



## SHISHA-SMOKING; POPULARITY AND FAMILIARITY AMONG UNIVERSITY STUDENTS OF JAMSHORO AND HYDERABAD, SINDH, PAKISTAN

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**ABSTRACT...** Worldwide, annual rate of 4.9 million deaths have been reported due to the tobacco abuse and this rate might rise to 10 million in the next 20-30 years. Seventy percent of these deaths take place in developing countries. **Objectives:** To determine the prevalence and knowledge of shisha-smoking among the university students of Jamshoro and Hyderabad Sindh, Pakistan. **Methodology:** A Questionnaire-based cross-sectional study was conducted from December 2013 to August 2014. A convenient sampling of 400 participants was done from three universities at Jamshoro and one at Hyderabad i.e., Liaquat University of Medical and Health Science (LUMHS), University of Sindh and Mehran University of Engineering and Technology (MUET) Jamshoro and Isra University, Hyderabad. Undergraduate male students, age ranging between 18-23 years, were included whereas females, postgraduate students and house officers were excluded. Data were analyzed using SPSS (Statistical Package for the Social Sciences) version 16. **Results:** Ninety-two percent students were aware of shisha-smoking whereas 8% had no knowledge. Thirty-six percent have ever smoked shisha while 64% of students never smoked it. Of the smoking students, 45% mentioned smoking shisha rarely, 25% of students smoked sometimes, 13% smoked always, 6% smoked it often and 10% smoked just once. Most of the students (92%) knew the hazards associated with shisha smoking. According to 48% participants, shisha-smoking is far more dangerous than cigarette-smoking. **Conclusions:** Prevalence of shisha-smoking in the educated youth is high; however, only half were aware of its harmful effects.

**Key words:** Smoking; Tobacco; Universities. Cancers.

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### INTRODUCTION

Worldwide, annual rate of 4.9 million deaths have been reported due to the tobacco abuse and this rate might rise to 10 million in the next 20-30 years. Seventy percent of these deaths take place in developing countries<sup>1</sup>. In Pakistan, significant increase in tobacco use in the form of shisha-smoking has increased in the youngster<sup>2</sup>. Depending upon regional parlance, Shisha is also known as water pipe, hubble-bubble, narghile, and hookah. The word "waterpipe" is given to the use of tobacco where the produced smoke travelled through a column of water. The frequently used tobacco in waterpipe is moasela<sup>[1]</sup>, which is a dark coloured paste, made in India, by combining tobacco, molasses and pulpy fruit (apple, banana), making it flavoured and sweet<sup>3</sup>. Shisha smoking has been recognized as a contributing factor in multiple tobacco related diseases such as lung

cancer, oesophageal cancers, cardiovascular disease and adverse pregnancy outcomes (low birth-weight), communicable diseases such as hepatitis C and tuberculosis, nasopharyngeal and bladder cancer, oral dysplasia etc<sup>4</sup>. A rise in blood pressure and heart rate among shisha-smokers is also noted<sup>5</sup>. The amount of smoke inhaled after a single shisha-session is about 200 times than from a cigarette<sup>6:11</sup>. The nicotine quantity in waterpipe tobacco is measured at 2% to 4% as compared to 1% to 3% present in the cigarettes whereas the waterpipe smoke also has the carbon monoxide content estimated at 0.34% to 0.4%<sup>8</sup>. In addition, the smoke of tobacco consists of over 4800 various chemicals among which 69 are carcinogenic<sup>7</sup>.

This study was designed to find out the frequency of shisha-smoking among the university students

of Jamshoro and Hyderabad and to know whether they were aware of the consequences of shisha-smoking.

## METHODOLOGY

### Study area and period

This study was conducted in the three universities at Jamshoro and one at Hyderabad i.e., Liaquat University of Medical and Health Science (LUMHS), University of Sindh and Mehran University of Engineering and Technology (MUET) at Jamshoro and Isra University, Hyderabad. The study was conducted between December 2013 to August 2014.

### Study Design

A Questionnaire based cross-sectional study.

### Study population and sample

Four hundred male students, 100 from each university, of age group 18-23 years, were selected by convenience sampling from the common room, cafeteria and the classrooms. The participants were informed about study objectives before data collection and their informed consent was sought. Questionnaires were filled in only by those who agreed to participate in the present study. All data were anonymized.

### Inclusion and exclusion criteria

Undergraduate male students of age group (18-23 years) were included whereas females, postgraduate students, house officers were not included.

### Data entry and analysis

Data was entered and analysed on SPSS (Statistical package for the Social Sciences) version 16.

## RESULT

According to this study, Ninety-two percent students were aware of shisha-smoking whereas 8% had no knowledge. Thirty-six percent have ever smoked shisha while 64% of students never smoked it (Figure 1). Of the smoking students, 45% mentioned smoking shisha rarely, 25% of

students smoked sometimes, and 13% smoked always, 6% smoked it often and 10% smoked just once in their lives (Figure 2). Most of the students (92%) knew the hazards associated with shisha smoking while 8% did not know about the accompanying risk factors (Figure 3). According to 48% participants, shisha-smoking is far more dangerous than cigarette -smoking but 52% consider cigarette smoking more hazardous and risky for the health issues. Most of the participants (54%) were attracted by the smoke and beauty of shisha. Majority of the students (67%) in this study agreed that smoking shisha is also a status symbol.

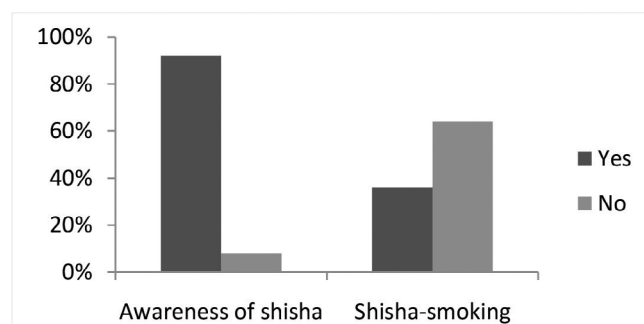


Figure-1. Knowledge and practice of shisha-smoking among the university students

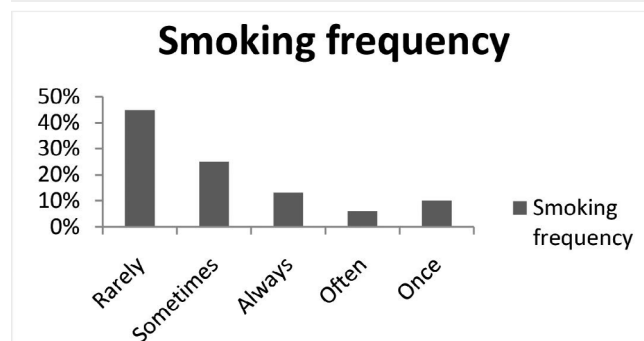


Figure-2. Frequency of smoking among the students.

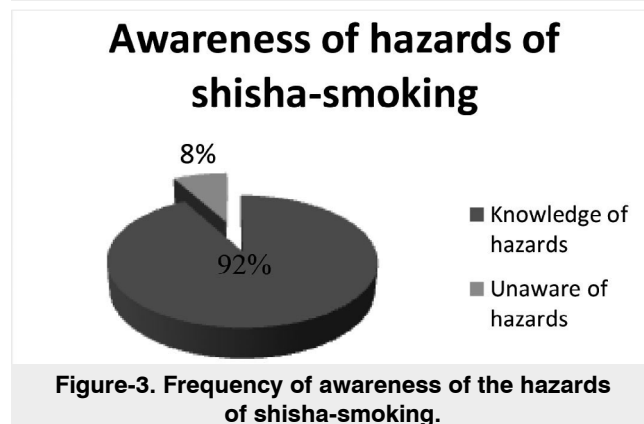


Figure-3. Frequency of awareness of the hazards of shisha-smoking.

## DISCUSSION

The current study about shisha smoking utilizing a questionnaire showed that most of the participant students were aware of the hazards but despite having knowledge, they had appreciated shisha smoking. According to this study, 36 % of students are involved in shisha-smoking whereas studies conducted in Egypt reported that 26% boys and 5% girls have ever used shisha while 22% of Israeli children use shisha at least once weekly. Yet another study conducted at Beirut University revealed that 31% males smoked shisha<sup>6</sup>. Shisha smoking is relatively rare in Singapore, but is common in the Mediterranean regions, according to a WHO report<sup>8</sup>.

According to the participants of the present study, most students were attracted by the smell and beauty of shisha. Students share the cost of its smoking with friends, unknowingly that they may contract certain communicable diseases. Forty-eight percent students believed that shisha is more dangerous than cigarette but 52% considered that cigarette is more harmful than shisha. Several studies reported the misconception among the shisha smokers that it is less harmful than cigarette<sup>9,10</sup>; for example, study in San Diego noted that in their population people are unaware of the fact that shisha-smoking is more dangerous than the cigarette<sup>11</sup>. However, in reality, a single shisha session smoke inhalation is equal to inhaling smoke from 200 cigarettes<sup>6,12</sup>. Evidence suggests that the non-smokers when exposed to shisha smoke, they inhale about 71-81% of nicotine<sup>13</sup>. There are two misconceptions that mislead the people and present a picture of shisha being less dangerous than cigarette are, firstly it is believed that in water-pipe device tobacco is heated and secondly, its smoke passes through water<sup>4</sup>.

## CONCLUSIONS

Shisha smoking is largely a social phenomenon and associated with a number of deleterious health issues which are less appreciated by the consumers.

## RECOMMENDATION

More detailed studies should be conducted in

Pakistan and awareness campaign about its dreadful effects should be launched especially targeting the youth.

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## REFERENCES

1. Maziak W, Ward KD, Soweid RAA, Eissenberg T, **Tobacco smoking using a waterpipe: a re-emerging strain in a global epidemic**, *Tob control* 2004; 13(4); 327-333.
2. Anjum Q, Ahmed F, Ashfaq T, **Shisha smoking- An Imminent Health Hazard**, *J Pak Med Assoc* 2007; 57(9); 430-431.
3. Khan N, Siddiqui MU, Padhiar AA, Hashmi SAH, Fatima S, Muzaffar S, **Prevalence, knowledge, attitude and practice of shisha-smoking among medical and dental students of Karachi, Pakistan**, *JDUHS* 2008; 2(1); 3-10.
4. Akl EA, Gaddam S, Gunukula SK, Honeine R, Jaoude PA and Irani, **The effects of waterpipe tobacco smoking on health outcomes: a systematic review**, *Int. J. Epidemiol* 2010; 39(3); 834-857.
5. Al-Safi SA, Ayoub NM, Albalas MA, Al-Doghim I, Aoul-Enein FH, **Does shisha-smoking affect pressure and heart rate?**, *J Public Health* 2009; 17(2); 121-126.
6. Anjum Q, Ahmed F, Ashfaq T, **Knowledge, attitude and perception of water pipe smoking (Shisha) among adolescents aged 14-19 years**, *J Pak Med Assoc* 2008; 58(6), 312-317.
7. Sajjad KM, Parveen R, Durr-e-Sabih, Chaouachi K, Naeem A, Mahmood R, Shamim R, **Carcinoembryonic antigen (CEA) levels in hookah smokers, cigarette smokers and non-smokers**, *J Pak Med Assoc* 2007; 57(12); 595-599.
8. World Health Organisation (2006) **The health hazards of smoking shisha**.
9. Shafagoj YA, Mohammad FI, **Levels of maximum end-expiratory carbon monoxide and certain cardiovascular parameters following hubble-bubble smoking**, *Saudi Med J* 2002; 23(8); 953-958.
10. Shaikh RB, Vijayaraghavan N, Sulaiman AS, Kazi S, Shafi MSM, **The acute effects of waterpipe smoking on the cardiovascular and respiratory systems**, *J Prev Med Hyg* 2008; 48(3); 101-107.
11. Aljarrah K, Ababneh ZQ, Al-Delaimy WK, **Perceptions of hookah smoking harmfulness: predictors and characteristics among current hookah users**, *Tob induced dis* 2009; 5(16).

12. Lim BL, Lim GH, Seow E, **Case of carbon monoxide poisoning after smoking shisha**, Int J Emergen med 2009; 2(2); 121-122.
13. Chaouachi K, Hookah (Shisha, Narghile) **Smoking and environmental tobacco smoke (ETS). A Critical Review of the Relevant Literature and the Public Health Consequences**; Int. J. Environ. Res. Public Health 2009; 6; 798-843.





"Everybody pities the weak;  
jealousy you have to earn."

Arnold Schwarzenegger (1947-)



#### AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. N.	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Nehan Syed	Conception and design, data collection, authorship	
2	Keenjher Rani	Conception and design, data collection, authorship	
3	Muhammad Qasim Memon	Conception and design, data collection, authorship and intellectual review	