Factors behind the prevalence of smoking: A case study of Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur, Azad Jammu & Kashmir

Muhammad Shoaib[1], Mirza Muhammad Abdullah[1] and Atif Ullah[2]

1. Department of Community Medicine, Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur, Azad Jammu & Kashmir
2. Department of Physiology, Nowshera Medical College, Nowshera, Pakistan

*Correspondence: shoaib_ajk@hotmail.com

Significance:
Pakistani tobacco smokers spend 250 billion PKR on more than 64 billion cigarettes consistently. Gold Leaf, the well-known brand in Pakistan is accessible at a cost of 140 PKR for one pack of 20 cigarettes. The least expensive cigarettes accessible in the market are for 50 PKR per pack of 20 cigarettes. The foreign made and expensive cigarettes are additionally accessible in the market which can go up to 200 PKR or more per pack. Current study investigated factors behind prevalence of smoking.

ABSTRACT

Objectives: The objectives of research were to analyze the smoking behavior among the medical students and to examine the factors behind the prevalence of smoking among the students of Mohtarma Benazir Bhutto Shaheed Medical College while recommendations are made on study findings.

Materials and Methods: Quantitative research design is used while nature of research is descriptive cross-sectional. Sample size of the study was 500 Medical Students (First year MBBS to final year MBBS). Non-probability convenience sampling technique was used to extract the sample. The data was collected through self-structured mixed questionnaire and analyzed by employing SPSS.

Results: They faced difficulty in refraining the smoking stuff which might be the educational and socio-cultural pressures which they are expected to contain in the society. The knowledge and legislation were supported by the students as legislation should be carried out to ensure the smoke free environment in College.

Conclusion: Students of Medical College Mirpur have been found addict to the smoking. However, they have been found conscious towards their smoking status while experiencing different brands.

Introduction

Tobacco addiction, nowadays, is one of the biggest health problems across the world. According to a survey conducted by World Health Organization (WHO), smoking is one of the worst habits that is spreading more rapidly all around the world. (1) Smoking has had been a risk factor for cardiovascular and respiratory diseases and Tobacco use has also been source of different types of cancer. (2) The consumption of tobacco is the main preventable cause of death in the whole world as almost 70% of the deaths occur in developing countries due to smoking.

(3) It is pertinent fact reported by (WHO) that more than 600,000 lose their lives from breathing another people's smoke. In addition, smoking has been the cause of life expectancy reduction, increase in medical expenses and loss in productivity during the lifetime of a person. (4) Therefore, WHO gives priority to programs related to smoking prevention. (5, 6) On the other hand, the trend of smoking among the college students has been increased. (7, 8) However, this study is conducted to examine the prevalence and pattern of various types of smoking. (9) For the last few decades, there has been significant increase in number of college smokers. WHO has declared the act of smoking addiction as a smoking dependence syndrome in the international classification of disease. (5, 6) Cigarettes and other stuff of tobacco use are addictive. (8) The patterns of tobacco use are regular and compulsive and the withdrawal syndrome that normally accompanies abstinence occurs. This particular attitude develops among the students regardless of their gender and other characteristics. (10) These young people are using different stuff of smoking other than cigarettes pertaining even toxic substances across the world. (11) The substances used by these students might carry the socio-cultural pressures and expectations adhered by them. (12)

Different studies have revealed that frequency of smoking increases among the students when they subsequently pass through 1st year to 5th year and most addicts are found in the last year of their degree (13,4) it is pertinent here to devise any anti-smoking law or policy by the institution. Furthermore, 40% of the non-smoker students are more likely to become smokers when they enter college in their first year(1). Although, there are various reasons that promote smoking habits among the adults; one of the common factors stems from family socialization where the parents and peers are great source of maturing such practices sought at early age (7,13,4).

The smoking habit is common in students across the world as well as in Pakistan. (14, 15) According to the study, 9.7% of 7th grade students (both boys and girls) and 9th were active smokers, 24.6% had smoked at some time and 10.2% were susceptible to initiation, statistics that turned out to be higher with the passage of time. Diverse reasons were outlined by the young people, emphasized the belief so much in girls as in boys that smoking makes them appear more attractive. A study outburst that a high proportion of the respondents, 90.6%, said they were aware that cigarette smoke harms other people, while 84.3% agreed to ban smoking in colleges schools and other higher educational institutions (HEIs). (9, 15, 16).

Seemingly, smoking is a common practice at various medical colleges that lead to deaths and health issues in the world. (11) According to a study, Pakistan is amongst the high tobacco consumption countries across South Asia. (10)

Pakistani tobacco smokers spend Rs. 250 billion on more than 64 billion cigarettes consistently. (17) The cost of cigarette is considered around Rs. 4 and the aggregate cost of 64.48bn cigarettes comes to assessed Rs. 258bn roughly. (18) Gold Leaf, the well-known brand in Pakistan is accessible at a cost of Rs. 140 for every pack of 20 cigarettes (Rs. 7 for each cigarette). The least expensive cigarettes accessible in the market are Rs. 50 for each pack of 20 cigarettes or Rs 2.5 per cigarette. The foreign made and expensive cigarettes are additionally accessible in the market which can go up to Rs. 200 or more for every pack. (19) Pakistan Tobacco Company Limited is taking real part in tobacco industry of Pakistan.

Objectives: To know the smoking behavior among the medical students, to unpack the factors behind the prevalence of smoking among the students of Mohtarma Benazir Bhutto Shaheed Medical College and to make recommendations based on study finding to address the issue under study.

Materials and Methods

This research employed quantitative research design, cross-sectional technique, to assess the prevalence of smoking among the students of Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur Azad Kashmir. Data collection was carried out through primary sources while data was collected through structured questionnaire. Furthermore, out of the total population 2000 of Medical College a sample size of 500 students was taken for the study. Non-probability (convenience) sampling technique was used to access the sample. Questionnaire was used to achieve the information from the respondents. The tool was designed by the researcher and the data was collected carefully. The most common procedure to explore the factors involve in this study is One Sample T-test. It gives alternative explanation of the variables which is not possible through any other technique. It is carried out through a close group in which it is used as means to establish the relative importance of independent or explanatory variables to the dependent or responsive variables. The dependent variable was taken gender while independent variables were Refrain Smoking, Monthly Expenses on Smoking, Different Stuff of Smoking, Different Brands, Hours Spent on Smoking and Smoking Status of the respondents. Against the gender, all these variables were tested while results were tabulated and interpreted. On the other hand, non-parametric tests were also employed to check the strength of association among the variables, lambda and Goodman and Kruskal tau tests were employed to check the strength and direction of association between the Banning of Smoking and Legislation for the Control of the Smoking in College. The lambda and Goodman and Kruskal tau test showed the strong association between the variables.

Results:

The above table illustrates that among the 500 selected respondents, 87 percent were found male students while 13 percent were female students who confessed that they smoke either occasionally or permanently. However, smoking behavior is found among all the participants undertaken in the study. It is therefore established from the sample undertaken in the study that students of MBBS (both male and female) Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur Azad Kashmir are mainly addicted to the smoking. This evidence supports the proposition that prevalence of smoking behavior among the medical students has been at large scale and students are found addict to smoking regardless of their gender. (20, 21)

Table 2: Gender distribution of respondents

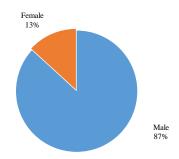| MBBS Class	Male	Female	Total
1st year	84	16	100
2nd year	87	13	100
3rd year	89	11	100
4th year	92	08	100
5th year	83	17	100
Total	435 (87%)	65 (13%)	500

Figure 2: Gender distribution of respondents

Independent sample t test (Dependent variable is gender)

Note: all these hypotheses are approved with p-value of less than 0.05.

According to the results of One Sample T-test following illustration was derived hypotheses wise.

1. **There is significant difference of facing difficulty to refrain from smoking by male and female respondents.**

    The results were drawn that gender and difficulty faced by the students to avoid the smoking has significant relationship which denotes that gender relation with the

difficulty faced by the medical students is linked and smoking cannot be avoided easily. Results show that for smokers' gender might be the source of the avoiding the smoking in female students while it can arouse the male students to get addict of it. Based on the results, it is concluded that smoking is more likely associated with masculine or feminine character and might be an act of men (male students) to supersede women (female Students) or an act of females to avoid males and vice versa. (24) The students might believe that the fashion and company greatly influence (23) them in developing their smoking habit. (25,26).

2. **There is significant difference of monthly expenses on smoking by male and female respondents.**

It has been observed that there is strong relationship between gender and the monthly expenses of the students. The smokers allocate a significant part of their monthly expenditures to smoking which may either increase their monthly expenses or they might find the budgetary constraints, but the relationship notifies here that gender and monthly expenses are associated with the male and female students. (27) It may be the educational pressures to contain the smoking habits while they might come across the financial issues to meet the both ends. (28)

3. **There is significant difference of smoking tobacco in other forms by male and female respondents.**

The significant relationship has been found between the gender and different stuff of the smoking among the students. It illustrates that students among male and female have been addicted to the different smoking stuff besides smoking of the cigarettes. (29) The reason behind it may be the pressure of education as well as other socio-cultural and familial pressures. The students may find the different source of satisfaction by utilizing the different smoking stuff. (30)

4. **There is significant difference of brands of cigarette smoked by male and female respondents.**

Here comes again the significant difference between the gender and brands of cigarettes. The interest of the male and female students may vary at large scale in making choice of the brands of cigarettes. (31) As different stuff is available in the market while male and female stuff can also make their priorities in terms of the flavors and tobacco

and nicotine amount. It is therefore concluded that the brands of the cigarettes are directly proportional to the gender among the medical students because the brands are tried first and gradually it becomes the habit. (28)

5. **There is significant difference of Hours to smoke more cigarettes by male and female respondents.**

The significant difference between gender and hours of smoking shows that smoking hours matter for both male and female students because of their gender. The hypothesis unpacked that time spent by the students on smoking is more likely associated with their gender. Likewise, male students may be more passionate to spend more time than female as the ratio of the male is higher than females. (31)

6. **There is significant difference of smoking status by male and female respondents.**

The hypothesis reveals that the smoking status of the male and female is different. The significant values identify that male students who smoke are large in number and banded better status than the female status that have meagre ratio, but the resemblance found among medical students is evident of their difference of the status. The students might consider the cigarette as symbol of quality and recognition adopted by both men and women. (1,3)

Table 2: Decision of respondents about banning of smoking * Knowledge about legislation of smoking

Count		Knowledge about Legislation		Total
		Yes	No	
Banning of Smoking	Yes	417	33	450
	No	43	7	50
Total		460	40	500

Table 2 reveals the behavior of students about the smoking, when respondents were inquired about the banning of the smoking and knowledge about the legislation of smoking in the medical college by the authorities. A large number of students, almost 92 percent supported the process of disseminating knowledge among the students while legislation should be carried out by the authorities against smoking. (15) Only 8 percent respondents were against the spread of knowledge about the legislation of smoking. Among the 500 respondents, a large ration of 90 percent respondents agreed to ban the smoking in the campus while 10 percent didn't agree to ban on smoking like stuff. (17)

The above table illustrates the application of Lambda and Goodman and Kruskal tau test applied to the variables knowledge for the legislation and banning of

the smoking in the college premises. Lambda test denotes that there is strong association between the knowledge for the legislation and banning of the smoking. Thus, the knowledge should be disseminated on the legislation about the smoking for the medical students in the college. (21) It can only be possible when legislation will be initiated, and decision must be taken to ban the smoking in the medical college. On the other hand, Goodman and Kruskal tau also shows the strong direction of the association found between the variables taken under study. It is therefore concluded that the knowledge is needed to carry out on the legislation in order to ban the smoking in the premises of college through policy making. (1, 3, 30, 31).

Discussion

The prevalence of smoking is the worldwide issue. (1). It is equally prevalent in developed and developing countries. (3) The youth of the world is at risk due to smoking and especially the youth in schools and colleges seeking their education are involved in smoking behavior which needs to be rescued. (5) This behavior is learned either through the provided environment in the home where one or more persons might be smoker which may impact the understanding of a child to get addicted to smoking. (6) Despite this, different other factors can be the found among the youth which motivate them to adopt the smoking habits. (4) Peers and friends may also be the source of indulging into this bad habit. (7) The smoking in Pakistan is very common almost every 8/10 people smoke. (5) Among this ratio, educated people have a considerable ratio which is alarming. The people those are the source of inspiration for the youth and other sections of the society. (18) Unfortunately, they are involved in such malicious behavior. (8) On the other hand, smoking has been found spreading worldwide in young people both male and female. The recent world trends are alarming as youth is also using some other smoking stuff besides the smoking of cigarettes. (9)

In Medical College Mirpur, it is numerically found that all the students taken under study were found smokers in which 87 percent are male students while 13 percent were found female students. Furthermore, this study unpacked that the students are more likely facing the difficulty in getting out of the situation of being involved in smoking habits i.e., mainly cigarettes and other related stuff which they use to get relax and seek satisfaction. (6, 9) Another factor has been found that students have strong association between the gender and monthly expenses which clues that students might allocate an amount for the smoking like stuff and might lessen their other expenditures. (11) In this situation students might face the financial constraints to meet the other ends. There is a lot of variety of cigarettes available in the market

and with the passage of time new varieties may replace the older one. Students who addicted to smoking either by trying cigar or any light stuff can be in search of changing their brands while female students can find the lighter variety to seek the satisfaction. (10,13) In addition, students spend time to the smoking was also found significant. (3) The boys can be passionate to spend more time than females in order to seek their gratification. (15) Conversely, they were found more conscious to their status of smoking which may carry different things i.e., brands and time spent to the smoking stuff. (21) Therefore, it is pertinent to mention here that medical students were found more passionate towards the smoking stuff, maintaining their status while dealing with the expenditures. (23) All the results have been found most significant showing the strength and direction of association among the variables. When asked about the knowledge and legislation for the smoking in the College premises, a large number of students, almost 92 percent supported the process of disseminating knowledge among the students while legislation should be carried out by the authorities against smoking. (10) Only 8 percent respondents were against the spread of knowledge about the legislation of smoking. Among the 500 respondents, a large ration of 90 percent respondents agreed to ban the smoking in the campus while 10 percent didn't agree to ban on smoking like stuff. (13)

Conclusion

It is thus concluded that the students of Medical College Mirpur have been found addict to the smoking. However, both male and female students were found addict to the smoking cigarettes and other smoking stuff available in the market. They have been found conscious towards their smoking status while experiencing different brands. They were found more passionate to manage the smoking hours. They faced difficulty in refraining the smoking stuff which might be the educational and socio-cultural pressures which they are expected to contain in the society. The knowledge and legislation against the smoking is important here because most of the respondents supported the dissemination of knowledge to the students from the first year while legislation should be carried out to ensure the smoke free environment in College. It is recommended that College administration must formulate the laws and develop policy to refrain the students from smoking and other stuff because these students have to cure the people when graduated. It has been found dire need of the Institution to take the radical steps to avoid the prevalence of Smoking in the College.

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