# SOCIAL LIFE HABITS REGARDING SMOKING AND ITS PERCEIVED CONSEQUENCES AMONG DIFFERENT PROFESSIONALS OF KARACHI: A COMPARATIVE STUDY

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#### ABSTRACT

Objectives were to investigate a relationship between smoking practices and level of awareness about health effects of smoking among undergraduate students in public sector universities of Karachi and to assess reasons for smoking among them.

An analytical cross-sectional study was conducted for the duration of 6 months from (April 2019 to September 2019). Four hundred participants were selected using consecutive sampling technique. Consenting undergraduates with ages more than 18 years who studied in Dow international dental college, Dow medical college, NED University and University of Karachi were included in this study. Self-administered structured questionnaire was used. Data was entered and analyze using SPSS v.21.

Results showed among study participants 103 (25.8%) were smokers and 253(63.3%) were nonsmokers. Prevalence was reported as 51.6% and 13.7% in males and females respectively. The ratio of non-smokers to smokers was high. It can also be seen by the fact that almost 89.3% of the participants had awareness and knowledge about the harmful effects of smoking on health. Also significant association was found between current smoking status and knowledge, attitude and perception (p < 0.05).

It was concluded that ratio of non-smokers to smokers was high due to increased awareness and knowledge towards the harmful effects of smoking.

Keywords: Harmful effects, social life, smoking professionals

**This article may be cited as:** Anzar W, Afaq A, Baig QA, Panhwar M, Baig EA, Taheer TB. Social life habits regarding smoking and its perceived consequences among different professionals of Karachi: A comparative study. Pak Oral Dent J 2021; 41(2):93-96.

#### **INTRODUCTION**

Smoking is an act of inhaling and exhaling of burned tobacco products. Many people believe smoking cigarette can help to relieve stress.<sup>1</sup> Throughout

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<b>Received for Publication:</b>	Feb 26, 2020
Revised:	Jul 30, 2020
Approved:	Jul 31, 2020

the world tobacco consumption is known as the sixth leading cause of death. It causes seizures; in very high concentrations nicotine can cause death usually due to the problems like paralysis to muscles, heart failure and fluid accumulation in lungs and air passages. <sup>2-3</sup>

In United States smoking is the major cause of death that accounts for 1 in every 5 deaths per year.<sup>4</sup> In china 180 million undergo harmful effects of second hand smoking yearly.<sup>5</sup>

A study by Minh H et al on Vietnamese adults showed that nearly 51.5% individuals had a good knowledge about the side effects of tobacco smoking.<sup>6</sup> Another study by Sood P et al concluded that dental patients who presented for dental check-ups had good knowledge about side effects of smoking.<sup>7</sup>Study by Zhao Y et al on fresh undergraduates revealed that among newly graduates 21.8% actively smoked on regular basis.<sup>8</sup>

Another research by Al-haqwi A et al on similar

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topic gave the findings that about 94% of sample were aware cigarette consumption can be lethal by causing serious health related issues. Approximately 25% medical students had good knowledge about hazards of smoking still they continued to smoke.<sup>9</sup> Recent study by Khan et al on medical students was conducted in Karachi , showed that smoking prevalence was 12.4% out of which 55% of smokers intended to give up smoking.<sup>10</sup>

Pakistan has a high consumption of tobacco related products. According to a recent report published by World Health Organization on global tobacco epidemic it has come to light that 34.9% males whereas 5.1%females are regular tobacco consumers. In Pakistan prevalence of smoking was 31.4% in males and 1.8% in females in year 2019.11 Tobacco use was higher in older and less educated. This finding served as a rational for this study. In the light of above evidences basic aim of the present study was to assess awareness about harmful effects of smoking cigarettes in undergraduate students of various universities of Karachi belonging to public sectors. Objectives of the present study were to investigate a relationship between smoking practices and level of awareness about health effects of smoking among undergraduates of Public sector universities of Karachi and to assess reasons for smoking cigarettes.

# MATERIALS AND METHODS

An analytical cross-sectional study was conducted in public sector universities of Karachi from April 2019 to September 2019. Universities which were included were Dow International Dental College, Karachi University, Dow Medical College .Sample size was calculated as 400 using open epi calculator taking reference from a similar article at 95% confidence interval, considering the power of study as 80% and margin of error as 5 %.<sup>9</sup> All participants studying in these universities were included using consecutive sampling technique. Inclusion criteria of participants included consenting individuals of both genders regardless of socioeconomic status and ethnic background. Non-consenting participants were excluded from the study.

Ethical approval was obtained from Institutional Review Board of Dow University of Health Sciences. Participants were asked to fill up consent form prior to participation. Data collection tool included self-administered structured questionnaire. The questionnaire comprised of 4 sections which included sociodemographics and personal details of study participants. Second section included questions regarding students' frequency of smoking consumption, followed by third section on students' knowledge towards smoking. Lastly questions regarding students' behavior and attitude towards smoking were asked. Data gathered was analyzed statistically using SPSS v.21. Descriptive statistics like percentages and frequencies were obtained for categorical variables whereas mean and standard deviation was calculated for continuous variables. Also chi-square test was applied to look into association between smoking practices and level of awareness about consequences of smoking. p-value <0.05 was considered as statistically significant.

# RESULTS

A total of 400 participants took part in this study out of which 218 were females and 182 were males. All the individuals were between 18-27 years mean age 20 $\pm$ 2. When field of study was assessed it was found that majority of the participants were medical students 113 (28.3%), followed by those who belonged to dentistry 105(26.3%). Engineering students were 94(23.5%) and least frequency was obtained for those who studied in other fields of study 88 (22%).

Prevalence of smokers was 103 (25.8%) whereas non-smokers were 253 (63.3%), occasional smokers were 34 (8.5%) and those who did not report anything were 10 (2.5%). It was seen that majority of participants in this study were females and majority of them were of 21 years. Greatest percentage of participants belonged to medical field. Among participants 94(51.6%) males were smokers, whereas 30(13.7%) females were smokers.

Overall prevalence of smoking was reported as 103 (25.8%) in study participants. Among smokers greatest frequency was obtained for those who consumed less than 5 cigarettes per day 87(21.8%) followed by those who consumed 6-10 cigarettes per day 20(5.0%) and least frequency was obtained for those who consumed 16 or more cigarettes per day 6(1.5%) whereas 276(69%) reported that they did not smoke at all.

Among all participants 51 (12.8%) tried smokeless tobacco, 54 (13.5%) reported that they consumed sheesha. Table 1 shows participants' knowledge about consequences of smoking. Results of Chi-square test showed that a significant association was found between smoking practices and knowledge about consequences of smoking in participants (p <0.05). It was seen than non-smokers had better knowledge about harmful effects of smoking as compared to smokers.

When students' attitude and perception was assessed and were inquired about what motivated them towards smoking, majority of them gave the reason that smoking helped them to relax, followed by those who did it for fun and then those who thought smoking cigarettes made them tough and least was obtained from those who thought it gave them confidence i.e 201(50.3%), 108(27.0%), 106~(26.5%), 88(22.0%) respectively. Table 2 shows participants' attitude towards smoking. Chi-square test showed a significant association was

Variable (n=400)	Yes n(%)	No n(%)	Don't know n(%)	May be n(%)	p-value
Smoking is harmful for health	357(89.3%)	29(7.3%)	5(1.3%)	9(2.3%)	0.040*
${ m Secondhandsmokingisharmful}$	342(85.5%)	28(7.0%)	12(3.0%)	18(4.5%)	$0.251^{*}$
Occasional smoking is not harmful	146(36.5%)	156(39%)	56(14.0%)	42(10.5%)	0.011*
Smoking can cause oral & lung cancer, heart diseases etc	369(92.3%)	15(3.8%)	8(2.0%)	8(2.0%)	0.430*
Benefits of smoking cessation	237(59.3%)	109(27.2%)	41(10.3%)	13(3.3%)	$0.034^{*}$
Chi-square test					

### TABLE 1: PARTICIPANTS' KNOWLEDGE TOWARDS SMOKING

p < 0.05 is considered statistically significant

Variable (n=400)	Yes n(%)	<b>No n(%)</b>	Don't know n(%)	May be n(%)	p-value
Do you feel embarrassed smok- ing publically?	122(30.5%)	129(32.3%)	129(32.3%)	20(5.0%)	0.021*
Cigarette smoking is a waste of money?	280(70.0%)	80(20.0%)	16(4.0%)	24(6.0%)	0.001*
Would you like a smoke free university?	325(81.3%)	48(12.0%)	14(3.5%)	13(3.3%)	0.040*

Chi-square test

P < 0.05 is considered statistically significant

found between smoking status of participants and their attitude towards smoking (p <0.05). It was also seen that 72(18%) were willing to quit smoking.

### DISCUSSION

Many people do smoking to relieve stress despite being aware about the consequences of smoking.<sup>2,7</sup> In present study 103(25.8%) were smokers and 253(63.3%) were non-smokers. This finding shows that smoking prevalence was high among males as compared to females. From this study it can be concluded that the ratio of non-smokers to smokers was high. This finding may be due to the fact that non-smokers had comparatively more knowledge and awareness towards harmful effects of smoking on health. These findings are consistent with Al-hagwi et al in which majority of participants were aware about side effects of smoking still they smoked.<sup>10</sup> In the current study prevalence of smoking was reported more in males. These findings were consistent with a recent report published which revealed that gender plays a key role in smoking. Females smokers were less likely to die due to consequences of smoking.<sup>12</sup> But, it was seen that prevalence of smoking in current study was higher when compared to prevalence in Nigerian students which reported 5.7% only.13

Another finding of this study was out of those who smoked, 87(21.8%) were those who consumed cigarette less than 5 per day. This low frequency of number of

cigarette consumption was same as the study by Berg  $\mathrm{C}.^{\mathrm{14}}$ 

Despite of low prevalence of smoking 254(63.5%)people consumed sheesha in current study, this prevalence was very high when compared to Egyptian students where it was reported as 22.5%.<sup>15</sup> In the study by Minh H knowledge of participants regarding specified disease due to tobacco consumption was still not clear and only 51.5% of adults knew that smoking can be a cause of lethal health related diseases. But present study disagrees with the finding as it shows 92.3% participants had knowledge about the harmful effects of smoking.<sup>6</sup>

In present study a statistically significant relationship was also found between smoking status and knowledge about consequences of smoking. These findings are consistent with Muniandy S et al and Cheah Y et al. In that study 4.5% respondents were unaware of the fact that smoking can be a leading cause of oral cancer.<sup>16,17</sup> This study shows that 50.3% participants think smoking help them to relax. These findings are in accordance with Golstan S et al which gave stress relaxation as the major reason for smoking and found a significant relationship between smoking status and stress relaxation by the participants.<sup>18</sup> However, it contradicts the findings of Kabbash which reported peer pressure as a major contributor.<sup>15</sup> We also found out prevalence of students who were willing to quit was higher as compared to other studies.<sup>2, 8</sup>

In present research participants who belonged to fields of study other than medical and dental smoked more done. These results were in accordance with the studies on Nepalian, Brazalian and Cyprus students.<sup>19,20,21</sup>Limitations are that majority of participants in current study belonged to medical field which might be the reason for better knowledge about health risks.

#### CONCLUSION

Smoking prevalence was low among females. The ratio of non-smokers to smokers was high due to increased awareness and knowledge towards the harmful effects of smoking.

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1 Wajiha Anzar:	Participated in substantial contributions to the conception and design of the work.		
2 Ashar Afaq:	Participated in acquisition, analysis, and interpretation of data for the work.		
3 Qaiser Ali Baig, Maryam:	Participated in drafting the work or revising it critically for important intellectual content.		
4 Eisha Abrar Baig, Talal Bin Taheer:	Participated in final approval of the version to be published and agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integ rity of any part of the work are appropriately investigated and resolved.		

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