

Original Article

Perceptions and Practices of Shisha Smoking among Medical Students

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Objective: To determine the perception and practices of shisha smoking among medical students.

Introduction: Shisha smoking is on the rise among the youth, all over the world. Various¹ shisha bars and restaurants have been established which serve shisha. Although common², among all age groups it is particularly popular among teenagers who are oblivious to the health problems and dangers associated with shisha smoking.

Study Design: Cross sectional study.

Place and duration: This study was conducted in Community Medicine Department Wah medical college, Wah Cantt from 1st February 2009 to 10th October 2009.

Materials and Methods: A total of 152 students of all classes were selected by systematic random sampling technique (every 3rd student was taken). Two Unwilling and non-cooperative students were excluded. All the students were subjected to fill a pre-tested and structured questionnaire designed to find out the perceptions and practices of students regarding shisha smoking.

Results: The study showed that 133 (88.66%) of the students exactly knew what a shisha was and 79 (52.66%) of the sampled students smoked shisha. More than half, 47 (59.49%) of the students used to smoke shisha in a shisha bar. 105 (78.7%) out of 133 students knew about the hazards of shisha smoking.

Conclusion: Most students knew about shisha and its hazards, more than half of them were involved in shisha smoking. Most of the students started smoking shisha because their friends smoked.

Key words: Perceptions, Practices, Shisha smoking.

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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.¹ The World Health Organization warns that if current smoking patterns continue, it will cause some 10 million deaths yearly by the year 2020.²

Smoking in any form is a known health hazard being responsible for cardiovascular diseases, lung cancer, chronic bronchitis, and respiratory diseases.^{3,5} However, the hazards due to the consumption of tobacco with methods other than cigarette did not get much attention. Shisha also known as Hubble-bubble, hookah, goza or narghile, is one of the other ways of tobacco consumption.^{3,6} Hookah (water pipes) has been used by the indigenous African and Asians for smoking tobacco for nearly 400 years.⁷ It has been claimed that >100 million people worldwide smoke water pipes daily.^{7,8} It is a common practice in the Arabian Peninsula, Turkey, India, Pakistan, Bangladesh, and some regions

of China smoking is more prevalent than cigarette smoking in certain areas.⁷

Water pipes involve the passage of smoke through water prior to inhalation. Although used to smoke other substances, including marijuana and hashish, water pipes are most often used to smoke flavored tobacco, which is made by mixing shredded tobacco with honey or molasses and dried fruit. In the U.S., this sweetened, flavored tobacco mix is most commonly known as shisha; Despite perceptions among young adults that water pipe tobacco smoking is safer than cigarette smoking.^{9,10} Studies to date do not support these perceptions. Although research is limited, the existing evidence suggests that water pipe smoking associated health risks are similar to those of cigarette smoking. A recent meta-analysis concluded that water pipe tobacco smoking was significantly associated with lung cancer, respiratory illness, low birth weight and periodontal disease.^{11,12}

Literature shows that in Pakistan, the information regarding shisha 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. This present study was planned to assess the perceptions and practices of shisha smoking in medical students of a medical college and to evaluate their knowledge about the hazards of shisha smoking.

Materials and Methods

A Cross sectional descriptive study was conducted at Community Medicine Department of Wah Medical College and Pakistan Ordnance Factory' Hospital Wah Cantt. The duration of the study was 7 months commencing from 1st February 2009 and concluded on 10th October 2009. The study population comprised of current students from 1st Year to final year M.B.B.S. The participants were selected by systematic random sampling with every third student of every class was included in the sample. The subjects were included irrespective of gender and age. All the students studying in the college and willing to participate were included. Uncooperative and unwilling students were excluded from the study population.

The data collection tool, implied was a structured and pre-tested Questionnaire. Different questions, regarding the knowledge about shisha, whether the subjects smoked shisha and how long they have been smoking shisha were asked. After explaining the purpose of the study, consent was obtained from the participants and they were subjected to filling the Questionnaire. Data collected was analyzed with the help of SPSS-17 for calculations of frequencies and percentages.

Results

A total number of 152 students were included in the study. It was noted that 133 (88.6%) of the students were aware of shisha while 19(11.4%) students exhibited their ignorance about shisha. The prevalence of shisha smoking among medical students included in this study was 51.97%. There were 33 (41.77%) students who had been smoking shisha for more than 3 years, 24 (30.39%) students had been smoking for last 1 to 3 years while 22(27.84%) medical students had been smoking for less than one year.

Majority of the students did not smoke shisha "daily" or weekly. Among the shisha smoking students, 27(34.17%) students used to smoke shisha weekly, 14(17.72%) students were in the habit of smoking shisha fortnightly and 38(48.10%) students indicated that they smoke shisha monthly. 47(59.49%) respondents used to visit restaurants for shisha smoking, 20 (25.31%) students cited their homes as the place of smoking and 12(15.18%) students reported their friends' home as preferred place for shisha smoking. (Table- I)

Table I: Duration, Frequency & Place of Shisha smoking (n= 79)

Variable	Student	Percent
Duration of shisha smoking		
More than 3 years	33	41.77
One to three years	24	30.39
Less than one year	22	29.84
Frequency of shisha smoking		
Weekly	27	34.17
Fortnightly	14	17.72
Monthly	38	48.11
Place of shisha smoking		
Shisha bar	47	59.49
Home	20	25.33
Friends home	12	15.18

Figure 1 exhibits the reasons of shisha smoking indulgence as revealed by the participants. Prime motive for shisha smoking mentioned by the participants was outing with the friends and their company. 32 (40.5%) students started smoking shisha because their friends were indulged in smoking the same, 24(30.37%) students started smoking shisha out of curiosity, 19 (24.05%) students started this habit as a social obligation and 4(5.05%) medical students revealed that a shisha smoking family member was the main motive.

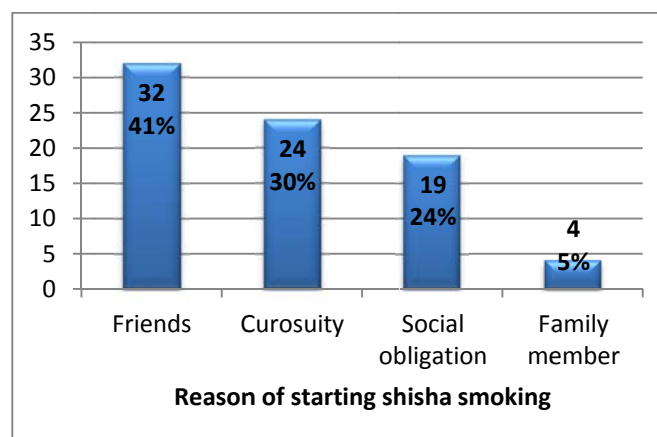


Figure 1: Cause of Shisha Smoking Indulgence

In this cohort of 133 medical students having awareness about shisha, 29(21.80%) students had no friends who smoked shisha, 36(27.06%) students had few friends who smoked shisha, 38(28.57%) participants had most of their friends indulged in shisha smoking, 30(22.5%) students had all their friends smoking shisha.

105 (78.9%) out of 133 respondents knew about the hazards of shisha smoking and 28(21.05%) did not know about the hazards of shisha smoking. Breathing problems / respiratory diseases (n=64, 48.12%) were

the most commonly cited health hazards of shisha, 19(14.29%) participants thought that shisha smoking leads to heart problems, 43(32.66%) students believed an association between shisha smoking and cancer. Only 7(5.26%) students related shisha smoking with causation of stroke (Table II).

Table II: Peer shisha smokers & knowledge about Hazards of shisha (n=133)

Variable	Respondent	Percent
Peer shisha smoking		
Few friends	36	27.06
Most of friends	38	28.57
All of friends	30	22.56
None of friends	29	21.81
Knowledge about hazards of shisha smoking		
Breathing	64	48.12
Cancer	43	32.33
Heart problem	19	14.29
Stroke	7	5.26

Discussion

An analysis of mainstream water pipe smoke (i.e., inhaled by the user) found large amounts of carcinogens, hydrocarbons, and heavy metals, including 36 times the amount of tar as in cigarette smoke. Water pipe tobacco smoking often occurs in a social setting, among friends at a private residence, or in venues that offer ready to smoke water pipes to customers.^{13,14}

In this study 79 (52.66%) students out of 150 respondents smoke shisha while a study conducted in Wake Forest University School of Medicine United States,⁹ 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.¹⁵ 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 shisha.³

In our study majority (59.49%) of respondents prefer to smoke in a shisha bar and only one fifth (20%) shisha smokers smoke shisha in their homes. In a study carried out in Karachi 46.7% smoke shisha in shisha bars and only 11.1% in their homes.³

This study reported that a large chunk (40.53%) of respondents start smoking shisha because their friends smoked shisha. However 58.7% students were influenced for shisha smoking by their friends in the study carried out in Karachi in 2007. It depicts that majority of shisha smokers are influenced by their friends' company. Study and discussion has reported that only 5.05% of participant started shisha smoking because their family member also smokes shisha. However this percentage is almost doubled (11.2%) in

study reported from Karachi.^{16, 17}

The awareness regarding hazardous effects of shisha smoking shows that only 48.12% of those participants were aware of shisha 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 32.33% narrated cancer, 19% heart problem associated with shisha smoking as per this study and 20.8% of medical students associated cancer with shisha smoking and 23.4% of responding medical students indicated heart diseases as hazards of shisha smoking in the study done on medical and dental students of Karachi. Moreover 77.5% of Malaysian University students consider shisha smoking can increase the risk of cardio-vascular and respiratory diseases.¹⁸⁻²⁰

The increasing trend of water pipe smoking can be attributed to several misconceptions. These include the popular beliefs that the nicotine content in water pipes is lower as compared to cigarettes and that the water used in this form of tobacco intake filters out all the hazardous chemicals such as carbon monoxide, nicotine and tar.^{14, 16} These common misconceptions lead the public to believe that water pipe smoking is not a significant health hazard.¹⁷

In Pakistan, the information regarding shisha smoking is scarce and that is a hindrance in effective intervention. Only few studies were conducted to determine general smoking pattern to the selected areas and specific population groups.^{17, 19, 21} Furthermore, few studies are conducted in Pakistan for prevalence of smoking habits among medical students.^{22, 23}

So this study shows that 79 (52.66%) medical students use to smoke shisha, which is a higher frequency as compared to literature.

According to the results the frequency of smoking shisha noted in this study was as about half of the smokers (48.11%) of our participants smoke shisha on monthly basis while 34.17% on weekly basis, only 17.72% on fortnightly basis and none on daily basis. However medical students of Dow University depicted that 21.7% smoke shisha daily, 11.1% weekly and 27.8% on monthly basis. Study done in Aga Khan University Medical College¹⁶ Karachi has reported frequency of shisha smoking on daily basis as 2%, on regular basis as 37% and occasional smoking as 61%. Moreover only 16% of college students in North Carolina smoke water pipe on daily basis.²³

Conclusion

According to our research shisha smoking is very popular among medical students. Most of the students know about hazards of shisha smoking and they usually prefer shisha bars for shisha smoking. An interesting fact is that mostly students start shisha 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 shisha 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 shisha smoking.

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