

Original Article

Frequency of Tobacco use in Different Occupational Groups of Peshawar

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Background: Tobacco use is rapidly prevailing globally. There is no large scale planned study available to know the status of tobacco use in our country.

Objective: Estimate the frequency of various forms of tobacco use in different occupational groups of district Peshawar.

Material and method: A total of 2548 subjects belonging to different occupations including both male and female were randomly recruited for the study.

Results: Out of a total 2548 persons with median age 37 ranged (12-82) years, there were 1799 non-tobacco users and 749 were taking tobacco in different forms. The overall frequency of tobacco usage in our society was determined as 29.4%. Cigarette smoking is the most popular tobacco used by Pakistani followed by naswar. The naswar is highly liked by cooks (31.5%), followed by sweepers (30.3%), prisoners (28.3%), dairy workers (22.42%) and teachers (7.32%).

Conclusion: Tobacco use is very common (29.4%) in different occupational groups of Peshawar. The crude and the most dangerous form of tobacco (naswar) is still under use of many people (13.4%).

Key words: Tobacco use, cigarette smoking, Naswar, CAD

Introduction

Tobacco use is not exclusively, or even principally, a problem in developed countries; it is rapidly becoming a global pandemic, infiltrating even the poorest nations.¹ About one in every three adults smokes and the majority are in developing countries (800 million) and most of them are male (700 million).² The prevalence of smoking among young adults ages 18 to 24 years old is >26%, the highest of any adult age group in the United States.³ A recent national survey revealed that more than 25% of adolescents aged 13 to 15 years in India had used tobacco, and 17% reported current use.⁴ The prevalence of tobacco use is 36.9% (31.8%-42.3) in Pakistan in different surveys.^{5,6} Tobacco is used in a number of forms in South Asia.⁷ The prevalence of at least one form of tobacco daily in Bangladesh ranged between 33.4% and 41%, smoking rate varied between 21% to 25%, the chewed tobacco rates were 17% in Pakistan, 21% in India, and the prevalence of gul use in

(huqqah), moist snuff used as an oral dip (Naswar), chewed with betel nut (Pan) and smoking of rolled dry leaves containing tobacco called beedi.¹³ Moist snuff consists of 40% to 45% finely ground air- or fire-dried tobacco mixed with water (45-60%), sodium carbonate (1.5-3.5%), sodium chloride (1.5-3.5%), moisturizer (1.5-3.5%), and flavoring (<1%).¹⁴ In 2002, the prevalence of current smoking in the population ≥ 15 years of age was 66.0% in men and 3.1% in women in China.¹⁵ The causative relationship between smoking and coronary heart disease (CHD) is well established, with relative risks (RRs) or odds ratios (ORs) estimated between 1.5 to 3 or higher.¹⁶ Four million deaths each year are attributed to smoking, and if current trends persist, the death toll from smoking will reach 10 million per year by 2030.¹⁷

Objective: Objective of this study was to know the frequency of various forms of tobacco use in people belonging to different occupational groups from districts Peshawar.

Materials and Methods

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Tobacco is also used in other forms like Hubble bubble

A total of 2548 subjects belonging to different occupations including both male and female were randomly recruited for the study.

STUDY DESIGN: Cross sectional study.

Tobacco use was defined according to current use of cigarette or beddies or huqqa (tobacco in water or chewing tobacco or snuffing tobacco).¹⁸

STATISTICAL ANALYSIS

The data were analyzed using statistical package of social sciences (SPSS version 16:00). Numerical data were presented as median range according to the distribution pattern of variable. Frequency of tobacco use was calculated in percentages. All data were analyzed with 95% confidence interval.

Results

A total of 2548 subject including both male and female (figure 1) with median age 37 ranged (12-85) years were enrolled after written informed consent. Out of total 2548 persons, there were 1799 non-tobacco users and 749 were taking tobacco in different forms. The type of tobacco; they were using is shown in the figure 2. The enrolled subjects were belonging to different professions. Their number, list of their profession and use of tobacco among these different categories is given in the table 1. The overall frequency of tobacco usage in our society was determined as 29.4%. The naswar is very popular among cooks (31.5%), sweepers (30.3%), prisoners (28.3%), dairy workers (22.42%) and teachers (7.32%). The journalists are top cigarette lovers (36%) followed by lawyers (22.6%), cooks (21.6%) and prisoners (21.7%). Huqqah is getting unpopular now a days. Cooks are the most frequent (53%) tobacco users and female tobacco users are negligible (0.02%) in the society (Table 1).

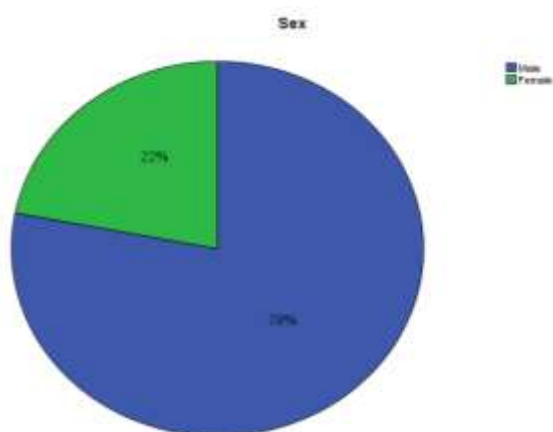


Figure 1: Gender distribution of study population

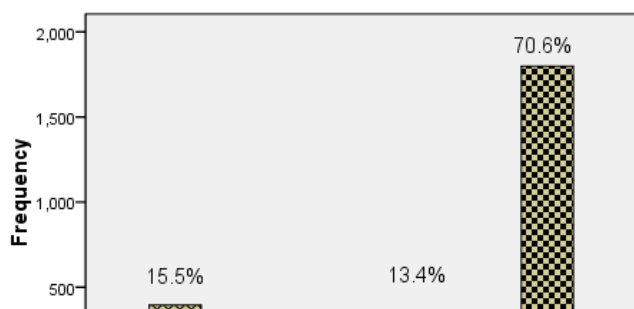


Figure 2: Distribution pattern of tobacco usage

Professions	Number	Non-tobacco users	Cigarette smokers	Naswar users	Huqqah users
Teachers	473	424	17	32	NIL
Cooks	292	136	63	92	1
Secretariat staff	275	210	45	20	NIL
Lawyers	252	83	57	12	NIL
Doctors	208	167	32	9	NIL
Confectioners	207	153	29	21	4
Sweepers	195	93	37	59	6
prisoners	166	83	36	47	NIL
Nurses	165	162	1	2	NIL
Dairy workers	165	102	24	37	2
Journalists	150	86	54	10	NIL

Discussion

Four million deaths each year are attributed to smoking, and if current trends persist, the death toll from smoking will reach 10 million per year by 2030.¹⁷ It is anticipated that nearly 1 million Indians will die annually from smoking by 2010, with 70% of those deaths prematurely occurring among people between the ages of 30 and 69 years.¹⁸ One of the challenges in global chronic disease prevention is reducing tobacco use, particularly in developing countries, such as India, with large populations (i.e., more than 1 billion residents).¹⁹ Smoking remains the most important risk factor for CVD in the world. In addition, there are multiple societal consequences from cigarette smoking, including enormous economic costs. In the United

States alone, it is estimated that smoking costs \$167 billion each year.^{20, 21}

This is the first study to determined the frequency of various form of tobacco use in different occupational groups. In our study the overall frequency of tobacco usage in our society was 29.4%. According to CDC the prevalence of smoking among young adults ages 18 to 24 years old is >26%, the highest of any adult age group in the United States.³ A recent national survey conducted by Reddy and his colleagues revealed that more than 25% of adolescents aged 13 to 15 years in India had used tobacco, and 17% reported current use.⁴ The prevalence of tobacco use is 36.9 % (31.8%-42.3) in Pakistan in different surveys.^{5,6} Thus tobacco use in our study is comparable in other international and national surveys.³⁻⁶

We also determined the frequency of Naswar addicts in all the groups included and we found that the frequency of naswar addicts were lower in most of the groups as compared to cigarette smoking but in certain groups especially belonging to lower social class and those with low education was high. The frequency of naswar user was 47 (28.3%), in class IV 59 (30.3%), in dairy workers were 37(22.4%). This may be because naswar is easily available and relatively cheaper in comparison to cigarettes. Similarly smokeless tobacco (ST) is also used in others countries like Central Asia, Iran, Afghanistan, Pakistan, Tajikistan, India, and in Europe, like Sweden. It carries different names: 'Snus' or 'Snuff' is a well-known name in Sweden, 'Niswar' (Naswar) or 'Tombaco' is used in Pakistan, Afghanistan, and India, 'toombak' in Sudan, and 'Sweka'.²² ST is used in India where its prevalence is 20%, and significantly higher in males.²³ In the United States, 5.2% of young adults, between the ages of 18 and 25, and 3.2% adults over the age of 26, used ST while in Sweden, around 20% of the adults used ST.^{24,25} Nicotine is the main component of tobacco and is found to reach a higher concentration in ST users in comparison to smokers.²⁶ But despite having high quantity of nicotine studies have failed to prove ST association with hypertension.^{27,28} ST association with CVD is controversial and some studied have failed to prove association between ST and CVD.^{29,30,31,32} While Some recent studies conducted in Sweden, evaluating long-term (19-year) CV outcomes suggest that snus (snuff) use is associated with an increased risk of fatal MI.^{33,34}

Conclusion:

Tobacco use in various forms is common in different occupational groups of Peshawar.

Tobacco usage in the form cigarette smoking is common among upper social class and educated groups like journalist, doctors and lawyers.

Frequency of cigarette smokers and naswar users both were high groups like Class IV, prisoners, Bakers and confectioners and dairy workers.

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