

FREQUENCY OF CIGARETTE AND SHEESHA SMOKING AMONG STUDENTS OF A PRIVATE MEDICAL COLLEGE

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ABSTRACT

Objective: To determine the frequency of cigarette and sheesha smoking among students of a private medical college.

Methodology: This study was conducted at Islamabad Medical and Dental college, Islamabad from April to September, 2013. A close ended questionnaire was administered to find out the frequency of cigarette and sheesha smoking among medical students and their knowledge about hazards of smoking.

Results: In this cross sectional survey, 255 MBBS students from Islamabad Medical and Dental college, Islamabad were selected. The mean age of students was 21.83 ± 1.657 years. The frequency of cigarette smoking was 33%, sheesha smoking 36%, and smoking of both was 24.3%. There were 16(6%) students who were ex-smokers of cigarette, 4% of sheesha and 1.6% of both. Greater part of students 32(12.5%) smoke 6 -10 cigarettes per day. Parents of 42 (34.7%) students know about their smoking. Majority of the students 45 (17.6%) started smoking just for fun or 25 (9.8%) to release stress. The main cause of quitting smoking in 15 (39.5%) students was medical advice or due to advice by elders in 11 (28.9%) students. 226 (88.6%) students had awareness about the ill effects of smoking. According to the bulk of students 105 (41.2%) the most effective way to control smoking epidemic is health education. Some students 46 (18%) had an opinion of high tax on cigarettes and 27 (10.6%) compulsory pictorial warnings on cigarette packs.

Conclusion: Sheesha and cigarette smoking is very popular among medical students. Most of the students know about hazards of sheesha smoking.

Key Words: sheesha smoking, cigarette smoking, medical students, IMDC

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INTRODUCTION

Tobacco use is one of the ten leading health indicators for the Healthy People 2010 agenda, and remains to be a major focus in the proposed Healthy People 2020 objectives. The World Health Organization warns that if current smoking patterns continue, it will cause some 10 million deaths yearly by the year 2020¹.

Smoking in any form is a known health hazard being responsible for cardiovascular diseases, lung cancer, chronic bronchitis, and respiratory diseases². However, the hazards due to the consumption of tobacco with methods other than cigarette did not get much attention. Sheesha also known as Hubble-bubble, hookah, goza or arghile, is one of the other ways of tobacco consumption^{3,4}.

Sheesha smoking (using a waterpipe, narghile or hookah) is a social and entertainment behavior of increasing popularity, especially among adolescents⁵. Sheesha smoke contains high concentrations of carbon monoxide,

nicotine, tar and heavy metals⁶. Thus, sheesha smokers are at a greater risk of serious respiratory diseases and cancers. Sheesha smoking is highly prevalent in developing countries and in the Eastern Mediterranean region⁷.

In our society, there is a recent trend toward increased Sheesha smoking and most of adolescents nowadays spend part of their leisure time smoking sheesha in café and restaurants. Several studies have shown that sheesha smoking is practiced more frequently (either daily or once per week)⁸. The favorite places for smoking sheesha are with friends in café and open places.

Epidemiological studies have revealed several reasons for the initiation and prevalence of cigarette smoking in children including the influence of peer pressure, family models and other environmental factors in the home and at school^{9,10}.

Literature review shows that in Pakistan, the information regarding sheesha smoking is scarce and that is a

hindrance in effective intervention. Very few studies have been conducted to determine general smoking pattern and similarly for prevalence of smoking habits among medical students. In this study we aim to determine the frequency of sheesha and cigarette smoking and to assess the perceptions and practices of cigarette and sheesha smoking in medical students of a medical college with assessment of their knowledge about the hazards of sheesha smoking.

METHODOLOGY

This was a cross-sectional study conducted in Islamabad Medical and Dental College. The target population consisted of MBBS students from 1st year to final year. A total of 255 students were selected for this survey. The sample size was calculated by using WHO sample size calculator taking confidence level of 95%, anticipated population proportion of 33% and absolute precision required of 6% and the minimum sample size was turned out to a minimum of 236 participants. From each class students were selected by using systematic random sampling technique. All the selected students in each class were briefed about the study and consent for inclusion in the study was taken. To investigate about their smoking habits a self-administered questionnaire was used. The questionnaire was comprehensive to assess the behavior of students regarding smoking including sheesha and cigarette and their knowledge of hazards of smoking. The questionnaire contained questions on personal characteristics, smoking behavior, knowledge and practice of hazards of smoking sheesha and cigarette, frequency, du-

ration, and amount of smoking. A "current smoker" was someone who, at the time of the survey, smoked any tobacco product either daily or occasionally; an "ex-smoker" was someone who was formerly a daily smoker but currently did not smoke at all; a "non-smoker" was someone who, at the time of the survey, did not smoke at all.

A pilot study was conducted to test the questionnaire and organizational procedures. The field work took about eight weeks. Approval and permission for the study was taken from the Medical College. The Statistical Package for Social Sciences (SPSS v. 16) computer software was used for data analysis. Quantitative variables of the study were presented in the form of mean and standard deviation and Qualitative variables as frequency and percentages. The results were presented in the form of graphs and tables.

RESULTS

In this cross sectional survey a total of 255 students of MBBS from 1st to final year from Islamabad Medical And dental College were selected. In this study sample there were 138 (54.12%) male and 117 (45.88%) female students. The mean age of students was 21.83 years with a standard deviation of 1.657 years with a minimum of 18 years and maximum age of 27 years.

The results of our study show that the prevalence of cigarette smoking among students was 33% and sheesha smoking was 36%. Some students responded that they smoke both cigarette and sheesha, the frequency of smoking both was 24.3%. In our study sample 16 (6%)

Table 1: Prevalence of Sheesha and Cigarette smoking

Response	Smoke Cigarette		Smoke Sheesha		Smoke both cigarette & sheesha	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	84	33	91	36	62	24.3
No	155	61	155	61	183	71.8
Ex-smoker	16	6	9	4	4	1.6
Total	255	100	255	100	249	97.6

Table 2: Distribution of Reasons started smoking

Reason started smoking	Frequency	Percent
Just for fun	45	17.6
For relaxation, to release stress	25	9.8
Some of my friends were smokers	15	5.9
Followed someone's example from family	3	1.2
To look mature	13	5.1
To look fashionable and trendy	13	5.1
To stay slim	3	1.2
Other	5	2.0
Total	122	47.8

Table 3: Distribution of Causes of quitting Smoking

Cause of quitting	Frequency	Percent
Medical advice	15	39.5
Advice by elders	11	28.9
High cost	4	10.5
Respiratory or heart problem	7	18.4
Other	1	2.6
Total	38	100.0

Table 4: Distribution of Effective way to control smoking epidemic

Effective way to control smoking epidemic	Frequency	Percent
Health education	105	41.2
High tax on cigarettes	46	18.0
Compulsory pictorial warnings on cigarette packs	27	10.6
Punishment	49	19.2
Incentives	3	1.2
Other	22	8.6
Total	252	98.8

students were ex-smokers of cigarette, 4% of sheesha and 1.6% of both (Table 1).

According to the results majority of the students were smoking cigarette from 3 to 5 years and majority of the students were smoking sheesha from 2 to 5 years. The mean age at which the students started smoking was 17.71 ± 2.538 years with a range of 10 to 22 years. Most of the students 32 (12.5%) were smoking 6 -10 cigarette followed by 31 (12.5%) students who were smoking 1-5 cigarettes per day.

The frequency of sheesha smoking showed that the majority of the student had a trend of occasionally smoking sheesha that is 35 (13.7%) were smoking sheesha weekly and monthly. According to the students who were smoking cigarettes or sheesha 42 (34.7 %) tolled that their parents or guardians know about their smoking and 79 (65.3%) students were smoking without information to their parents.

According to the results majority of the students 45 (17.6%) started smoking just for fun followed by students 25 (9.8%) who started smoking for relaxation or to release stress. Some students 15 (5.9%) started smoking due to the reason that their friends were smokers (Table 2). The assessment of knowledge about ill effects of smoking shows that 226 (88.6%) students had awareness about the ill effects of smoking on health and 22 (8.6%) did not had any idea about the ill effects of smoking.

When students were inquired about the reason for which they are not quitting the smoking majority 35 (13.7%) of them said that they think it a way to release

tension and stress. A large no. of students 31 (12.2%) thought that it is impossible to quit smoking for them. Some of the students 24 (9.4%) said that it has become part of their personality that's why now they can't stop it.

The main cause of quitting smoking according to the majority of students who quit smoking was medical advice in 15 (39.5%) students, followed by 11 (28.9%) students who quit smoking due to advice by elders as given in (table 3).

According to the students the most effective way to control smoking epidemic is health education according to majority of students 105 (41.2%). Some students 46 (18%) had an opinion of high tax on cigarettes and 27 (10.6%) compulsory pictorial warnings on cigarette packs (table 4).

DISCUSSION

In this cross sectional survey a total of 255 students of MBBS from 1st to final year from - Islamabad Medical and Dental college, Islamabad were selected. In this study sample there 138 (54.12%) males and 117 (45.88%) females. The mean age of students was 21.83 years with a standard deviation of 1.657 years with a minimum of 18 years and maximum age of 27 years.

Previous literature show that any kind of smoking has many health hazards like it significantly increases risk of lung cancer, respiratory illness, low birth weight and periodontal disease. Preliminary research shows hookah use may be associated with nicotine dependence and could be a gateway drug to cigarette smokin^{12,9}.

Sheesha smoking is a growing concern in urban areas of Western countries across the globe. In the UK, there has been a 21% rise in the number of sheesha cafe in recent years, but little research has been conducted on the public health implications of this smoking practice. This report summarises the current known health effects associated with sheesha smoking, whilst presenting data from other countries where such health effects have stimulated the development of sheesha-specific legislation¹⁰.

The main objective of the study was to find out the prevalence of cigarette and sheesha smoking among the medical students of a private medical college. The results of our study show that the prevalence of cigarette smoking among students was 33% and sheesha smoking was 36%. Some students responded that they smoke both cigarette and sheesha, the frequency of smoking both was 24.3%. In our study sample 16 (6%) students were ex-smokers of cigarette, 4% of sheesha and 1.6% of both.

These results have resemblance with previous studies conducted at different parts of the world. A study conducted in Wake Forest University School of Medicine United States, it was 40% of the sample and 30% percent of the study participants of the study conducted in Community Medicine Department, International Medical School, Management and Science University, Malaysia.¹⁰ The ratio further plunged in the study reported by Dow University of Health Sciences, Karachi in which 22.7% of students, indicated that they smoke shisha³.

Key London-based studies identify growing sheesha prevalence, especially among young people, university students and those of ethnic backgrounds typically associated with sheesha smoking. Finally, local authority responses identified that sheesha premises are particularly attractive for young people who smoke under the allure that sheesha is safer than cigarettes, and are hubs for antisocial behavior in certain areas of the city¹³.

When students were inquired about the reason for which they are not quitting the smoking majority 35 (13.7%) of them said that they think it a way to release tension and stress. A large no of students 31 (12.2%) thought that it is impossible to quit smoking for them. Some the students 24 (9.4%) said that it has become part of their personality that's why now they can't stop it.

Most sheesha tobacco appears illicit by virtue of being non-duty paid and lacking appropriate health warnings, and many premises remain non-compliant with the Smoke-free law. Public health intervention has been minimal thus far, and this report identifies a need for collaborative work and further understanding of the sheesha industry before significant strides can be made

to control its proliferation. Several peer-reviewed recommendations are detailed which aim to initiate future discussion, justify future action and instigate change in current practice to reduce the public health implications of sheesha smoking in London¹⁴. There is compelling evidence regarding the hazards of waterpipe smoking accumulated, in the literature¹⁵.

The awareness regarding hazardous effects of sheesha smoking shows that only 48.12% of those participants were aware of sheesha smoking and they thought that it causes breathing problems while a majority (62.4%) of respondents from Dow University of Health Sciences responded that lung diseases are associated with smoking. In our study the assessment of knowledge about ill effects of smoking shows that (88.6%) students had awareness about the ill effects of smoking on health narrated cancer, 19% heart problem associated with sheesha smoking as per this study and 20.8% of medical students associated cancer with sheesha smoking and 23.4% of responding medical students indicated heart diseases as hazards of sheesha smoking in the study done on medical and dental students of Karachi. Moreover 77.5% of Malaysian University students consider sheesha smoking can increase the risk of cardio-vascular and respiratory diseases¹⁵⁻¹⁷.

The growing evidence against the falsely acclaimed 'innocence' of waterpipe smoking has, however, been futile in preventing the increase in the practice. The World Health Organization (WHO) pronounced North Africa, East Mediterranean region and South-East Asia to have the highest rate of waterpipe smoking. The practice is also spreading fast among the youth of North America, Brazil and Europe at an alarming rate. Even in the United States, evidence suggests a gradual rise in the prevalence of waterpipe smoking among young adults¹⁶⁻¹⁷.

There are few studies on knowledge and attitudes regarding waterpipe smoking in the general population, and most indexed literature on the topic originates from the Middle East. Varsano et al, in Israel, surveyed 388 high school students on their beliefs about waterpipe smoking and observed that the majority of the students as well as their parents perceived waterpipe smoking to be much less harmful than cigarette smoking¹⁸.

There are reports that three of every four female waterpipe smokers preferred waterpipe smoking over cigarette smoking because they considered it to be much less perilous than the latter. Peer pressure and curiosity were cited as the most common triggers behind the initiation of waterpipe smoking by Egyptian females¹⁹.

Another study from Lebanon, reported similar perceptions by a large population of high school students who considered waterpipe smoking to be less dangerous than cigarette smoking. Yet again, it was observed

that while cigarette smoking remained stigmatised in Lebanon, social taboos associated with waterpipe smoking were minimal²⁰.

In this present study we found that according to the students the most effective way to control smoking epidemic is health education according to majority of students 105 (41.2%). Some students 46 (18%) had an opinion of high tax on cigarettes and 27 (10.6%) compulsory pictorial warnings on cigarette packs.

CONCLUSION

Most of the students know about hazards of sheesha smoking and they usually prefer sheesha bars for sheesha smoking. An interesting fact is that mostly students start sheesha smoking because their friends do. Steps should be taken to involve students in healthy recreational activities. Tobacco control programme should be conducted in colleges and awareness among people should be created through electronic and print media. Our study reveals the alarming situation of high practice of sheesha smoking among medical students and thus that active measures should be taken to control this current condition especially among students by increasing awareness in them with the hazardous side effects of sheesha smoking.

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CONTRIBUTORS

MA conceived the idea and wrote the manuscript. AMR supervised the study. AHA, FR, NT did data collection, data analysis and wrote manuscript. All the authors significantly contributed significantly to the final manuscript.