

Trends of Tobacco Smoking Among Students of Private University, Lahore – Pakistan

Muhammad Ashraf Chaudhry, Muhammad Zeeshan Ashraf

ABSTRACT

Objective: To assess the trends of tobacco smoking among students of private university Lahore. **Study Design:** A cross-sectional study. **Place and duration of study:** From April 2012 to May 2012 at Becanhouse National University, Lahore. **Subjects and Methods:** A self-administered questionnaire was used to collect the data from 51 students after obtaining informed consent. Data was entered and analyzed by using Statistical Package for Social Sciences (SPSS) version 16.0. **Results:** Prevalence of smoking was 60.8%. There were 62.5% male smokers and 60% female smokers. 'Sheesha' smoking was most common (40.6%).

Sixty-eight per cent smokers started smoking between 15-19 years of age. Cause of smoking in 64.5% was just for fun. Forty-eight out of 51 (94.1%) knew the hazards of smoking. Health education and high tax on cigarettes were pointed out by students to control the rising trend of smoking in the country. **Conclusions:** There is a high prevalence of smoking among university students which is disturbing. There is also very high prevalence of smoking among female students which is worrisome. Prevention and cessation of smoking among university students is drastically needed.

Key Words: Smoking, prevalence, tobacco, cigarettes, Shisha, university students.

INTRODUCTION

The tobacco epidemic is one of the biggest public health threats the world has ever faced. It kills six million people a year of whom more than 5 million are users and ex users and more than 600,000 are non smokers exposed to second-hand smoke. Approximately one person dies every six seconds due to tobacco and this accounts for one in 10 adult deaths.¹ In Pakistan, around 36% of adult males and 9% adult females are tobacco users. Boy to girl tobacco use ratio is 2:1. About 100,000 people die annually due to tobacco use.² As many as 1200 young children (aged 13-15) start smoking in Pakistan in response to the tobacco industry's enticing marketing of its products.³ The water pipe commonly known as 'Sheesha' or 'huqqa' is becoming increasingly popular among youth in urban areas.⁴

Apart from lung cancers, smoking is known to cause cancers of bladder, kidney, pancreas, cervix, pharynx, larynx, oesophagus and mouth and so is responsible for one third of all deaths due to cancer. Smoking also causes ischemic heart disease, hypertension, chronic obstructive lung disease, emphysema, stroke and peptic ulcer. It is also well known for the harmful role in the development of impotency, infertility and its deleterious effects on the fetus in utero.⁵

Majority prefers moderately high-priced cigarette brand with a filter, smoke ten cigarettes or less in a day, start in teens mostly and experience breathlessness and cough.⁶ Nicotine in tobacco smoke causes addiction, increases heart rate, causes the constriction of blood vessels, increases the blood pressure and fatty acids are poured in to blood. To further deteriorate the situation, CO exerts its effects too and all the above features lead to heart attack.⁷

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. Agreeably the most modifiable determinants are social and

Corresponding Author:

Dr. Muhammad Ashraf Chaudhary
Professor, Head of Community Medicine
CMH Lahore Medical College, Lahore
Tel. +92 313-5598859
E-mail: drmachaudhry@gmail.com

environmental in nature, including exposure to smoking by parents, siblings, friends, and members of the general public.⁸

This study was carried out to estimate the prevalence of smoking among university students and to identify the factors associated with smoking.

MATERIALS AND METHODS

This cross-sectional study was performed at Beacon House National University, Lahore from April 2012 to May 2012. We interviewed 51 conveniently selected students. Data was collected through pre-tested self-administered questionnaire. Questions were mostly close-ended. Ethics approval not required due to the non-interventional nature of the study; however, an informed consent was obtained from students who agreed to participate in the survey. Data was analysed using the Statistical Package for Social Sciences version (SPSS, Chicago, IL, USA) 16.0. Prevalent rate for current cigarette smoking was assessed as the percentage of students who smoked cigarettes or Sheesha on one or more days during the 30 days. At the same time, we also assessed the prevalence of ex-smokers (the percentage of students who had tried smoking in their lifetime). Chi-square test of significance was used to compare prevalence of smoking among male and female students. A p value of < 0.05 was taken to be statistically significant.

RESULTS

Out of 51 students, there were 16(31.4%) males and 35(68.6%) females. Out of 51 students, there were 31(60.8%) smokers, 18(35.3%) non-smokers and 2(3.9%) ex-smokers. Out of 16 males, there were 10 (62.5%) smokers, whereas out of 35 females, 21 (60%) were smokers and this difference was not statistically significant ($p = 0.08$) (table 1). Most commonly smoked was 'Sheesha' (40.6%) followed by cigarettes (31.2%) (Figure 1). Twenty-one out of 31 smokers (67.7%) started smoking between 15-19 years of age (Figure 2).

Cause of starting smoking in 64.5% was just for fun, in 12.9% was for relaxation, and while 19.4% started due to peer pressure (table 2). Hundred percent of ex-smokers quitted smoking due to

advice by elders. Forty-eight (94.1%) out of 51 study subjects knew the hazards of smoking (Figure 3). Students were questioned about the most effective way to control rising trend of tobacco smoking in the country. Twenty-five students (49%) were in favour of health education followed by high tax on cigarettes (27.5%) (table 3). Students were also questioned about the effectiveness of compulsory pictorial warning on cigarette packs in reducing the prevalence of smoking. Only 15 out of 51 (29.4%) confirmed its effectiveness while majority (70.6%) did not agree with it.

Table 1. Male and Female smokers

	Male	Female	Total	P-value
Smoker	10 (62.5%)	21 (60%)	31	0.08
Non-smoker	6	14	20	
Total	16	35	51	

Figure 1: Distribution of smokers according to form of smoking

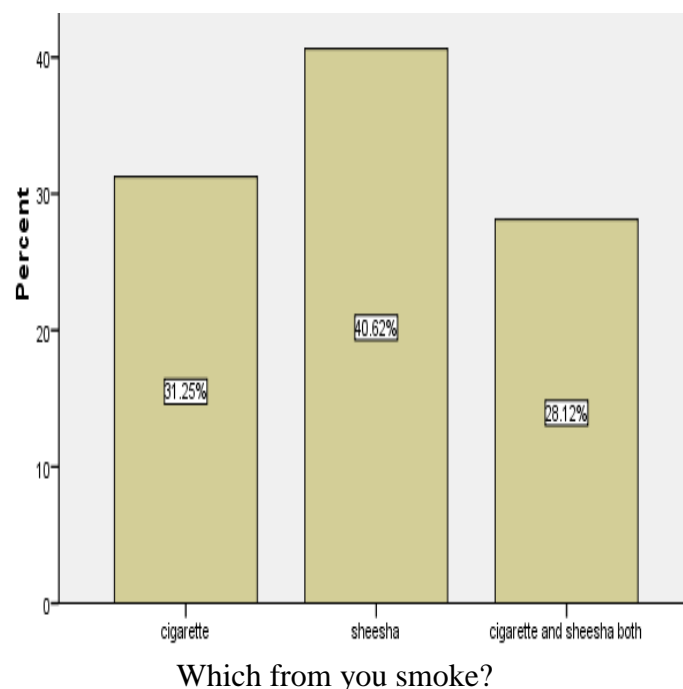
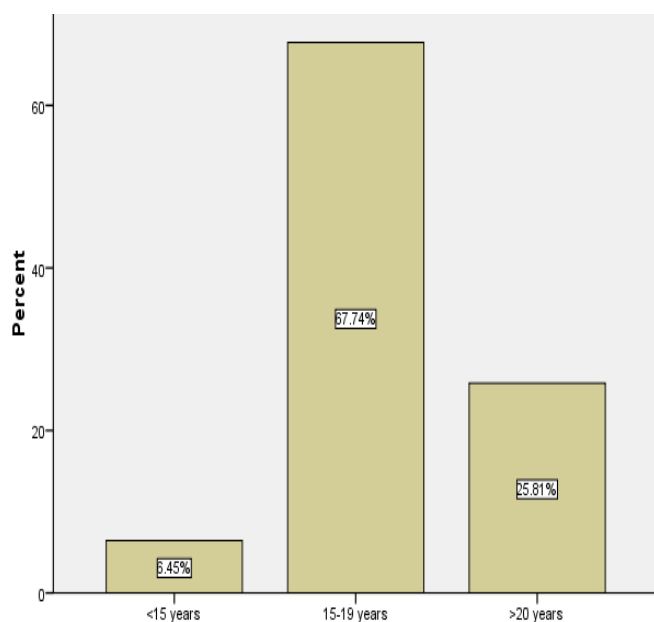


Figure 2: Age Smoking Started



What was your age when you started smoking?

Figure 3: Knowledge of students about hazards of smoking

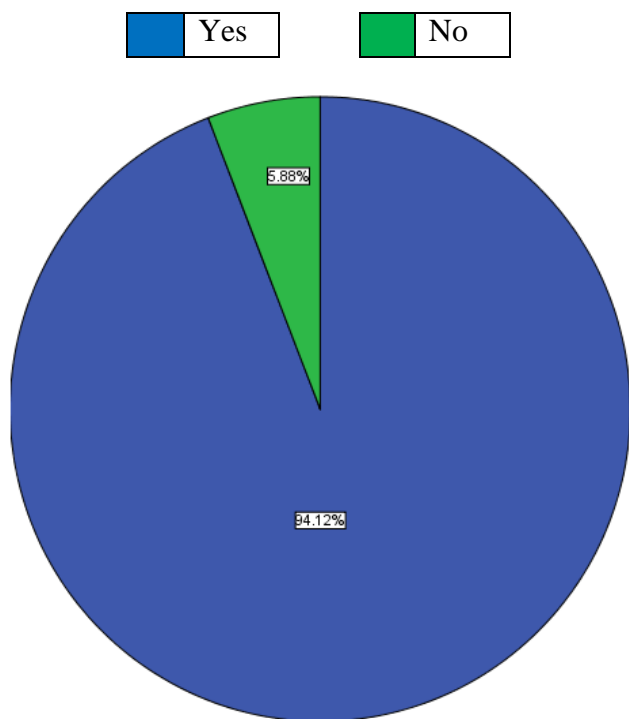


Table 2. Distribution of reasons of starting smoking

Reason	Frequency	Percent
Just for fun	20	64.5
For relaxation	4	12.9
Peer pressure	6	19.4
To look stylish	1	3.2
Total	31	100.0

Table 3. Effective ways to control rising trend of tobacco epidemic

Most effective way	Frequency	Percent
Health education	25	49
High tax on cigarettes	14	27.5
Punishment	2	3.9
Ban on all forms of tobacco advertising	3	5.9
Ban on loose cigarettes and small cigarette packs	4	7.8
Ban on sheesha smoking in all hotels/restaurants/cafes	3	5.9
Total	51	100.0

DISCUSSION

Tobacco is the single most preventable cause of death in the world today. By 2030, the death toll will exceed eight million a year. Unless urgent action is taken, tobacco could kill one billion during this century.⁹ Most of the people have known cigarettes for the fact that they cause lung cancer but the list of diseases and cancers caused by them are much more in number since they contain 4000 chemical compounds and 400 toxic substances.¹⁰

We found 60.8% of students were smokers. Out of these, 62.5% were males and 60% were females and the difference between male and female smokers was not statistically significant ($P=0.8$). There was high prevalence of smoking among university students, in spite of the fact that 94.1% students were fully aware of the hazards of smoking, which is really alarming. The prevalence of smoking among university students was found much higher as compared to earlier studies conducted in Peshawar and Islamabad universities.^{11,12} This shows wide gap between knowledge and practice of smoking. However, this is in contrast to previous study which has shown that someone who is aware of the mortality consequences of smoking smokes less.¹³

The high prevalence of smoking among girls (60%) in our study as compared to other countries in the region is a cause of concern. This is a worrisome, as these girls will add to the ever expanding pool of adult smokers in the country. The high prevalence of smoking among girls may be explained by increasingly popular Western lifestyle and changing societal roles and attitudes for women. Smoking among women, which was once considered to be associated with a loose and immoral behavior, has now become a symbol of freedom for women in developing countries, partly due to the powerful yet subtle messages put across by tobacco advertisements.

Tobacco companies throughout the world have successfully marketed to women by producing specifically for women, by advertising directly to the female population through fashion magazines and by sponsoring fashion and sports events for women. Similar tactics have also been observed in Pakistan, where tobacco companies are targeting the youth by sponsoring concerts, pop singers and

sports events. At the same time, television and film actors who have a wide following with young boys and girls are often hired for promotional activities.

In our study, most commonly smoked was 'Shisha' (40.6%). This is in contrast to earlier study¹⁴ carried out by Anjum Q et al where prevalence of current shisha smoking was found 17% among adolescents. This increasing trend of Shisha smoking among youth is mostly attributed to lack of knowledge and the misconceptions regarding its use. Major cause of smoking in our study (64.5%) was just for fun. This is in contrast to earlier study carried out by Ahmed R et al⁸, where smoking was associated with smoking status of parents, siblings and peer pressure.

In our study, 67.7% smokers started smoking between 15-19 years of age. This is in contrast to earlier study carried out by Chaudhry MA et al⁴ where 68% smokers started smoking between 20-30 years of age. This is the group which should be targeted in health education campaigns. Knowledge of the students regarding the hazards of tobacco was surprisingly good. More than 94% of the students were aware about the ill effects of smoking. This indicates that simply educating about the hazards of smoking is not enough to achieve tobacco prevention and cessation among students. Complete ban on tobacco advertisements, promotion and sponsorship should be ensured and all educational institutions must be declared smoke free. In our study, 49% purposed the most effective way to control rising trend of tobacco smoking in the country as health education followed by high taxes on cigarettes.

In our study, majority of the students (70.6%) negated the compulsory pictorial warning on cigarette packs in reducing the prevalence of smoking. This in contrast to earlier study carried out by Z.Sobani et al¹⁵ where graphic health warnings were considered to be most effective.

Results from the study suggest that Framework Convention for Tobacco Control (FCTC) provisions calling for more smoking cessation treatments and smoke free spaces will be very effective within Pakistani universities. It is high time that we not only make appropriate strategies but also carry out the continuous surveillance of the implementation as well.

LIMITATIONS

The limitations of study are that only a small sample could be surveyed studying in university. Our study was limited to convenience sample of private university students and did not include students from other Government universities of Lahore. Thus findings from the present study may not generalize to all university students. Finally, the data are based on reporting by students and their responses pertaining to tobacco use and other variables were not biologically validated.

CONCLUSION

In conclusion, high prevalence of smoking among university students is disturbing. Prevention and cessation of smoking among university students is drastically needed. Awareness of health hazards of smoking is not problem among university students. There is a dire need to implement smoke free policies. All educational institutions including universities should be strict 'No Smoking Zones'. The situation has reached a level that warrants the attention of national and international policy makers.

REFERENCES

1. World Health Organization (WHO), Fact sheet N^o 339, May 2012. Retrieved on 27th October 2012 from: www.who.int/media/centre/factsheets/fs339/en/index.html.
2. Fact sheet – Tobacco Use in Pakistan, Tobacco Control Cell, Health Services Academy, Cabinet Division, Government of Pakistan. Retrieved on 27th October 2012 from: www.tcc.gov.pk/Factsheet.htm.
3. Maqbool S. Growing interference of tobacco industry derailing pro-health policies. The News International; May 31, 2012.
4. Chaudhry MA et al. Prevalence of smoking among health care providers in tertiary care hospitals. Rawal Medical Journal Jan-June 2009; 34: 40-42.
5. Zareef S et al. Awareness of health hazards of smoking among young smokers and non-smokers. Ann. Pak. Inst. Med. Sci. 2009; 5: 27-30.
6. Baloch AA, Siddiqi JA, Raza M, Sheikh Z. Trends of cigarette smoking in health workers of Lyari General Hospital/Civil Hospital

Karachi, Dow University of Health Sciences. Med Channel, 2007; 13: 10-3.

7. Zwar N, Bell J, MacDonald C, Mendelsohn C. Nicotine and nicotine replacement therapy – the fact. Australian Pharmacists, December 2006; 25(12).
8. Ahmed R et al. Prevalence of cigarette smoking among young adults in Pakistan. J Pak Med Assoc 2008; 58: 597-601.
9. WHO Report on the Global Tobacco Epidemic 2008, p.8.
10. NetDoctor.co.uk Smoking: Health Risks. Reviewed by Dr Gavin Petrie, consultant chest physician. Based on a text by Dr Carl J Brandt. Last updated 14.02.2005.
11. Zaman M, Irfan U, Irshad E. Prevalence of cigarette smoking among Peshawar university students. Pak J Chest 2002; 8: 9-18.
12. Sheikh MA, Kamal A. Prevalence and pattern of smoking in university students perspective from Islamabad. J Coll Physicians Surg Pak 2004; 14: 194.
13. Carbone JC, Kvenmdokh S, Rotenberg OJ. Smoking, health, risk and perception. Journal of Health Economics 2005; 24: 631-653.
14. Anjum Q, Ahmed F, Ashfaq T. Knowledge, attitude and perception of water pipe smoking (Shisha) among adolescents aged 14-19 years. JPMA 2008; Retrieved on 30th October, 2012 from: <http://jpma.org.pk/view Article/View Article.aspx? Article ID = 1419>.
15. Z. Sobani et al. Graphic tobacco health warnings: which genre to choose? Int J Tuberc Dis 2010; 14: 356-361.

AUTHORS

- **Dr. Muhammad Ashraf Chaudhry**
Department of Community Medicine
CMH Lahore Medical College, Lahore
- **Dr. Muhammad Zeeshan Ashraf**
Department of Community Medicine
CMH Lahore Medical College, Lahore

Submitted for Publication: 24-12-2013

Accepted for Publication: 12-04-2014
After minor revisions