

FREQUENCY OF SMOKING BETWEEN MALE STUDENTS OF ABDULWALI KHAN UNIVERSITY MARDAN & BACHA KHAN MEDICAL COLLEGE: HAS MEDICAL EDUCATION GOT SOME EFFECT

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ABSTRACT

Objectives: To compare the frequency and identify factors of smoking among the male students of Abdul Wali Khan University Mardan and Bacha Khan Medical College.

Methods and materials: A cross-sectional study was conducted at AWKM and BKMC data was collected using structured Questionnaires having close ended questions. Non probability sampling technique was used. Data was analyzed through SPSS version 2020.

Results: Our study found out the level of awareness regarding the hazardous effects of smoking was 92.1 % among students of Abdul Wali Khan University Mardan as compared to 100 % among students of Bacha Khan Medical Collage Mardan. Out of 112 smokers, 57 were smoking for pleasure while 45 were smoking to relieve stress

Conclusion: Although our study didn't find any significant effect of awareness on smoking habits but still majority of our participants believed that arranging awareness programs that could help to decrease and control the prevalence of smoking.

Key words: Male students, frequency, Smoking

INTRODUCTION

Cigarette smoking is a global health challenge, a life threatening factor and the leading preventable cause of death in both developed and developing countries¹. Diseases related to cigarette smoking kills one in ten adults, globally. If people continue to indulge in this practice of smoking with the current rate, then, an estimated 1.1 Billion people would be affected from this cancer². The deleterious effects of smoking and its association with numerous diseases is an established fact.³ Different studies have

shown the relationship between cigarette smoking and increased risk of cancers of mouth, stomach, esophagus, lungs and it also reduces fertility³. One of the reports of WHO shows that cigarette smoking cause about 4 million deaths annually and this figure is about to rise to 8.4 million in 2020⁴. And out of these about 70% of deaths occur in developing countries. If we take the WHO statistics 1/3rd people over 15 years age are smokers in developing nations⁵. Smoking is more common in male than females but women empowerment adds to increase in smoking in females⁶. Mainly adults are affected and the starting age is often as early as 13-15 years. The usual inspiration is from social circle⁷. The prevalence of smoking varies from region to region, for instance it is very common in East Asia, central Asia and

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Europe whereas relatively less prevalent in sub Saharan African countries⁸. Cigarette smoking is very alarming for developing countries and it requires examination of determinants of tobacco use and also develop cessation interventions. Studies have shown that physicians can have much large influence on their patients in their smoking cessation efforts^{9, 10}. But physicians do smoke themselves, which leaves a conflict in their behavior¹¹. According to the study in Syria, 41% of men and 11% of women physician smokes, which tells us about seriousness of the problem¹².

In a study on Malaysian students, it was found that 9% of students smoke cigarettes and 88% among them were in habit of smoking even before entering the university and 28% of them smoked more than 10 cigarettes per day.¹³ According to one study in Yasoj, it was found that about 15.9% of students smoke cigarettes and hookah, 1.5% smoke cigarettes and pipe and about 9% smokes all three¹⁴. Various studies showed that in both developing and developed countries the prevalence of cigarette smoking is increasing among adolescents and the age of onset of use is decreasing^{15, 16}. In a five years study in Saudi Arabia, a strong association of cigarette smoking and coronary heart disease was found community based study, during 5 years period between This study was carried out from 1995 to 2000 in Saudi Arabia.¹⁷

In our country mostly students start smoking at quite young age, that is adolescence.. The percentage of smoking according to different studies was found to be between 16.7 to 33%¹⁸.

Talking of medical students in Pakistan, the prevalence rate is almost the same as students studying in non-medical institutions. Nearly half of students tried to get rid of their bad habit as they came to know the hazardous consequences of their practice and wanted an effective legislation followed by strict implementation on part of the government¹⁹. The percentage of chain smokers among medical students and non-medical students is similar, however when it comes to occasional smoking medical students are more likely to be occasional smokers²⁰. After looking at conditions of cigarette smokers in medical colleges, the situation highlights the inadequacies of tobacco control teaching in medical curricula. Cigarette smoking is prevalent among medical college students. One study showed that 29% of students

were current smokers among students of college of applied medical sciences in Riyadh. KSA²¹. Another study which was conducted in Abha, KSA identified a prevalence rates of regular smoking as 13.6% among medical students. This study also elaborated that inspite of knowledge about the harmful effects of smoking, it continued to be a major issue among the educated lot.²²

It is quite surprising to know that even though the injurious effects of active and passive smoking are known, prevalence remains high as shown by studies in Kingdom of Saudi Arabia^{23, 24}. In the same study, in Al-kharj military hospital, KSA, it was shown that 19% of staff were smokers, 14% were ex-smokers and 67% nonsmokers²³. A ten months survey by World Health Organization in two Gulf countries showed that prevalence of smoking was high among male physicians in both Kuwait and Bahrain. In Kuwait current smokers were 18.4%

The bleeding index was recorded as;

	AWKU	BKMC	P-value
Smokers	n=73	n=39	0.013*
Regular smoker	17	18	
Occasional smoker	56	21	
Encouraging factors			
Along friends	30	20	0.080
To relief stress	30	08	
Consider it fashionable	13	11	
Age of starting smoking			
< 10 years	01	01	0.825
10 - 15 years	07	04	
15 - 20 years	40	18	
> 20 years	25	16	
Place of smoking			
Home	05	01	0.054
University	21	20	
With friends	47	18	
Number of cigarettes/day			
1 - 3	57	23	0.098
3 - 10	13	10	
11 - 20	02	03	
> 20	01	03	
Reason of smoking			
Pleasure	29	28	0.004*
Increase concentration	07	03	
To relief stress	37	08	

and ex-smokers were 15.8%.²⁴ The studies have reported that cigarette smoking is more prevalent in medical students because of stress of studies and lack of coping mechanisms to deal with day to day life stresses in medical school. Therefore this research was conducted to collect the baseline information about awareness of students regarding smoking. This study aimed to find out the effect of awareness and factors of smoking among male students of AWKM and BKMC

MATERIALS AND METHODS

Comparative Cross-sectional study was conducted in two Educational Institutions of District: Mardan i.e Abdul Wali Khan University and Bacha Khan medical Collage in 2021. The total sample size was 278 (139 in each institution). Non probability convenient sampling was done. All male students of BKMC and AWKUM were included in study population and those who were absent or unwilling were excluded. Ethical approval was taken from Bacha Khan Medical college No 30/C-Medicine / BKMC. A written informed consent was taken from all students and privacy was maintained. Data was collected using structured questionnaire having close ended questions by conducting face to face interviews. Pre testing of questionnaire was done at different settings and necessary changes were made before final implementation. Data was analyzed through SPSS version 20 using specific statistical tools and presented by tables, bar and pie charts, on the basis of this data, detail discussion was done & conclusion was drawn.

RESULT

Out of 278 students, 112(40.2%) were smokers. Out of which 73(65.17%) were from Abdul Wali Khan University and 39(34.8%) were from Bacha Khan Medical College. See table 1 for details:

Our study showed statistically significant association among number of smokers and reason of smoking p value 0.013 and 0.004 respectively. The level of awareness regarding the hazardous effects of smoking was 92.1 % among students of Abdul Wali Khan University Mardan as compared to 100 % among students of Bacha Khan Medical Collage Mardan.

DISCUSSION

Our study was conducted in two institutions

of Mardan city Khyber Pakhtunkhwa Pakistan i.e. Abdul Wali Khan University Mardan (AWKUM) and Bacha Khan Medical Collage Mardan (BKMC). Among AWKUM students, frequency of smoking is 52.5%, While in BKMC, it was 28.1% These findings are similar to a study conducted in medical university of Larkana which showed frequency to be 56%²⁷ yet another study at King Saud university KSA, recorded it as 32.7%³⁷ respectively. These findings are much higher than a study conducted among medical students at university college of medicine in Abha, KSA which was 13.6%²².

We found out in our study that 11.5% of AWKUM and 8.6% of the BKMC students have parental history of smoking, which was less than the study carried out at Central Kerala, Tamil Nadu, India as they had 24% participants with family history of smoking³⁴. In our study at AWKUM, 76.7% students were occasional smokers and only 23.3% were regular, this is comparable with the study conducted at King Saud University, KSA, where 17.53% were regular smokers²⁵, at odds with this, our BKMC students have nearly equal proportion of both regular and occasional smokers i.e. 46.2% and 53.8% respectively. In our study group at AWKUM, accompanying friends (41.1%) and relief of stress (41.1%) were the two factors that mainly influenced smokers' decision to start smoking, while our BKMC students are mainly influenced by their friends, 51.3% of the total, these results are less than a study conducted at Frontier Medical Collage Abbottabad where 68.19% participants have their friends as a source of inspiration³⁰. Our study looked into different ages of starting smoking and found out that 54.8% of AWKUM participants started smoking at the of 15-20 years of their age, while in BKMC 46.2% started smoking at the age of 15 to 20 and 41.0% after 20 years of their age, these results are in collation with the study conducted among college students at Karachi of which 45% students started smoking at the age of 15-20 years while 55% started smoking after 21 years²⁸. Another study conducted in 18 universities of Pakistan found out that mean age of initiation was 16.65±2.4629. Our study of both groups is supported by another study conducted in Frontier Medical Collage Abbottabad where 62.17% started smoking between 15-20 years³⁰. In our study at Abdul Wali Khan University Mardan, 78.1% of smokers smoked 1-3 cigarette per day & 17.8%

smoked 3-10 cigarettes per day, while in Bacha Khan Medical College Mardan 59.0% participants smoked 1-3 cigarette per day and 25.6% smoked 3-10 cigarette per day, these results are totally different than study conducted at King Saud university where only 29.72% smokers smoked less than 10 cigarette per day²⁵. Surprisingly, 100% of BKMC and 92.1% of AWKUM students are totally aware of the hazardous complications of smoking but still there is a high prevalence of tobacco use in male students, our study is in affirmation to another study conducted “Smoking Habits and Beliefs of Future Physician of Pakistan”, their study concluded that in spite of adequate knowledge there is high prevalence of smoking among future physicians of Pakistan¹⁹.

Our study found out that 58.9% of the AWKUM and 51.3% of the BKMC participants tried to quit their smoking. Comparable to this another study performed at costal south India in Kasturba Medical College in which 50.7% participants tried to quit their smoking³⁵. 43.2% of AWKUM and 57.6% of BKMC were of the opinion that there must be awareness programs to decrease the prevalence of smoking, another study conducted in Pakistan according to their result majority are in favor of legislative measures to curb the problem. Our study can be considered a landmark since it is the first smoking related comparative cross sectional study in the Mardan region among medical and non-medical students. As it is the comparative cross sectional study, it is cheap relatively easy to conduct and we were able to measure prevalence for all factors under investigation. Scanty resources and limited time on our hands restrained our study to only two institutions else we would have liked our study to cover many institutions as basing study in many institutions could have generated more accurate results. Further, And the research would have been much better if the sampling method used was the probability sampling so that students could have an equal chance to participate in it.

CONCLUSION

Although most of the students are aware about hazardous effects of smoking, still smoking is high both among medical and non-medical students. Although our study didn't find any significant effect of awareness on smoking habits but still major chunk of our participants believed that arranging awareness programs that could help to decrease and control the

prevalence of smoking. Since this study was conducted in only one district of Khyber Pakhtunkhwa, the generalizability of this study should be done with caution and it is recommended that these students should receive counseling and stringent antismoking policies should be implemented at university level.

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