

ATTITUDES AND BELIEFS OF NON-MEDICAL STUDENTS TOWARDS TOBACCO USE AND SMOKING

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ABSTRACT

Objective: To study the attitudes and beliefs of non-medical university students towards tobacco use and smoking.

Methodology: This cross sectional study was conducted at Foundation University Institute of Engineering and Medical Sciences(FUIEMS) from 1st May 2011 to 1st November 2011. A self-administered English language questionnaire was distributed by fourth year medical students to random sample of 450 male and female students. Questionnaire was collected after 15 minutes.

Results: In this study 73.8%(n=237) were males, 26.2%(n=84) were females with mean age of 21.69±2.18. Sixty six (20.6%) were current whereas 27(8.4 %) were ex- tobacco user. Male gender, family history and smoker friends was found statistically significant with tobacco use (p=0.002, 0.00 and 0.00, respectively).Cigarette use (79.4%) was most common, followed by sheesha (8.4%),Experimentation (27.27%), peer pressure(18.18%), family influence (16.66%), to look cool (13.6%) and stress (10.6%) were factors leading to smoking. On questions about tobacco hazards and legislation, 53(83.30%) were aware of the tobacco hazards and 68.1%(n= 45) knew of legislation but only 12% considered it effective. Current tobacco users didn't like the idea of their future family using tobacco. 30.3% smokers agreed increasing tax or price of tobacco will decrease the use by youth.

Conclusion: Tobacco use is prevalent more than previously assumed in non-medical university students and a more comprehensive approach, effective policies and awareness at youth level with emphasis on a dedicated curriculum is needed.

Key Words: Tobacco Use, Social Behavior, Attitude

INTRODUCTION

Tobacco is a major preventable cause of premature morbidity and mortality.¹ World Health Organization (WHO) estimates that globally over 1 billion people currently smoke tobacco. It also attributes approximately 6 million deaths a year which is expected to rise to around 10 million per year by 2030.²

Willingness to start tobacco smoking among young people is one of the most worrisome aspects of smoking. Based on statistics from CDC, in USA more than 80% of established adult smokers begin smoking before the age 18 of years. It also reports 8.2% of middle school students and 23.9% of high school students use some or the other form of tobacco products.³ While cigarette consumption has been declining in high-income countries, it is rising in low-income and middle-income countries. This trend is much higher in developing countries such as in Pakistan, about 24% of college students are reported to be current smokers.⁴

Different factors identified with tobacco smoking of any kind include male gender, ethnicity, low socioeconomic class, and cigarette smoking among close relatives and friends.⁵ Other predictors which were highly associated with smoking initiation among young people in colleges and universities include experimentation with tobacco, peer pressure, and lack of sensitization from the part of the school or university.^{6,7} Whereas especially in males the reasons like relieving stress (74%), enhancing image or to look cool (62%), companionship (54%), leisurely independence (46%) and a show of male power and masculinity (44%) are found to be associated with tobacco use of any kind.⁸

With this diverse array of attitudes and beliefs of the youth towards tobacco use, efforts are being made all over the world to identify promoting factors, so as to make effective policies to decrease the growing trend of tobacco use.⁹ This study was conducted to study and identify the factors leading to tobacco use in non-medical students in Pakistan, and their beliefs so that more targeted efforts and policies can be formulated.

METHODOLOGY

A cross sectional study was conducted at Foundation University Institute of Engineering and Medical Sciences(FUIEMS) from May 2011 to November 2011. A formal approval from the Ethical board of university was taken and random sample of 450 male and female students from different graduate and post graduate programs of engineering and management were selected. A self-administered pre-tested English language questionnaire was distributed by a group of fourth year medical students headed by a team leader to the selected students in their classes. The questionnaire was collected after 15 minutes

by the same team.

The data was entered in SPSS version 19. Descriptive statistics were used to describe the data i.e., mean and standard deviation (SD) for quantitative variables (age and number of cigarettes smoked per day) while frequency along with percentages for qualitative variables (gender, smoking status, residence, family/friend history of smoking, forms of tobacco smoking, factors leading to smoking, awareness about hazards of tobacco use and legislation in country, view about doctors as role model and their attitude towards their future spouses and children using tobacco). Chi-square test was used to analyze the effect of gender, age residence, and family or friend history with tobacco use on use of tobacco. P-value <0.05 was considered as significant.

RESULTS

A total of 321 completed questionnaires were received from a total of 450 students. Out of 321, 73.8% (n=237) were males whereas 26.2% (n=84) were females. The age of students ranged from 18 to 26 years with a mean of 21.69 ± 2.18 years.

In total, 66 (20.6%) were current tobacco users, 27 (8.4%) were ex-tobacco users while rest 228 (71%) were not tobacco users. In males, 59 (89.39%) whereas 7 (10.6%) females were current tobacco users. In ex-smokers category (n=27), 21 (77.7%) were males and 6 (22.2%) were females. The prevalence of tobacco use in terms of status either current or ex-users was found to be statistically significant in males with a p value of 0.002. With most of study population 62.3% (n=200) and 50% of current tobacco users were living at home and the area of residence was not found to be statistically significant with smoking status (p=0.059). Moreover, 52 (78.7%) were using tobacco before starting university. In type of tobacco used by students 27 (79.4%) used cigarettes, 21 (8.4%) use sheesha, 10 (3.1%) use cigar, 6 (1.9%) use "paan" with tobacco and 2 (0.6%) use Hukka.

Forty-seven (71.21%) tobacco users out of total 66 had a family history whereas 35 (53.03%) out of 66 had at least one friend who used tobacco in any form as well. Family history and friends history of tobacco use was found statistically significant with tobacco use (p value <0.001 and <0.001 respectively). The factors leading to use of tobacco are shown in Table 1.

It was interesting to note most of the users were aware of the hazards, legislation but were still using tobacco and mostly considered legislation as not effective. Moreover they didn't like the idea of their future spouse, children and doctors using tobacco. The different behaviors and attitudes are shown in Table 2.

Table1: Factors Promoting Tobacco Use in Non-Medical Students

Factors	Frequency	Percent
Experimentation	18	27.3
Peer pressure	12	18.2
Parents	11	16.7
To look cool	9	13.6
Stress	7	10.6
Media	4	6.1
Easy availability	4	6.1
Ideal personality	1	1.5
Total	66	100.0

DISCUSSION

Tobacco use started during teenage years becomes a lifelong habit and long duration of tobacco use in any form leads to a life time full of multi system illnesses. The findings of our study are similar and alarming as many other conducted world over.

The prevalence of 20% current tobacco users among students population in our study is similar to a study conducted in Karachi which found 26% tobacco smokers.⁴ Whereas, in United Arab Emirates, Italy and Saudi Arabia, the prevalence was found to be 29%, 38.2% and 9.7% respectively. The finding of more Male students using tobacco is similar to as found all over world.¹⁰⁻¹³

To the belief the students who are boarding hostels will be using tobacco more as compared to those who live at home our study found no statistically significant difference among two groups. This finding was associated with an alarming fact that most users started using tobacco even before joining university at much younger age most probably in schools.^{4,14} According to the Global Youth Tobacco Survey (GYTS) presented by WHO, 25% of smokers smoked their first cigarette before the age of 10 and in Iran the mean smoking initiation age was found to be 13.93 ± 2.21 years.¹⁵

Among the factors identified which usually lead to tobacco use, friends and family history are most important ones. If there is family history of any kind of tobacco use then students are more likely to take up that habit. Similarly, Students whose friends are smokers are 5 times more likely to smoke compared to those whose friends are non-smokers.^{4,14,16} Many studies have shown that experimentation or use of tobacco just for fun with friends leads to a permanent habit and addiction for a lifetime. The use of sheesha is increasing world over with the belief that it

is a healthier way to use tobacco. Other factors leading to tobacco smoking include relieving stress as frequent smokers report smoking was relaxing (62.5% vs. 26.2%, $p = 0.002$) and energizing (48.5% vs. 11.4%, $p = 0.001$).¹⁷

There is difference in attitudes regarding legislation in developing countries and under developed countries. In developing countries most students showed positive attitudes towards tobacco control irrespective of their own smoking status, for example most students agreed to ban on tobacco sales to adolescents and that banning of smoking in public places. One of the strategies to reduce smoking-related morbidity and mortality is to encourage the involvement of health professionals as role models in tobacco-use prevention and cessation counseling.¹⁸ Data shows that in developing countries students had wrong beliefs on smoking ($p < 0.05$), and negative attitude toward tobacco control policies compared to nonsmokers.^{13,19}

Studies have shown that higher cigarette prices will reduce smoking prevalence rates of overall youth population and other youth sub-populations. Moreover, that smoke-free air laws will reduce smoking prevalence for the overall youth population with the largest reductions in high SES and male sub populations.⁵ But in our study only 30.3% smokers agreed that increasing prices will have an effect on overall smoking trend.

Table 2: Attitudes and Beliefs of Students about Smoking

S.No	Belief in question (yes)	Current users n (%) n=66	Non Users n (%) n=228	Total n (%) n=321
1	Awareness about hazards of all kind of tobacco use	53(83.3)	194(85.0)	247(76.9)
2	Awareness about legislation	45(68.1)	110(48.2)	155(48.28)
3	Is legislation effective?	8(12.1)	71(31.1)	79(24.6)
4	No smoking in Public will matter	44(66.6)	191(83.7)	235(73.2)
5	Doctors should not smoke at all	32(48.4)	178(78.0)	210(65.4)
6	Mind if spouse is a smoker	43(65.1)	171(75)	214(66.6)
7	Feel bad if children start smoking	51(77.2)	187(82)	238(74.1)
8	No smoking tobacco program should be part of curriculum	45(68.1)	199(87.2)	244(76.01)
9	Increasing taxation and prices will decrease tobacco use	20(30.3)	134(58.7)	154(47.9)

When it comes to future family, most of smokers didn't agree to the idea which is similar to studies in Muslim countries as in Saudi Arabia. Of all the participants, 68% of participants in the study did not like their family smoking.¹⁰

To counter the worrisome trend of tobacco use in students, the WHO and the U.S. Centre for Disease Control and Prevention (CDC) and Global Health Professions Student Survey (GHPSS) recommends the introduction of a separate tobacco module in medical schools so to increase awareness in youth.⁵ In addition further efforts recommended include restrictions on advertising, graphic health warnings on cigarette packages and in advertisements and, combined with full implementation of evidence-based, community wide, comprehensive tobacco control policies at government level.⁹ In Italy, one study projects that with a comprehensive approach, the smoking prevalence can be decreased by as much as 12% soon after the policies are in place, increasing to a 30% reduction in the next twenty years and a 34% reduction by 30 years in 2040.⁹

Keeping in view these data it is imperative that the smoking burden be reduced in our young population so that the healthcare cost to the society is reduced. Furthermore, in a developing country like Pakistan the healthy young trained man power of today will be of use to us tomorrow.

CONCLUSION

In our study the fact that students knew of hazards and legislations and continued to use tobacco is similar to studies which have shown that despite knowledge of so called no-smoking policy for years, its perceived enforcement is variable. More comprehensive approach, effective policies and awareness at youth level in schools and colleges with emphasis on a dedicated curriculum is needed.

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