoking. Out of 442 smoking persons 162 (36.66%) are smoking for just company while 252 (57.01%) for anxiety and remaining 28 (6.33%) casually. 20 – 40 cigarettes of different brands per day are used by different occupation persons. The people consume money for cigarette smoking in the range of Rs:300 – 2000 per month. Among smoking persons 292 (66.06 %) complaint of Nocturnal cough, 96 (21.72%) during day and 54 (12.22 %) at both time. 125 smokers (28.28 %) complaint of sputum, while 43 subjects (9.73 %) complaint of occasional or frequent blood stained sputum. 24 (5.43 %) smokers reported of symptoms or diagnosis of Ischeamic heart disease. 35 smokers (7.92 %) smoke during fasting of Holy Ramadan. 290 smokers (65.61 %) do not hesitate to smoke at public places.

The results of comparison with the Abbottabad study are summarized in table-1.

DISCUSSION

Advertisement through electronic media e.g., television, dish, radio, Internet and Print media e.g. newspapers, journals etc, play important role in communication. Similarly print and electronic media are the main sources for the advertisement of cigarette smoking. They produce charm in the adds of the cigarette smoking. Teenagers are easily trapped by these cigarette smoking adds. A number of studies have found that advertisement is a major promoter of teenage smoking.

In the 1990 study conducted in United Kingdom the effects of prolonged cessation among those who had smoked cigarettes for many years. Although efforts to change from cigarettes to other types of tobacco, or from smoking substantial numbers of cigarettes to smoking smaller numbers, seemed to confer only limited benefit, stopping smoking confers substantial benefit. It was noted that even people who stop smoking at 50 or 60 years of age avoid most of their subsequent risk of developing lung cancer, and that those who stop at 30 years of age avoid

more than 90% of the risk attributable to tobacco of those who continue to smoke. In the United Kingdom widespread cessation has roughly halved the number of cases of lungs cancer.

Despite cessation of smoking and improvements in cigarette composition, lung cancer is still the chief neoplastic cause of death in the United Kingdom, and tobacco causes even more deaths from other diseases than from lung cancer¹⁷. The changes since 1950 in tobacco-attributable mortality from diseases other than lungs cancer can be estimated indirectly from national mortality statistics. Such estimates indicates that in 1965 the united Kingdom probably had the highest death rate from tobacco related diseases in the world, but that since the number of deaths in middle age (35–69) from tobacco has decreased by about half, from 80,000 in 1965 to 43,000 in 1995. Nevertheless, cigarettes smoking remains the largest single cause of premature death in the United Kingdom and eventually kills about half of those who persist in the habit. The 1990 study assessed the effects of stopping smoking only on lung cancer, but a comparably large benefit of stopping was found for all cause mortality in the prospective study of smoking and death among British doctors¹⁸⁻¹⁹. This reinforces similar evidence from many other countries that even in middle age those who stop smoking avoid most of their subsequent risk of being killed by tobacco. Two thirds of those in the United Kingdom who are still current smokers say they want to give up the habit, and the extent to which they succeed in doing so will be the chief determinant of the number of deaths caused by tobacco over the next few decades.

Table-1: Comparison between Pattern, Consumption and Sign Symptoms of Cigarette Smoking among population of Abbottabad and Multan

S. No.	Pattern of Smokers	Abbottabad		Multan	
1	% age of the smokers	(200 Smokers out of 600 subjects)	33 %	(442 smokers out of 1100 subjects)	40.02 %
2	Reason of smoking			(162 out of 442 smokers)	
(a)	Just for company	(66 out of 200 smokers)	33 %		36.66 %
(b)	For anxiety	(126 out of 200 smokers)	63 %	(252 out of 442 smokers)	57.01 %
(c)	Without any reason	(08 out of 200 smokers)	04 %	(28 out of 442 smokers)	6.33 %
3	Per day usage of cigarettes	10 – 30 cigarettes		20 - 40 cigarettes	
4	Monthly expenditure on smoking	Rs. 200 – 1800/-		Rs. 300 – 2000/-	
5	Complaints of cough				
(a)	Nocturnal cough	(164 out of 200 smokers)	82 %	(292 out of 442 smokers)	66.06 %
(b)	Cough during day	(12 out of 200 smokers)	06 %	(96 out of 442 smokers)	21.72 %
(c)	At both times	(24 out of 200 smokers)	12 %	(54 out of 442 smokers)	12.22 %
6 (a)	Smokers complaint of sputum	(63 out of 200 smokers)	31.5%	(125 out of 442 smokers)	28.28 %
(b)	Smokers with blood stained sputum	(30 out of 200 smokers)	15 %	(43 out of 442 smokers)	9.73 %
(c)	Smokers without complaint of sputum	(107 out of 200 smokers)	53.5%	(274 out of 442 smokers)	61.99 %
7 (a)		(17 out of 200 smokers)	8.5 %	(24 out of 442 smokers)	5.43 %

(b)	Smokers reported of symptoms or diagnosis of Ischaemic Heart disease (IHD) Smokers without IHD	(183 out of 200 smokers)	91.50 %	(418 out of 442 smokers)	94.57 %
8 (a)	Smokers smoking during Ramazan fasting	(48 out of 200 smokers)	24 %	(35 out of 442 smokers)	7.92 %
(b)	Smokers not smoking during Ramazan fasting	(152 out of 200 smokers)	76 %	(407 out of 442 smokers)	92.08 %
9 (a)	Smokers smoking at public places	(132 out of 200 smokers)	66 %	(290 out of 442 smokers)	65.61 %
(b)	Smokers not smoking at public places	(68 out of 200 smokers)	34 %	(152 out of 442 smokers)	34.39 %

While smoking had been on the decline in the United States for several years it has now leveled off²⁰. An estimated 47 million people smoke or nearly a quarter of the adult population. About 28% of the male population and 23% of women smoke. The California Tobacco Control Program has led to significantly larger decrease in the prevalence of smoking and in the rate of per capita cigarette consumption in California than in the rest of the United States.

In our study about 40.02 % male population of Multan indulge in smoking while in our another study 33 % male population of Abbottabad was found to be indulge in smoking, which is definitely higher than the society in developed and more educated countries like USA where the masses are more aware of the hazards of the smoking, therefore the smoking should be discouraged on the national level. In this connection electronic and print media have to play vital role.

CONCLUSION

As studied world wide, smoking is known to cause different diseases e.g., Heart disease, cancer, lung diseases including pneumonia, flu, bronchitis, emphysema, stroke, dementia, osteoporosis, incontinence, impotence, cataract etc., besides this, smoking inflicts the financial losses to the person and family.

It is therefore suggested that smoker should decide to quit the smoking once for all²¹⁻²⁵. However, the following physical responses can be expected during the period of quitting.

Physical Responses to Quitting

Time after last cigarette	Physical Response
20 minutes	Blood pressure and pulse rate return to normal
8 hours	Levels of carbon monoxide and oxygen in the blood return to normal
24 hours	Chance of heart attack decreases
48 hours	Nerve endings start to re-grow ; ability to taste and smell increases
72 hours	Bronchial tubes relax; lung capacity increases
2 week to 3 months	Improved circulation; lung function increases up to 30%
1 to 9 months	Decreased incidence of coughing, sinus infection, fatigue, and shortness of breath; re-growth of cilia in lungs, increasing the ability to handle mucus, clean the lungs, and reduce chance of infection; overall energy level increases.

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