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Prevalence of Smoking Among Universities Students of Semnan Province in 2011

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ABSTRACT

This study in 2011 determined the prevalence of smoking and its associated factors among universities students in Semnan Province located in the North Eastern of Iran. 9000 students (1462 studying for a Associate degree, 6835 a bachelor degree,433 a Master degree and 270 a PhD degree)were selected randomly among 93000 students of Semnan universities , to complete a questionnaire Which was prepared based on the Global Youth Tobacco Survey. The prevalence of current smoking was 21%(80%male and20%female). The most important factors in the tendency to smoking were: friends smoking, stress, separation from family and fun .
KEY WORD: Prevalence, smoking, students, Semnan

INTRODUCTION

Cigarette smoking is considered a major public health hazard in the world. It is among the main preventable causes of untimely death, morbidity and mortality worldwide. About 5 million deaths occur annually due to cigarette smoking. If the pattern of tobacco consumption continues at the same pace as today, the morbidity and mortality rates will be doubled (10 million people per year) by the year2020 [1,2] and 7 million of which will occur in developing countries [3].Due to high proportion of young In the Islamic Republic of Iran, tobacco control and prevention programmes are very important[4].

Several studies showed increasing trend in smoking among Iranian youth [5,6,7].

There has been a dramatic increase over the past decade in the numbers of college-age smokers [8]. Based on recent studies the prevalence of smoking increases from the first year to the final year among university students, which underlines the fact that the early years at university are important for targeting anti-smoking activities [9,10]. Students who enter college as non-smokers are 40% less likely to begin smoking if they live in a smoke-free campus [11].

Cigarette consumption shows an increasing trend in many Middle East and North Africa countries[12].

The World Health Organization has reported prevalence of smoking among young people in the Eastern Mediterranean as following: 26.6% in Iran, 20.9% in Kuwait, 17.2% in Iraq, 10.1%in Pakistan and15.9%in Saudi Arabia [13]. However, the trend and pattern of smoking as well as the quitting rate especially among college students are largely unknown in many of these countries.

This study was carried out to determine the prevalence and it's related factors among University students of Semnan Province.

METHODS

This study was coducted as a cross-sectional descriptive study during a 16-week period(from mid-March 2011 to mid-June 2011). The total number of university students in Semnan Province are about 93000.The sample size was estimated as 9000 subjects based on :prevalence=20% ,α=0.05 and precision (d=0.15).The subjects were selected randomly and proportional to size of cash University students.They have to complete the questionnaire which was an Iranian Global YouthTobacco Survey (GYTS) questionnaire [4].The data analysis was performed using *SPSS*, version 11.5 software.

RESULTS

There were 9000 university students, including 5400 boys (60%) and 3600 girls (40%) . The age range was 18–35 years and the mean age was 28.5±3.6 years.

The prevalence of smoking among the students was 20%. For any type of tobacco 20 % of respondents were current smokers, 80% nonsmokers. For cigarettes, 39% were current smokers, while for Hookah

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(water pipe) the corresponding prevalences were 31% and 5% for Pipe.

Table1 Distribution of the characteristics of the smoker and non smoker groups

	Smoker(n=1700)		**Nonsmoker(n=7300)**		**Statistics**
Variable	No.	%	N0.	%	
Age group					
<20	272	16	803	11	X^2=28.2;df=4;P<0.001
20-25	1224	72	5110	70	
25-30	153	9	1168	16	
+30	51	3	219	3	
Degree					
Associate	221	13	1241	17	X^2=13.1;df=3;P<0.001
BA	1360	80	5475	75	
MA	68	4	365	5	
PhD	51	3	219	3	
Family residence					
Urban	1547	91	6716	92	X^2=4.1;df=1;P<0.001
Rural	153	9	584	8	
Students residence					
For famill	595	35	2993	41	X^2=88.01;df=3;P<0.001
Renting a home - alone	935	55	2190	30	
Hostel	170	10	2117	29	
Family member smoking					
Father					
Yes	901	53	1825	25	X^2=103.11;df=1;P<0.001
N0	799	47	5475	75	
Brother					
Yes	510	30	1314	18	X^2=24.25;df=1;P<0.001
NO	1190	70	5986	82	
Sister					
Yes	136	8	292	4	X^2=15.90;df=1;P<0.001
No	1564	92	7008	96	
Mother					
Yes	153	9	219	3	X^2=38.3;df=1;P<0.001
No	1547	91	7081	97	
Parents Life					
Father and mother are alive	1411	83	5986	82	X^2=14.65;df=4;P<0.001
Father and mother are separate	68	4	219	3	
Father is dead	85	5	730	10	
Mother is dead	102	6	219	3	
Both is dead	34	2	146	2	
Status married					
Married	238	14	1168	16	X^2=1.12;df=1;P<0.001
Un married	1462	86	6132	84	
Family number					
3<=	204	12	1022	14	X^2=0.74;df=2;P<0.001
3-6	1190	70	4964	68	
6>	306	18	1314	18	
Education of Father and mother					
illiterterate	85	5	219	3	X^2=*24.12;df=5;P<0.001*
Education elementary	221	13	1387	19	
Diploma	833	49	3869	53	
BA	34	2	219	3	
MA and Phd	510	30	1387	19	
Occupation					X^2=31.3;df=2;P<0.001
Employed	680	40	2117	29	
Un Employed	1020	60	5183	71	
Family income					
<200$	170	10	511	7	X^2=23.05;df=2;P<0.001
200-400$	340	20	2336	32	
>400$	1190	70	4453	61	

Table 1 shows the Distribution of the characteristics of the smoker and nonsmoker groups. Significantly more current smokers were in older age groups 20-25 years (72%) and 25+ years (9%) compared with the total sample ($p < 0.001$). Students at the university of Azad and Industrial had the highest prevalence of smoking compared with those at other university; the lowest prevalences were at the university of medical sciences and quranic sciences ($p < 0.001$).

For cigarette smokers the mean daily cost was 12000 (1$) Iranian riyals(61%) .

There were significant differences between smoking and their Degree ($p < 0.001$) there was a significant difference between smoking and Status married ($p < 0.001$). There were significant differences between smoking and their family residence and students residence ($p < 0.001$).A total of 1700 (20%) students were smokers; 1343 boys (29%) and 357 girls (11%) ($P < 0.001$).

Among the 1700 smokers, 96% had more than 1 other family members who also smoked ($P < 0.001$) .

Of the smokers, 527 (31%) lived with both their parents($P < 0.0001$). Thus, significantly more smokers lived with a single parent (due to the death of a parent or separation) ($P < 0.001$). Table 2 shows the Distribution of the reasons for smoking.

Table2 Distribution of the reasons for smoking

Reasons for smoking	N	%	Statistics
Entertainment	748	44	$X^2=75.82;df=5;P<0.001$
Friend	408	24	
Stress	289	17	
All	255	15	

The most important predictive factors for smoking were: having a family member who smokes,highest family income,occupation,level education of father and mother,education degree and status married.

DISCUSSION

In this research, the prevalence of tobacco smoking in our students (21 %) was lower than rates reported in a previous study of students in Iran. Another study of university students of Kerman and Tehran during 2001–2005 showed that 22.7% and 22.1% were smokers. In the GYTS study conducted in 1999 among the youth of 13 countries, occasional smoking was reported by between 10%–33% of young people.

However, in the Iranian national health survey performed from 1991–99, the prevalence of cigarette smoking had declined from 12.5% to 14.3% [10].

In our research the prevalence of daily cigarette smoking among this group of 20–25year-olds was greater in boys than girls (27% versus 81%).This finding shows that the risk of trying cigarette smoking is similar in boys and girls, but boys in this age group are more likely to become dependent on smoking. Higher rates of smoking among adult males compared with females has been seen in studies in Poland (26.4% versus 41.2%) [11] and in other Mediterranean countries, North Africa and the Middle East (60% versus 20%) [14]. In another study of the university students in Turkey, the prevalence of occasional smoking in boys and girls were 46% and 24% respectively [15,16].Friends' behaviour and attitudes have also been shown in a large number of studies to be a particularly powerful force in shaping behaviour [17-19].

There was a significant statistical relationship between cigarette smoking and the lifestyle of the students . living with both parents or a single parent. We can hypothesize that living in a supportive and friendly family environment is a significant factor in preventing smoking in youth. Smoking by parents and brother and sister seems to be important in the initiation as well as the continuation of smoking. Bauman et al. found that student whose parents smoked were almost twice as likely to smoke as those whose parents had never smoked [20]. Kandel et al. found that both maternal smoking and the quality of parent-child interaction influenced the current smoking status among adolescents [21]. These finding are consistent with this study as current smokers had twice the risk when relatives, especially family, were smokers. We also observed that more students who had tried smoking had family members who also smoked compared with those that never smoked. This suggests that imitation plays an important role in the initiation of smoking in youth [16].

Our results show that the prevalence of smoking varied across students at different university, which is consistent with other studies in Iran [5]

These findings were confirmed in the regression analysis, as the significant predictive factors for smoking were presence of more than 1 smoker among the family members, having a brother or sister

that smokes and living with a single parent. Therefore, it can be concluded that family environment is an important factor influencing the smoking behaviour of youth.

Conclusion

In summary, the overall reported prevalence of daily cigarette smoking university students in Semnan Province (21%) is not especially high compared with figures reported from other countries. However, due to the large number of daily smokers who will become addicted to cigarettes in the future and because of the limited health education and prevention programmes addressing smoking in the Islamic Republic of Iran, this figure is concerning. Targeted preventive and educational interventions, for example through the mass media, are needed.

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