

## Family and friends influences on cigarette smoking tendency among the dormitories students of Golestan University of Medical Sciences in North of Iran

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**Abstract:** *Introduction:* Cigarette smoking leads to harmful physical and emotional disorder. Since the family atmosphere plays an important role on nurture of children, our study was done to study perspectives of the students about the family and friends influence on cigarette smoking. *Material & Methods:* A cross-sectional analytical study was conducted among the residents in dormitories in Golestan University of Medical Sciences which is located in Gorgan, North of Iran in 2010. The sample size consisted all of the dormitories' students. The data was gathered using a valid and reliable questionnaire and was analyzed by SPSS software and statistical tests including Chi-square, Logistic regression and Independent t-test. *Results:* Of 669 students, 538 of them filled out the questionnaires completely. 6.1% of them were smoker and 83.5% of them had experiences of cigarette smoking. The most important reason for the smoking tendency was "having a smoker friend". There were significant relationships among smoking with "age, gender, ethnicity, year of education, smoker mother and smoker friend" ( $P < 0.05$ ). Smoker mother (OR: 8.26, CI:1.97-34.68) and smoker friend (OR:4.21, CI:1.83-9.67) increased the chance of cigarette smoking tendency of the students. *Conclusion:* Cigarette smoking was more common among the students who have close smoker friends. It seems that enhance of public awareness about detrimental effects of smoking is needed.

**Keywords:** Cigarette smoking, University student, Parents, friends Dormitory

### Introduction

Smoking is considered a major preventable cause of morbidity and mortality, causing over four million deaths a year [1]. This figure is forecast to increase to 10 million deaths per annum by 2030; 70 % of which will be in developing countries [2]. Cigarette smoking is well known as a risk factor for many of health problems such as lung cancer, cardiovascular diseases, intrauterine growth retardation, spontaneous abortion, antepartum hemorrhage, female infertility, peptic ulcer disease, chronic obstructive lung disease, sexual dysfunction in men, and so on. Passive smokers can also acquire diseases associated with cigarette smoking [3-7].

Numerous studies indicated that in both developed and developing countries the prevalence of smoking is increasing in youths, while the age of smoking initiation is decreasing

[8]. Studies indicated having a smoker in family, a smoker friend and also school atmosphere are strong reasons for smoking tendency among youth [9-12]. Parents and friends are the most important influence on children's decision to smoke [13-14], although many parents do not fully understand the extent of their influences. According to a study smoker siblings were more influential than smoker parents [15].

One of the most common group habits among young people is smoking. The inner sense of belonging may force them to obey group habits. Beside the stressful factors of life and the role of advertising, the other motivations that push the young people to be smoker are competition with other peers, the desire to show off, expect to be respected by the others, imitation of adults, and making a similar image as the others [16].

The youth specially, medical students are the main part of Iran’s population. Therefore we cannot ignore their influence on health system of the country. Medical students may be considered as a role model for other young people. The students study in governmental universities while pay no cost, then the society expects to have healthy and educated doctors and nurses for a healthy community. In this study we aimed to study perspectives of dormitories students about the family and friends influence on cigarette smoking.

**Material and Methods**

A cross-sectional analytical study conducted among the dormitories students of Golestan University of Medical Sciences, Gorgan, located in North of Iran, in 2010. The sample consisted all of the university dormitories’ students. A 25-item self-administered questionnaire was designed in three main sections of demographic characteristics, cigarette smoking by family and friends, and tendency factors, with an emphasis on local and cultural specifications validated in a pilot study and used in the main survey. The content validity was verified by a panel of experts, and the reliability was confirmed with a Cronbach alpha reliability coefficient of 80 percent obtained in a pilot study on 15 cases.

A team of expert students, especially trained for this study distributed the anonymous questionnaires among the participants, while giving adequate explanation and reassurance. Of 669 male and female students resident in four university’s dormitories, 538 participants filled out the questionnaires confidentially. The obtained data were analyzed by SPSS software package version 16.0 using t-test for comparison of mean values and Chi square test for comparing the frequencies between smokers and non-smokers. Odds ratio (95 % CI) from logistic regression models were employed to evaluate the gender-specific associations of starting to smoke with possible associated factors such as socioeconomic factors, smoking of relatives and friends, parents’ marital status. The significance level was at  $p < 0.05$ .

**Results**

Of 538 students, 67.3% (362) were female and 92.4% (497) single. The mean age of the participants were  $22.18 \pm 2.35$  years (age range:

18-39 year old). The majority of them were medical students (35.3%). In terms of ethnicity, most of the students were Fars (63.6%) and Turkmen (20.4%). 33(6.1%) of them were smoker and 83.5% of them had experience of cigarette smoking. Mean of addiction period was 2 years. 11(30 %) of the smokers reported attempt to quiet. The most common places for smoking were dormitory (48.5%) and street (15%). 36.5% of them did not mention to a special place. The reasons for the smoking tendency were having a smoker friend (33%), personal interest (27%), as hobby (24%), concern over unemployment (12%), and home sickness (4%).

The reasons for continuing cigarette smoking were “personal interest (33%), addiction (15.5%), concern over unemployment (12.5%) having a smoker friend (12.5%), draw attraction especially from opposite gender (6%), and feeling heartbroken (3%). 25% also did not mention a specific reason. 17.3% of them had smoker fathers, 1.3% smoker mothers and 9.5% had smoker siblings. We could not find any significant relationships among major, marital status and having smoker father with cigarette smoking ( $P > 0.05$ ). However, there were significant relationships among “age, sex, ethnicity, year of education, having smoker mother and smoker friend” with smoking ( $P < 0.05$ ). The results indicate that having a smoker mother or friend increased the probability of cigarette smoking tendencies 8.26 and 4.21 times respectively.

**Table-1: Dependent variables distribution in case and control group**

Variable		Smoker Number (%)	Non smoker Number (%)	P-value	$\chi^2$
Smoker mother	Yes	9.1	1.2	0.014	11.67
	No	90.9	98.8		
Smoker friends	Yes	27.3	8.2	0.02	13.34
	No	72.7	91.8		

Table 1 shows the relationships among cigarette smoking with having a smoker mother or friend.

<b>Table-2: University analysis of factors predicting smoking among the smokers</b>				
<b>Variable</b>		<b>OR</b>	<b>CI (95%)</b>	<b>P-Value</b>
Ethnicity	Fars	1	-----	-----
	Turkmen	0.297	0.068-1.289	0.105
	Azeri	3.556	1.317-9.60	0.012
	Others ethnicity	1.702	0.61-4.752	0.31
Age		1.292	1.116-1.495	0.001
Sex		25.08	7.54-83.468	<0.01
Years education		1.435	1.168-1.764	<0.01
Smoker mother		8.26	1.97-34.68	0.004
Smoker friends		4.21	1.83-9.67	0.001

Table 2 shows the relationships among cigarette smoking, ethnicity, sex, age, years of education and cigarette smoking by mother and friend.

<b>Table-3: Multivariate analysis of factors predicting smoking among the smokers</b>			
<b>Variable</b>	<b>OR</b>	<b>CI (95%)</b>	<b>P-value</b>
Sex	23.52	7.54-83.468	<0.01
Friends	3.22	1.24-8.38	0.016

Table 3 shows the relationships among smoking, age, gender and friends multivariate logistic regression test.

### Discussion

The results indicated a low prevalence of cigarette smoking among the students. The outbreak of smoking among the students of medical universities varied in different parts of Iran (From North to South and from East to West) from 5.9 to 33% [16-23]. The prevalence of smoking among students in New Zealand, Turkey, and Greece were 20, 33.4, and 46.9% respectively [24-26]. Several studies support our findings that having a smoker friend is one of the most important factors for smoking tendency (9,12,27-29).

Addiction is considered as both a personal and social behavior; therefore providing appropriate awareness using public media may be helpful in providing cross country education. In a

contemporary society, peer groups have become an increasingly important context in which youths spend their time. The peer group defines what is "normal" for its members in attitude, thought, and behavior and is a strong factor for predicting cigarette smoking tendencies. Parent's supervision on their child's network of friends may be a necessity [13]. In current study, the relationship between smoking tendency with having mother or friend smoker was significant [13,30-31]. Siziya and Khader's studies support our finding [32-33].

According to the results of a survey in United States, the students with smoker friends had eight times more likely for smoking in comparison with students who had no smoker friends [34]. In Kelishady's study, 75.2% of parents believed that parents smoking are effective on children smoking tendency [35]. In contrast with other studies, there was no significant relation between cigarette smoking and having smoker father [33, 35-36].

Although the percentage of smoker mothers was not high, little amount could soar smoking tendency to 8.26 times. This finding may prove the important role of mother in family for children's nurture. Also, in our culture smoking by mother seems odd and consider disregarded. In our study, the relation between smoking and years of education was significant. According to the some studies tendency and daily cigarette smoking of medical students increase from first semester till last year [19,37-38]. It is believed that some of the students gradually loose their interest to their major and seek for unhealthy behaviors such as smoking [39].

In a study male gender 2.8 time increased risk of smoking [17], while in our study its effect was much more. Generally smoking among men are more popular than women females [32, 40-43]. As it mentioned for the mothers, in our society smoking among women is a kind of shameful habit. Although, lack of report [44] can be one of the reasons for lower rate of smoking among female students in current study. Disgracing the woman who smoke is reported by the other authors too [25].

### Conclusion

Smoking behaviors of medical and nursing students may have a profound effect on the implementation of smoking-prevention activities in the future, as they are the role models. In this study cigarette smoking prevalence rate was relatively low in comparison with similar studies. However, psychosocial issues should be addressed to prevent future epidemics.

Furthermore, having smoker friends and mother were important factors for the cigarette smoking

tendency. Appropriate interventions such as parental monitoring from adolescence may consider as preventive measure. The families should be aware of adverse effect of cigarette smoking by the mothers on developing unhealthy habits on their children in future.

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