

# Pattern of Cigarette Smoking among College Students of Quetta

**1. Zafarullah Khan 2. Khalid Hassan Khan 3. Shahnaz Nadir 4. Mir Hassan Khan**

1. Asstt. Prof. of Endocrinology, BMC, Quetta 2. Student final year, BDS College of Dentistry, Hamdard University, Karachi 3. Asstt. Prof. of Gynae & Obstetric, KMC, Peshawar 4. SRO, PMRC, KMC, Peshawar

## ABSTRACT

**Background:** Cigarette smoking habit is developed more at the young age, hazardous to health and causes premature mortality.

**Objective:** To determine the pattern of cigarette smoking and factors contributing to the said habit among college students of Quetta.

**Study Design:** Randomized study.

**Place and Duration of Study:** This study was conducted at the Bolan Medical College, Quetta during the academic year 2010-2011.

**Materials and Methods:** A total of 850 students from different colleges of Quetta were randomly selected during the academic year 2010-2011. Prevalence and influence of factors associated with the cigarette smoking were recorded on a predesigned questionnaire. The collected data was analyzed with the help of statistical procedures.

**Results:** Out of the total, 122 students were smokers, 23 ex-smokers and 705 non-smokers. Smokers had the habit for charm and relaxation. While non-smokers and ex-smokers avoided cigarettes use due to family blame, religion and its adverse effect on health. Besides, the habit was found more common among students whose fathers and brothers were smokers. Majority of them knew the hazards and very little number was smoking in the public places.

**Conclusion:** Young age and transition period from school to college is a critical time to adopt the habit of cigarette smoking, hence needs an immense attention of the authority designing tobacco control policies. Healthy recreational activities, awareness programs related to its hazards, non-smoking home environment, increased tax and ban on its advertisements are the essential measures, which can minimize the habit. In addition, the present basic work would serve as a template to conduct further advanced studies on this line.

**Key words:** Cigarettes smoking, associated factors, college students of Quetta.

## INTRODUCTION

Smoking is not only socially unacceptable but also hazardous to human health. Its smoke as produced from combustion of tobacco contains Tar, Nicotine and carbon monoxide. Tar component coats lungs like soot in a chimney, paralyzing the cilia and causes carcinoma of the lungs. Whereas Nicotine when reaches the brain, makes the heart to beat faster, also constricts the blood vessels and hence increases the blood pressure. These effects in combination with the stress produced by carbon monoxide in the smoke of cigarette caused 120,000 heart attacks in the United States<sup>1</sup>. Not only smokers are facing the complications of tobacco use but also non smokers are affected through indoor pollution. Some scientists demonstrated that bronchitis is easily developed in young children of smoking parents<sup>2</sup>. In a study in Japan, the risk of lungs cancer was found significantly higher among non smoking wives married to heavy smokers as compared to those married to non smokers<sup>2</sup>.

A study showed that cigarette smoking leads to decrease HDL and increase LDL by extra secretion of catecholamine, which is a well known cause of Coronary artery disease<sup>3</sup>. Apart from carcinogenic and cardiovascular diseases, tobacco use is responsible for diseases of breasts, teeth, prostate, pancreas and

kidneys<sup>2</sup>. In women, smoking during pregnancy affects fertility, birth outcomes, lactation, foetal development, causes cancer of reproductive system and increases perinatal mortality<sup>4</sup>. A report highlighted that the smoking women have link with early onset of menopause and their babies born have increased levels of carboxyhaemoglobin in the blood<sup>4</sup>. In males, heavy smoking is associated with impaired spermatogenesis, abnormal sperm morphology, lower androgen secretion and erectile dysfunction<sup>5</sup>. About one million premature deaths occurred annually worldwide among which fifty thousand are due to passive smoking<sup>6</sup>. In Cuba, smoking related diseases account for over 30 % of all the deaths and in the United Kingdom for about 15-20%<sup>2</sup>. If special attention is not given to this particular issue, the death rate will jump to about 10 million deaths by the year 2030<sup>7</sup>.

As per WHO figures, 47% of men and 121% of women smoke worldwide<sup>6</sup>. Among them 70 % live in developing countries<sup>6</sup>. The national health survey of Pakistan reported a prevalence of 13.7% among adolescents and 5% among women of rural areas<sup>8</sup>. Despite knowing the hazards, 21.3% medical students were found smokers in Sind medical college, Pakistan<sup>9</sup>. The habit of tobacco use is developed easily in the younger age group and with the change in life style from school to college. Hence, it should be observed

and modified/stopped with basic education. Therefore, the present study was designed to determine the percentage of smokers, ex-smokers and non smokers among college students of Quetta. Contributing factors will also be identified regarding this habit so that effective intervention program for the control may be suggested.

## MATERIALS AND METHODS

Six colleges in Quetta were selected for this study. Information regarding personal, contributing and smoking habit was recorded in the predesigned questionnaire. A smoker is defined as one who smokes at least one cigarette per day for 30 days and ex-smoker who had previously smoked at least one cigarette per day for 30 days but does not smoke now. The personal information included age, sex, and education level, whether urban or rural, boarder or day scholar, monthly income, total family number, smoking history of family, peak time/ places of smoking, ailment history, sources of hazards awareness, duration of smoking, number of cigarettes smoked per day, reason for smoking, not smoking and quitting the habit.

Volunteers were taken from each class and they distributed the questionnaire among the students. A lecture to explain the purpose of the study and how to fill the questionnaire was given to the students. Then written consent was obtained from the participants as well as district education officer. The code of confidentiality was kept throughout the study and the students were also assured that the responses will not be disclosed to any college authority. A total of 850 students (Males 832 and females 18) had filled and returned the questionnaires (Table-1). The SPSS version 10 program was used for entering the data and statistical analysis.

**Table No.1: Distribution of participants of the study**

Name of College	Number of students
Bolan Medical College (BMC), Quetta	340
Government Degree College (GDC), Quetta	202
Government Science College (GSC), Quetta	129
Tameere Nou Public College (TNPC), Quetta	76
Musa Public College (MPC), Quetta	55
Law college (LC), Quetta	48
<b>Total</b>	<b>850</b>

## RESULTS

The results of our survey are described in tables 2-4. Out of the total, 122 (14.4%) were found smokers, 23(2.7%) ex-smokers and 705 (82.9%) non-smokers. The prevalence of high smokers was found in

Government degree college (16.8%) followed by Musa public college (14.6%). Ex-smokers were predominantly observed in Law College (4.2%) and Bolan medical college (3.2%). Most of the students of Government Science College (84.5%) and Tameer nou public college (84.2%) were non smokers. Among 18 female students from Bolan medical college, no one was found smoker or ex-smoker.

Day scholar's students and those living in the rural area were found light smokers. 30% had smoker fathers and 43% were brothers of smokers, and 11% fathers and 16% brothers of ex-smokers were also smokers. Majority of the smokers stated that they are doing so to reduce tension and for maintaining good personality/ charm as shown in the advertisement of cigarettes by different media. Though very less number did not hesitate to smoke in the public places but their peak time of smoking was at the night. 58% students started the habit between the ages of 16-23. Almost 60% knew about the hazards either from TV, radios, newspapers, teachers or doctors.

About 53.3% ex-smokers had stopped smoking due to its adverse effect on health and 30% because of family pressure. Most (46.2%) of the non smokers stated that they were not smoking due to its harmful effect and 40.4% has considered it as addiction and prohibited by Islam. Only three smokers have complaint of nocturnal cough and one ex-smoker has diagnosis of ischemic heart disease.

**Table No.2: Findings of the survey, number (%age)**

Name of College	Smokers	Ex-smokers	Non-smokers	Total
BMC, Quetta	48 (14.1%)	11 (3.2%)	281 (82.7%)	340
GDC, Quetta	34 (16.8%)	03 (1.5%)	165 (81.7%)	202
GSC, Quetta	16 (12.4%)	04 (3.1%)	109 (84.5%)	129
TNPC, Quetta	10 (13.2%)	02 (2.6%)	64 (84.2%)	76
MPC, Quetta	08 (14.6%)	01 (1.8%)	46 (83.6%)	55
LC, Quetta	06 (12.5%)	02 (4.2%)	40 (83.3%)	48
<b>Total</b>	<b>122 (14.4%)</b>	<b>23 (2.7%)</b>	<b>705 (82.9%)</b>	<b>850</b>

**Table No.3: Ex- Smokers: Reason for Quitting the habit**

Reason	Number	Percentage
Health effect	16	53.3
Waste of money	03	10.0
Loss of charm	01	3.3
Family blame	09	30.0
Friend advise	01	3.3
Brand not available	-	-

**Table No.4: Non smokers: Reason for not smoking**

Reason	Number	Percentage
Religion	301	40.4
Health hazards	344	46.2
Waste of money	49	6.6
Non smokers society	14	1.9
Family blame	17	2.3
No charm	09	1.2
No tension	11	1.5

## DISCUSSION

Tobacco is used worldwide in different brands and its introduction to any country is associated with immense health problems. China is the top consumer as one of the three cigarettes in the world today is smoked there<sup>10</sup>. In developing countries, its prevalence is also increasing. In Bangladesh, 15 million males and 0.5 million females were found smokers in a population of 110 millions<sup>11</sup>. In our study, we got 14.4% prevalence rate in college students of Quetta. An early study conducted in USA showed a prevalence of 14% among college students<sup>12</sup>. While another study in Karachi reported, the prevalence of smoking to be 13.7% in school going adolescents<sup>8</sup>.

Besides, we found that smoking was more common in GDC and less common in GSC. There are multiple possible reasons for the different pattern like environment, knowledge of health hazards, depression etc. Lack of knowledge and depression are well known risk factors for smoking and increase the danger of starting the habit at young age. Some scientists gave possible explanation that science students are more cared and restricted, and more recreational activities are provided in their colleges<sup>13</sup>.

In the present attempt we also observed that father and brothers of most of the smokers were also smoking. This means that family has strong influence on the habit of the individual. 46.2% students in colleges of Quetta were not smoking because of its harmful effect thus indicating that the majority of students are familiar about smoking related complications. However, 40.4 students gave the reason that they did not smoke for the religious reasons.

Some of the students had left smoking due to family reasons and its adverse effect on health. The advice of the doctor in this regard will be more effective if he/she himself/herself is not smoking. A researcher demonstrated that people who smoke mainly for stimulation, handling and pleasure could easily stop smoking as compared to those who have the habit to reduce tension<sup>14</sup>. Quitting smoking is a long term process requiring a great deal of unconscious, constructive and painful conflict, but one can stop smoking if he is guided regularly and should keep him busy in some beneficial alternative activities. Besides, the harmful effects of smoking should be advertized, discussed and included in dramas on radio and

television as well as through the press. Like us, an early study reported that advertisement-showing charm in smoking is a major promoter of teenage smoking<sup>3</sup>. In addition, increased tax, ban on tobacco advertisement and seminars on subjects such as "Health or Tobacco" are other beneficial measures which may help to minimize the habit.

## CONCLUSION

Young age and transition period from school to college is a critical time to adopt the habit of cigarette smoking, hence needs an immense attention of the authority designing tobacco control policies. Healthy recreational activities, awareness programs related to its hazards, non-smoking home environment, increased tax and ban on its advertisements are the essential measures, which can minimize the habit. In addition, the present basic work would serve as a template to conduct further advanced studies on this line.

## REFERENCES

1. Peter KCJ. Report of the conference on "effect of smoking on national health." 1990;23-24: 35-41.
2. Ahmed Z, Saddique MK, Khan MH. Blood parameters and smoking pattern in Peshawar colleges. PJMR 1995; 34(3): 190-92.
3. Jaleel MA, Noreen R, Hameed A. Cigarettes smoking survey of citizens of Karachi. RMJ 2003; 28.
4. Board of science and education. Smoking and reproductive life; effect on reproduction and child health, 2004.
5. US department of health and human services. The health consequences of smoking: A report, Washington DC: 2004.
6. Doll R, Peto R, Borhan J. Mortality in relation to smoking. BMJ 2004; 328: 1519-21.
7. WHO. World Health report, making a difference. Geneva 1999.
8. Rozi S, Akhter S, Ali S. Prevalence and factors associated with current smoking among adolescents in karachi. J Trop Public health 2005; 36(2): 498-504.
9. Ahmed EN, Jaferey NA. Smoking habit among medical students of Sind Medical College. JPMA 1983; 33: 39-44.
10. WHO. World Health Organization in the pacific region, smoking statistics, May 28; 2002.
11. Bedi R, Gilthorpe M. Betel quit Chewing and cigarette smoking among Bangladesh community. J Dent Res 1994; 73: 237.
12. Rigotti NA, Leej E, Wechsler H. US college students; Use of tobacco products. JAMA 2000; 284 (6): 699-705.
13. Maaosek MV, Ciffeeld AB, Edward NM. Priorities among effective clinical preventive services. Am J Prev Med 2006; 31: 51-4.
14. Horn D. An approach to office management of the cigarette smoker. Dis Chest 1998; 53: 203.