

Frequency And Motive Behind Shisha Smoking Among Students Of Private Universities Of Karachi

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ABSTRACT:

Objective: To determine the frequency and primary motive behind the initiation of smoking Shisha (waterpipe) among the students of private universities of Karachi.

Methodology: It was a Cross sectional study conducted in three private universities of Karachi comprising of 400 students of different disciplines. The study was questionnaire based. Data was entered on SPSS version 23 to derive results. **Results:** Our study consisted of 400 subjects, out of which 261 (65.3%) were male and 139(34.8%) were female. The mean age of the students was 21.12 (STD± 3.07). 195(74.7%) male and 87(64%) female students agreed that they had tried Shisha smoking. The students of Engineering (n= 125, 31.33%) were found more into the practice of smoking Shisha. Pleasure was the primary motive for initiation of Shisha smoking (29.75%). Mint flavour was highest in demand recommended by 69% male students (n=199/288). Regarding knowledge related to harms, 212 students out of 363 agreed upon the fact that smoking Shisha is more harmful as compared to cigarettes, whereas 37 students (9. 25%) did not respond to the question. Also 282 (70.5%) agreed to the fact that Shisha is less addictive.

Conclusion: High prevalence of Shisha smoking was observed among engineering students due to pleasure and socialization. Interventions should be implemented in order to promote awareness concerning health hazards and necessary measures ought to be carried out to extricate youth from this trend.

Keywords: Shisha, Waterpipe, Pleasure, Socialization, Health hazards

INTRODUCTION:

Evidence has shown that trend of tobacco smoking is increasing in developing countries leading to tremendously high risk of tobacco related diseases¹. World Health Organization ascribes 4.9 million deaths per year because of tobacco use, a figure expected to rise to more than 10 million by 2030 if the current trend continues². Various researches focussed on the prevalent trends and patterns of tobacco usage, namely cigarettes and smokeless tobacco, but did not consider those prevalent in developing countries such as waterpipe,

namely, Shisha³.

Waterpipe smoking commonly known as Shisha, Muassel, Hookah, Nargilha or Hubble bubble, in different countries and cultures, has gained immense popularity in Middle East countries and being practiced in Arabian Peninsula, Turkey, India, Pakistan, Bangladesh and China⁴.

It is a form of tobacco intake in which the smoke passes through water before inhalation⁵. This habit of smoking was traditionally confined to older men and women in the Indian subcontinent and Arab countries; however, it is rapidly spreading among youth. Factors which promote its fame may include its social acceptance as a part of cultural heritage, modern trends, easy availability, attractive designs and flavoured aromatic tobacco called "Muassel"⁶. It has now paved its way to commercial cafés, restaurants and even at homes. The most common users are university and college students. Shisha is a smoking device widely used in Arabian Peninsula to smoke Jurak, a mixture of tobacco and fruit cooked to produce a dark coloured paste. It is perceived by youth, the general public and even health professionals as being less harmful than cigarette smoking⁶, for instance, nicotine is lower than quantity found in cigarettes, as water used in Shisha filters out all noxious chemicals consisting of carbon monoxide, tar and nicotine, and less harmful and irritating to pharynx and respiratory system; due to Muassel⁷.

A detailed study had been conducted on the estimated amounts of carboxyhaemoglobin saturation in Shisha and cigarette smokers relative to the number of Shisha or cigarettes smoked a day⁸. The carboxyhaemoglobin concentration in blood has been shown to be a useful marker of absorption of tobacco smoke^{8,9}. As compared to a cigarette, which involves inhalation of approximately 500–600ml of smoke (i.e., 10–13 puffs of about 50 ml, on average)^{10,11}, a single waterpipe use episode involves inhalation of approximately 90,000ml of smoke¹². The

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use of Shisha may be associated with coronary heart disease¹³, pulmonary diseases¹⁴, and even bronchogenic carcinoma¹⁵. An evidence from a recent study verified that, as compared to non-smokers, both daily waterpipe tobacco smokers and cigarette smokers had higher levels of carcinoembryonic antigen (CEA), a tumour forming protein¹⁶. Waterpipe smoking also causes deterioration of dental¹⁷ and foetal health¹⁸. It also involves sharing the same waterpipe, which increases risk of transmitting infectious diseases¹⁹.

Keeping this background in mind, the objective of this study was to find the frequency of students indulged into the habit of shisha smoking belonging to different disciplines, recognition of motive behind initiation of this practice and to assess their awareness regarding its side effects and addiction, and their perception of being less or more lethal as compared to other patterns of smoking

METHODOLOGY:

This cross-sectional study was conducted in selective 3 private universities of Karachi during January and February 2016. A total of 400 students belonging to different disciplines like MBBS, BDS, Engineering, MBA, BBA, Computer studies and Psychology participated in the study. The permission was requested from these private universities through appropriate channel with assurance that names of the institute would be kept confidential. Informed verbal consent was obtained from the participants. The study was based on self-administered questionnaire, comprising of age, gender, discipline, duration, frequency, flavour and place of smoking, knowledge regarding its harms, and primary motive behind adoption of shisha smoking habit.

Responses were entered into the system using SPSS version 23.

RESULTS:

Our study comprised of 400 subjects, out of which 261 (65.3%) were male and 139 (34.8%) were female. The age range varied between 15- 40 years, with mean age of 21.12 years (STD± 3.07). These subjects were inquired whether they had ever tried shisha smoking. 195(74.7%) male students, whereas, 87(64%) female students agreed they had. The incidence of smoking shisha was higher in male students. The frequency of consistent Shisha smoking was seen in students of ages 20(19.5%) and 21(19.3%).

The students of Engineering were found more into the practice of smoking Shisha (figure-1) with a frequency of n=125 (31.3%), followed by MBBS (n=105, 26.32%). Regarding primary motive, 119 students out of 363(32.78%, 80 males and 39 females) agreed pleasure to be the main reason (table-1), whereas, 67 students stated eliminating boredom or passing time. Regarding the flavour, Mint was most popular among males (69%, 199/288). Majority of the respondents did not smoke on daily or weekly basis. 39.65% (n=115) students agreed to smoke Shisha once a month (table-2) In our study, 149 students out of 363 believed that smoking Shisha is less harmful as compared to cigarettes, whereas 212 students disagreed to the perception of being less harmful whereas 37 students (9. 25%) did not respond to the question. Also, 282 (70.5%) agreed that Shisha is less addictive and can be quitted easily. 273 subjects (68.25%) agreed that Shisha can be the leading cause of cancer.

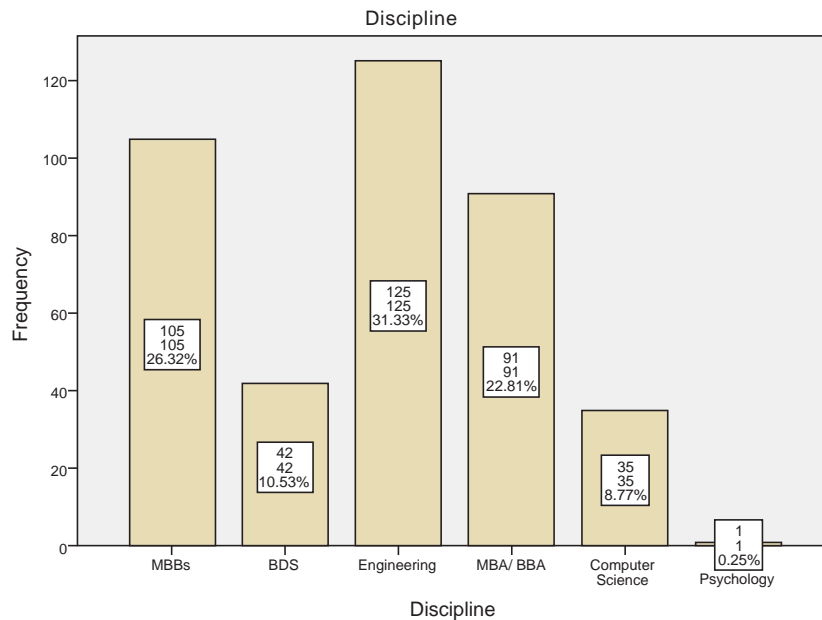
Table: 1
Cross Tabulation of motive with gender for shisha smoking

Motives	Gender		Total
	Male	Female	
Pleasure / fun	80	39	119
Peer pressure	25	27	52
Boredom / passing time	43	24	67
Inspiration by father or brothers	9	7	16
Relieve of tension and stresses	36	15	51
Don't Know	47	11	57
Total	240	123	363

Table: 2
Frequency of Shisha Smoking

Smoking Habits	Responses (n)	Percentage of Respondents %
Once a week	32	11.03
Twice a week	39	13.44
Once a month	115	39.65
Less than a month	104	35.86

Figure-1:
Cross tabulation of Frequency to Discipline of respondents



DISCUSSION:

Several studies regarding Shisha smoking had been conducted locally and internationally, which were population based, at university level, and even among adolescents of secondary schools of Saudi Arabia and Syria depicting the prevalence, attitude, practices and perceptions regarding its harms. In few Arab countries, Shisha smoking had been considered less disgraceful than cigarette smoking, with less gender disparity^{20,21}. Respondents believed it to be less harmful than smoking cigarettes²⁰⁻²², whereas, our study had come up with better awareness of the respondents who had disagreed that, Shisha smoking is less harmful when compared to cigarette smoking. This fundamental point distinguishes our study from previous researches²⁰⁻²². Secondly, this study also revealed ratio of female smokers to be considerably higher than previous studies conducted in Pakistan²².

Our study presented information regarding frequency and primary motive behind adoption of Shisha smoking, and also, awareness regarding its harms and addiction. The participants hail from better socio-economic status, probably indulged into this habit since young age; inspired by family members (inspiration), influenced by friends (peer pressure), to get relief from tough study schedule (stress reliever), elimination of free time (boredom) or to just spending leisure time (pleasure). The percentage of waterpipe smokers in our study was 70.5%, considerably higher than a study conducted at Syrian University which showed a prevalence of 45.3% (males and females 62.6% and 29.8% respectively)²². Another study from Beirut University showed prevalence of smoking to be 43%²³. This drastic increase may be due to the fact that the former study²³ was conducted in 2001 and present results showed significant increase among modern well educated youth of Pakistan. Also,

a tremendous rise in the proportion of female smokers was noteworthy. It was almost compatible to the females of Pakistan in the National Health Survey²⁴. A similar study conducted in Egypt showed prevalence of smokers (81- 92%) who were aware of the hazards of waterpipe use associated with asthma, respiratory diseases, heart diseases and transmission of infection²⁵.

The current study showed that Shisha smoking was more common among engineering students (31.33%). This was probably due to the fact that these students belonging to sound socio-economic status accepted this trend for seeking pleasure, socializing and status symbol. Probably, they had been into the practice of smoking since long time influenced by their family background and continued as fashion.

In our study, pleasure seeking was the primary motive behind initiation of smoking shisha with 33.3% (n=80) male and 31.7% (n=39) female which was considerably higher than a study conducted by Pakistan Medical and research council (PMRC) in 2012²⁶.

The mean age in this study for initiation of smoking shisha was 21 years, compared to 17-18 years in PMRC study²⁶, whereas, a study conducted among secondary school adolescents at Al Hassa, Saudi Arabia²⁷ showed average age to be 15 years. Surprisingly, there were more than twelve Arab countries where 10% of the girls between 13-15 years of age smoke²⁸.

The frequency of Shisha smoking in this study (table-2) indicated that it was mostly for socialization and fun, without likelihood of addiction. These respondents fell into the category of occasional smokers. This result was in agreement to the study conducted by Maziak et al, comprising Syrian university students who smoked occasionally⁶.

Consistent previous studies depicted that smoking shisha was neither harmful nor addictive as compared to

cigarettes²⁹⁻³¹. Another study in Israel surveyed 388 high school students on their beliefs and observed that majority of them, as well as parents perceived shisha smoking to be less harmful than smoking cigarettes³². Another study described perception of using a waterpipe was likely to be less lethal due to presumed “filtering” effects of water³³. In our study, 58.4% students disagreed to the belief of shisha being less harmful as compared to cigarettes, which meant they were aware of the hazards and consequences, and smoked occasionally.

CONCLUSION:

Modern social trends have opened new avenues for prevailing Shisha smoking as trend setter in our society. This social influence provokes youth to become a part of modern society. Increasing number of females is indulging into the habit of shisha smoking, mostly for seeking pleasure. Among different disciplines, engineering students were more. Most of the subjects were aware of the health hazards of Shisha smoking, and were occasional smokers.

RECOMMENDATIONS:

Essential measures should be taken by the health care providers in educating adolescents and young adults regarding hazards of Shisha smoking. This could be enforced in the form of precise disclosure of shisha when implementing standardized assessments and clarify that shisha tobacco smoke contains same toxicants as cigarette smoke, even in higher quantities.

LIMITATIONS OF THE STUDY:

This study limits itself for evaluation of frequency and primary motive behind shisha smoking among students of private universities of Karachi for discipline of MBBS, BDS, MBA, BBA, Engineering, Computer Studies and Psychology only. This was due to the fact that only respective universities offered themselves for evaluation and sample size was also limited due to the same reason. The results described in this study may further be improved by encouraging more and more respondents among various other institutes located in Karachi or other urban areas of Pakistan.

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