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Smoking Prevalence and Associated Factors at Students Housing of King Saud University

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Abstract: ***The study describes the prevalence of smoking, and the correlates of current smoking, by male students King Saud University, Saudi Arabia. A random sample of 718 students at the university housing of students and the colleges of King Saud University answered a modified form of Global Youth Tobacco Survey questionnaire. The prevalence of current smoking was 21.6% in the Students Housing and 18.6% of those who live outside the housing. Of current smokers, 10.6% smoke cigarettes, 3.9% smoke water-pipe and 4.5% smoke both. In logistic regression analysis, smoking by family and close friends were predictors of current smoking status.***

Keywords: Smoking, Saudi Arabia, University, Prevalence, Tobacco

1. Introduction

Smoking has become a worldwide habit [1]. The statistics of WHO estimate that there are more than 1.3 billion smokers in the world [2, 3] and 80% of them live in the developing countries [4]. Cigarette smoking is a risk factor for a lot of diseases such as lung cancer, emphysema, looking older, throat cancer, stroke, ischemic heart disease, mouth cancer, tuberculosis, gastric ulcer, diabetes mellitus, arthritis and cataract [4]. It is known that about half of all continuing regular smokers will be killed by their smoking and those that die in middle age (defined as aged 35-69 years) as a result of their smoking lose on average 22 years of life, with a larger proportion of that shortened life span being spent in health problem. Men born between 1900-1930 who smoked only cigarettes and continued smoking died on average about 10 years younger than lifelong nonsmokers [4]. 438,000 deaths are because of smoking related disease only in USA [5], and more than four million people in the world, and also there is an expectation that the number rises up to 8.4 million deaths by 2020 [6].

Smoking is not just harmful for the smokers themselves; it also causes a lot of problems for the non-smokers and for the environment [4]. Smoking is one of the most important causes of premature mortality in a lot of developed countries [7, 4]. It's estimated that there are four million deaths per year due to smoking related diseases [8]. Those smokers consume approximately more than six hundred billion cigarettes in a year [9]. Tobacco has a huge number of chemical and toxic substances, and some of them are addictive [4]. There are Carbon monoxide, arsenic, tar and nicotine, and the last one in responsible for addiction [7,4,10].

Organs affected by these poisons include not only mouth, vocal chords, throat, and lung, but also kidney, bladder, uterus and ovaries [4]. Carbon monoxide is a major contributor to cardiovascular diseases from smoking [4]. It impairs oxygen transportation in the blood. It is also strongly linked with the development of coronary heart disease [4]. One cigarette contains approximately 8 milligrams of nicotine. Nicotine increases heart rate and blood pressure [4]. Nicotine is a poisonous, water-soluble alkaloid found in tobacco leaves and used as an insecticide [4]. Generally, Smoking affects the functions of all the systems of the body [4]. These health problems cost a lot of money and efforts [11]. In USA, they cost more than 167 billion dollars per year [11]. In Saudi Arabia, they pay more than 160 million dollars for bringing tobacco [11]. Most of the prevention programs emphasize and concentrate on the awareness of health hazards of smoking [12]. Although these health hazards of smoking are known very well [11], theses programs of warning of smoking and cessation are increasing and the costs of smoking are also increasing [13], and the rate of smoking among university students increase in the developing countries [14,1,11]. Also although there is a health warning on every packet of cigarettes indicating that smoking is the main cause of lung cancer, lung diseases and of heart and artery diseases, and in spite of the anti-smoking clinics distributed all over the Kingdom, smoking in Saudi Arabia is increasing rapidly, particularly among the young, partly due to aggressive marketing by tobacco companies [14]. The prevalence of smoking among young adults is high, and over time the age when people begin smoking at is declining [15]. In USA, the prevalence of smoking decreased among the adults except the young adults (18-24 years), and that was from 1993 to 2000 [10].A recent study that examined smoking habits among university students in twenty-three countries showed that the age-adjusted prevalence ranged from 2% in Thailand to 46% in Spain among women and from14% in Thailand to 47% in Portugal among Men [1]. Epidemiological studies among different university student populations in Arab and Eastern Mediterranean countries demonstrated a marked variation in the prevalence of smoking [1]. Prevalence ranged from 13.0% to 42.5%, being the highest in Turkey (42.5%) and Kuwait (42.2%) [1]. Some studies in the Arab and Eastern Mediterranean countries showed obvious variation in the prevalence of smoking [1]. Previous studies in Saudi Arabia for estimating the prevalence of smoking among university students showed the median of smoking prevalence which was 13.5% [11]. In a previous study at King Faisal University in Al-Asha showed 21.6% prevalence of current smoking cigarettes [7]. In Sharjah University, a study there showed that the prevalence of smoking was 15.1%, 9.4% of them were cigarettes smokers [6].Stress, life problems, peer influence, acceptance of society, family members smoking and the lower education level make the individual closer to smoke and all of these are factors help for initiation of smoking [1,4]. A previous study at King Saud University in Abha City showed that the curiosity was the main cause of

the initiation of smoking and peer influence was the main source for the first cigarette, then from the parents [14]. Those who have less tolerant parents to smoking are less likely to smoke [16]. In a previous study in King Saud University in Riyadh, smoking habits of father, mother, brother, sister and friends were found to be significantly associated with the smoking habits of the male smokers [17]. Several studies show that the first cigarette is at the age of ten to nineteen years old [16,9], but the regularity of smoking begins mostly above the age of eighteen [4]. A lot of tobacco companies' campaigns are mainly aimed at youth as most tobacco users start young [18]. Children and young adults who know less about the health effects of tobacco than adults face greater obstacles in making informed choices [18]. It is difficult for most teenagers to comprehend the damage that tobacco use would cause to their health at some distant future, as it is difficult for them to avoid, reduce or stop the use of tobacco once they start smoking it [18]. In a previous study in Jordan, only 9% began their smoking over 25 years old [12]. A study in Kenya showed that the average age of onset of cigarette smoking is 14 years and also showed that those who start smoking before the age of 17 have a more possibility to quit smoking [18]. Several studies show that the more factors which are related to the initiation of smoking, the more chances to smoke and more difficult to quit [15]. There is a significant association between the initiation of smoking and the peer influence, which is more effective than the role of the smokers of the family members play [14]. In a study in USA in 2005 on the students of Armstrong Atlantic State University, Savannah College of Art and Design, and Savannah State University, it was showed that the social determinants of smoking are more powerful than the demographic variables [13]. In a previous study in Saudi Arabia, 66% of smokers began their smoking because of their friends [19]. Psychological factors are also included in the influence of the initiation of smoking, depressive individuals are more liable to smoke, and the more depressive people, the more cigarettes they smoke, and those are also more difficult for them to quit smoking [20,15]. Some studies show that there is a relationship between anxiety sensitivity and smoking [15].

A lot of information about smoking prevalence and the associated factors are unknown according to the Students' Housing, because there was no study before on the same population. The objectives of our study were to estimate the prevalence of smoking among students in Students Housing of King Saud University, to estimate the associated factors of the initiation of smoking among the same group and to compare the tobacco use and the associated factors between them and the other students of the university who don't live in the Students' Housing.

2. Methodology

Study-Design

A descriptive cross-sectional study was conducted in March 2011 to estimate the prevalence of smoking as comparison between Students Housing and the colleges of King Saud University (KSU) in Riyadh, Saudi Arabia.

Sample

The total number of students in Students Housing in KSU at the time of the study was 3336. The sample size was calculated using a prevalence of smoking of 18-22% [2] assuming a degree of precision of 3.84% at the 95% confidence interval. The number of subjects was estimated to be 350. The same number was also taken from the colleges of KSU excluding the students who live in students housing. The total number of subjects was estimated to be 700.

Data Collection

A pilot-tested structured questionnaire prepared specifically for the study, was administered by the investigators who asked the students to respond freely and truthfully to each question. An assurance of anonymity was provided. Students took 12 –17 minutes to complete the questionnaire while the investigators were outside the students' rooms to ensure that they complete the questionnaire confidentially. We were divided into two groups; one was in the students housing while the other was in KSU colleges. The first group of investigators took a sample of students of 353 students from several buildings which were selected using simple random sampling from each building. While the second group of investigators took a sample of 365 students from several colleges. The first group, visited the selected rooms in residence between 03:00 PM to 09:00PM and explained the purpose of the study to all students. The second group went to the colleges. We used modified version of the Global Youth Tobacco Survey Questionnaire [21]. The questionnaire was divided into five categories, demographic characteristics like age, college, university year, residency and the level of parent's education. The students were asked about their knowledge if the smoking cigarette makes the smoker gain or lose weight and about the harm of the smoking. Also the students were asked about their feeling towards the smokers. Concerning smoking behavior, students were asked about their current average daily cigarette consumption and the smoking place. The last is quitting like the desire of cessation of smoking. They were classified as current smokers if they smoked on average at least one cigarette per day. Those who were identified as smokers were questioned about how long they had been smoking and their age at which they started smoking. The last they were asked about their desire to quit smoking. The questionnaire included additional information on current and previous smoking status, type of smoking and quantity of cigarettes smoked, age of initiation and source of smoking, reasons for starting smoking and attempts to quit smoking. The smoking behavior of the student, his or her family members and closest friends was obtained. A total of 750 structured questionnaires were distributed and 718 were fully completed. The response rate was 95%. A total of 6 questionnaires were missed and 26 have incompletely answered on the main study questions, and they were excluded from the analysis.

Data Processing and Analysis

The data were revised according to certain pre-determined criteria. *SPSS* version 16 was used for data entry and data analysis. The test of significance used chi-squared test of independence. A logistic regression model was applied to determine the possible predictors and/or correlates of current

smoking status of the respondents. $P \leq 0.05$ was considered statistically significant.

3. Results

1. Univariate relationships

Table 1: Distribution of study sample according to the ages among KSU students in 2011

Age	*Frequency*	*Percentage*
From 18 to 19 years	20	2.8
From 20 to 21 years	178	24.8
From 22 to 23 years	251	35.0
From 24 to 25 years	108	15.0
From 26 to 27 years	25	3.5
From 28 and more	12	1.7
Unknown	124	17.3
Total	718	100%

From Table (1), (251) members of the study sample represent 35.0% of the total members of the study sample at the age of 22-23 years, which are the most, while the (178) of them represent 24.8% of the total members of the study sample at the age of 20-21 years. (108) of them represent 15.0% of the total members of the study sample at the age of 24-25years, while (25) of them represent 3.5% of the total members of the study sample at the age of 26-27 years, and (20) of them represent 2.8% of the total members of the study sample at the age of 18-19 years, and (12) of them represent 1.7% of the total members of the study sample at the age of 28 or more years, and (124) of them represent 17.3% of the total members of the study sample who did not show their ages.

Table 2: Distribution of study sample according to the colleges among KSU students in 2011

College	*Frequency*	*Percentage*
Health colleges	159	22.1
Science colleges	226	31.5
Humanity colleges	223	31.1
Islamic Studies	104	14.5
Unknown	6	0.8
Total	718	100%

From Table (2), (226) members of the study sample represent 31.5% of the total members of the study sample in science colleges, which are the most. (223) of them represent 31.1% of the total members of the study sample in Humanity colleges. (159) of them represent 22.1% of the total members of the study sample in health colleges, while the (104) of them represent 14.5% of the total members of the study sample in the Islamic studies, and (6) of them represent 0.8% of the total members of the study sample who did not show their colleges.

Table 3: Distribution of study sample according to the academic year among KSU students in 2011

School year	*Frequency*	*Percentage*
First year	47	6.5
Second year	158	21.9
Third year	182	25.3
Fourth year	209	29.1
Fifth year	106	14.8
Unknown	17	2.4
Total	718	100%

From table (3), (209) of the sample of the study represent 29.1% of the total members of the study sample in the fourth year, which are the most, while the (182) of them represent 25.3% of the total members of the study sample in the third year. (157) of them represent 21.9% of the total members of the study sample in the second year. (106) of them represent 14.8% of the total members of the study sample in the fifth year, and (47) of them represent 6.5% of the total members of the study sample in the first year, and (17) of them represent 2.4% of the total members of the study sample who did not show their academic years.

Table 4: Distribution of study sample according to the residency place among KSU students in 2011

Residency place	*Frequency*	*Percentage*
With family	273	38.0
With friends	78	10.9
University housing	353	49.2
Other	11	1.5
Unknown	3	0,4
Total	718	100%

From table (4), (353) members of the study sample represent 49.2% of the total members of the study sample who live in the university housing, which are the most, while the (373) of them represent 38.0% of the total members of the study sample who live with their families. (78) of them represent 10.9% of the total members of the study sample who live with their friends, while (11) of them represent 1.5% of the total members of the study sample who have other residences, and (3) of them represent 0.4% of the total members of the study sample who did not show their residency places.

Table 5: Distribution of study sample according to the level of father's education among KSU students in 2011

Father's education level	*Frequency*	*Percentage*
Illiterate	82	11.4
Reads and writes	76	10.6
Finished primary school	105	14.6
Finished intermediate school	99	13.8
Finished secondary school	124	17.3
Finished university basic education	174	24.2
High education	54	7.5
Unknown	4	0.6
Total	718	100%

From Table (5), (174) members of the study sample represent 24.2% of the total members of the study sample whose fathers have completed the basic university education, which are the most, while the (124) of them represent 17.3% of the total members of the study sample whose fathers have completed secondary school. (105) of them represent 14.6% of the total members of the study sample whose fathers have completed primary school, while (99) of them represent13.8% of the total members of the study sample in whom their fathers have completed the intermediate school, and (82) of them represent 11.4% of the total members of the study sample whose fathers are illiterate, and (76) of them represent 10.6% of the total members of the study sample whose fathers are able to read and write, and (54) of them represent 7.5% of the total members of the study sample whose fathers have high level of education, and (4) of them represent 0.6% of the total

members of the study sample who did not show the level of education of their fathers.

Table 6: Distribution of study sample according to the level of mother's education

Mother's education level	*Frequency*	*Percentage*
Illiterate	157	21.9
Reads and writes	151	21.0
Finished primary school	114	15.9
Finished intermediate school	66	9.2
Finished secondary school	96	13.4
Finished university basic education	116	16.2
High education	15	2.1
Unknown	3	0.4
Total	718	100%

From table (6) (157) members of the study sample represent 21.9% of the total members of the study sample whose mothers are illiterate, which are the most, while the (151) of them represent 21.0% of the total members the study sample whose mothers are able to read and write, compared to (116) of them represent 16.2% of the total members of the study sample whose mothers have finished university's basic education, while (114) of them represent 15.9% of the total members of the study sample whose mothers have finished primary school, and (96) of them represent 13.4% of the total members of the study sample whose mothers have finished secondary school, and (66) of them represent 9.2% of the total members of the study sample whom their mothers have finished intermediate school, and (15) of them represent 2.1% of the total members of the study sample whose mothers have finished high education level, and (3) of them represent 0.4% of the total members of the study sample did not show the level of education of their mothers

Table 7: Do your parents smoke? – Answers among KSU students in 2011

	Frequency	*Percentage*
None	576	80.2
Yes, both	8	1.1
Father only	16	2.2
Mother only	112	15.6
Unknown	6	0.8
Total	718	100%

From table(7), (576) members of the study sample represent 80.2% of the total members of the study sample whose parents are non-smokers at all, which are the most, while the (112) of them represent 15.6% of the total members of the study sample whose fathers smoke only, (16) of them represent 2.2% of the total members of the study sample whose mothers smoke only, while (8) of them represent 1.1% of the total members of the study sample whose parents are smokers, and (6) of them represent t0.8%of the total members of the study sample who did not show anything about this.

Table 8: If one of your closest friends offered you a cigarette, would you smoke it? – Answers among KSU students in 2011

	Frequency	*Percent*
No, never	470	65.5
Maybe	158	22.0
Of course I will do	80	11.1
Unknown	10	1.4
Total	718	100%

From table (8), (470) members of the study sample represent 65.5%of the total members of the study sample who if one of their closest friends offered them a cigarette ,they would never smoke it ,which are the most , while (158) of them represent 22.0% of the total members of the study sample who if one of their closest friends offer them a cigarette , they may smoke it , (80) of them represent a percentage of 11.1% of the total members of the study sample who if one of their closest friends offered them a cigarette ,surely they would smoke it, while (10) of them represent 1.4% of the total members of the study sample who did not show that.

Table 9: Has anyone in your family discussed the harmful effects of smoking with you? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	443	61.7
No	270	37.6
Unknown	5	0.7
Total	718	100%

From table (9), (443) members of the study sample represent 61.7% of the total members of the study sample have discussed the dangerous effects of smoking with one of their family members, which are the most. While the (270) of them represent 37.6% of the total members of the study sample have never discussed the dangerous effects of smoking with one of their family members, compared to (270) of them represent 37.6% of the total members of the study sample who did not show that.

Table 10: At any time during the next 12 months do you think you will smoke a cigarette? – Answers among KSU students in 2011

	Frequency	*Percentage*
Sure	98	13.6
Never	462	64.3
Maybe	152	21.2
Unknown	6	0.8
Total	718	100%

From table (10), (462) members of the study sample represent 64.3% of the total members of the study sample who at any time during the next 12 months , they will never smoke a cigarette, which are the most, while (152) of them represent 21.2% of the total members of the study sample who at any time during the next 12 months, they are not sure if they will smoke a cigarette or not , (98) of them represent 13.6% of the total members of the study sample who at any time during the next 12 months, they certainly sure that they will smoke, and (6) of them represent 0.8%of the total members of the study sample who did not show that.

Table 11: Once someone has started smoking, do you think it would be difficult to quit? – Answers among KSU students in 2011

	Frequency	*Percentage*
Sure, yes	101	14.1
No, it's not difficult	372	51.8
It might be difficult	233	32.5
Unknown	12	1.7
Total	718	100%

From table (11), (372) members of the study sample represent 51.8% of the total members of the sample who believe that it is not difficult when someone has started smoking to quit, which are the most, while the (233) of them represent 32.5% of the total members of the sample who believe that it might be difficult to quit smoking, compared to (101) of them represent 14.1% of the total members of the sample who believe that it is difficult to quit smoking, and (12) of them represent a percentage of 1.7% of the total members of the study sample who did not show that.

Table 12: Do you think the smokers have more or less friends than non-smokers? – Answers among KSU students in 2011

	frequency	*Percentage*
More	89	12.4
Less	264	36.8
No difference	354	49.3
Unknown	11	1.5
Total	718	100%

From table, (12), (354) members of the study sample represent 39.3% of the total members of the sample who believe that there is no difference between the non-smokers and smokers friendships, which are the most, while (264) of them represent 36.8% of the total members of the sample who believe that smokers have fewer friends than those non-smokers. (89) Of them represent 12.4% of the total members of the sample who believe that smokers have more friends than non-smokers, and (11) of them represent1.5% of the total members of the study sample who did not show that.

Table 13: Do you think that smoking cigarettes makes you gain or lose weight? – Answers among KSU students in 2011

	Frequency	*Percentage*
Gain	64	8.9
Lose	368	51.3
Has no effect	279	38.9
Unknown	7	1.0
Total	718	100%

From table (13), (368) members of the study samplerepresent51.3%ofthe total members of the sample who believe that smoking helps weight loss, which are the most, while the (279) of them represent 38.9% of the total members of the sample who believe that smoking has no effect on weight. (64) of them represent 8.9% of the total members of the sample who believe that smoking helps to gain weight, and (7) of them represent 1.0% Of the total members of the study sample who did not show that.

Table 14: Do you think cigarette smoking is harmful to your health? – Answers among KSU students in 2011

	Frequency	*Percentage*
Definitely yes	620	86,4
Probably yes	65	9.1
Definitely no	28	3.9
Unknown	5	0.7
Total	718	100%

From table (14), (620) members of the study sample represent 86.4%ofthe total members of the sample who believe that smoking is definitely harmful to health, which are the most, while (65) of them represent 9.1% of the total members of the study sample who believe that smoking may be harmful to health, while (28) of them represent 3.9%of the total members of the sample who believe that smoking is not harmful to health, and (5) of them represent 0.7% of the total members of the study sample who did not show that.

Table 15: Do you think that smoking makes a person more or less attractive? – Answers among KSU students in 2011

	Frequency	*Percentage*
More	49	6.8
Less	503	70.1
No difference	161	22.4
Unknown	5	0.7
Total	718	100%

From table (15), (503) members of the study sample represent 70.1% of the total members of the sample who believe that smoking makes a person less attractive, which are the most, while the (161) of them represent 22.4% of the total members of the sample who believe that there is no difference. (49) of them represent 6.8% of the total members of the sample who believe that smoking makes smokers more attractive, and (5) of them represent 0.7% of the total members of the study sample who did not show that.

Table 16: Does any of your closest friend's smoke cigarettes? – Answers among KSU students in 2011

	Frequency	*Percentage*
None	128	17.8
Some of them	416	57.9
Most of them	154	21.4
All of them	16	2.2
Unknown	4	0.6
Total	718	100%

From table (16), (416) members of the study sample represent 57.9% of the total members of the study sample who have some of their closest friends are smokers, which are the most, while the (154) of them represent 21.4% of the total members of the study sample who have the most of their closest friends are smokers. (128) of them represent 17.8% of the total members of the study sample who have none of their close friends are smokers, and (16) of them represent 2.2% of the total members of the sample study who all their closest friends are smokers, and (4) of them represent 0.6% of the total members of the study sample who did not show that.

Table 17: When you see a man smoking what do you think of him? – Answers among KSU students in 2011

	Frequency	*Percentage*
Stupid	131	18.2
Lacks confidence	118	16.4
Losing his life	305	42.5
Successful	11	1.5
Intelligent	6	0.8
Advanced	20	2.8
Other	110	15.3
Unknown	17	2.4
Total	718	100%

From table (17), (305) members of the study sample represent 42.5% of the total study sample when they see

man smoking, they think of him that this smoker is losing his life, which are the most, while (131) of them represent 18.2% of the total study sample when they see a man smokes, they think of him that this smoker is stupid. (118) of them represent 16.4% of the total study sample when they see a man smokes, they think of him that this smoker lacks confidence, and (110) of them represent 15.3% of the total study sample answered by —others", and (20) of them represent 2.8%of the total study sample when they see a man smokes, they think of him that this smoker is advanced, and (11) of them represent 1.5% of the total study sample when they see a man smokes, they think of him that this smoker is successful, and (6) of them represent 0.8% of the total members of the study sample when they see a man smokes, they think of him that this smoker is intelligent, and (17) of them represent 2.4% of the total members of the study sample who did not show that.

Table 18: When you see a women smoking what do you think of him? – Answers among KSU students in 2011

	Frequency	*Percentage*
Stupid	329	45.8
Lacks confidence	78	10.9
Losing her life	206	28.7
Successful	12	1.7
Intelligent	3	0.4
Advanced	16	2.2
Other	58	8.1
Unknown	16	2.2
Total	718	100%

From table (18), (329) members of the study sample represent 45.8% of the total study sample when they see a woman smokes, they think of her that she's stupid, which are the most, while the (206) of them represent 28.7% of the total study sample when they see a woman smokes, they think of her that she is losing her life. (12) of them represent 1.7% of the total study sample when they see a woman smokes, they think of her that she is successful, and (3) of them represent 0.4% of the total study sample when they see a woman smokes, they think of her that she is intelligent, and (16) of them represent 2.2% of the total members of the study sample who did not show that.

Table 19: Do you think that when the smoke for a short time (one or two years) could you avoid the harmful effects of smoking? – Answers among KSU students in 2011

	Frequency	*Percentage*
Never, it won't affect	63	8.8
Maybe	450	62.7
Sure it will	198	27.6
Unknown	7	1.0
Total	718	100%

From table (19), (450) members of the study sample represent 62.7% of the total members of the sample who believe that smoking for a short time (one or two years) may affect, which are the most , while (198) of them represent 27.6% of the total members of the sample who believed that smoking for a short time certainly it will affect, compared to (63) of them represent 8.8% of the total members of the sample who believe that smoking for short time will never affect, and (7) of them represent 1.0% of the total members of the study sample who did not show that.

Table 20: Do you think the smoke from other people's cigarettes is harmful to you? – Answers among KSU students in 2011

	Frequency	*Percent*
Definitely yes	533	74.2
Definitely not	70	9.7
Maybe	112	15.6
Unknown	3	0.4
Total	718	100%

From (20), (533) members of the study sample represent 74.2% of the total members of the sample who believe that the smoke of cigarette is definitely harmful to non-smokers, which are the most, while the (112) of them represent 15.6% of the total members of the sample who believe that the smoke of cigarette may be harmful to non-smokers, compared to (70) of them represent 9.7% of the total members of the sample who believe that the smoke of cigarette is not harmful to non-smokers, and (3) of them represent 0.4% of the total members of the study sample who did not show that.

Table 21: During the last year did you read or hear in any media messages against smoking? – Answers among KSU students in 2011

	Frequency	*Percentage*
Few	282	39.3
A lot	376	52.4
Never	51	7.1
Unknown	9	1.3
Total	718	100%

From table (21), (376) members of the study sample represent 52.4% of the total members of the study sample who have heard a lot during the last year in the mass media to messages against smoking, which are the most, while (282) of them represent 39.3% of the total members of the study sample who have heard or read a little over the last year in the mass media to messages against smoking, compared to (51) of them represent 7.1% of the total members of the study sample who haven't heard or read in the last year in mass media to messages against smoking, and (9) of them represent 1.3% of the total members of the study sample who did not show that.

Table 22: When you visit the public places (Exhibitions, stadiums, parks, restaurants, etc. ...) do you see non-smoking or anything against smoking? – Answers among KSU students in 2011

	Frequency	*Percentage*
A lot	276	38.4
Sometime	386	53.8
Never	44	6.1
Unknown	12	1.7
Total	718	100%

From table (22) , (386) members of the study sample represent 52.8% of the total study sample who when they visit the public places (Exhibitions, stadiums, parks, restaurants ... etc.) they sometime see , no smoking or Anything against smoking ,which are the most, while the (276) of them represent 38.4% of the total study sample when they visit the public places (Exhibitions, stadiums, parks, restaurants ... etc.) they usually see no smoking or

anything against smoking, compared with (44) of them represent 6.1% of the total members of the study sample, when they visit the public places (Exhibitions, stadiums, parks, restaurants ... etc.) they don't see no smoking or anything against smoking , and (12) of them represent 1.7% of the total members of the study sample who did not show that.

Table 23: When are you watching the movies or the TV shows, do the actors usually smoke? – Answers among KSU students in 2011

	Frequency	*Percentage*
I don't watch TV	61	8.5
A lot	336	46.8
Sometimes	294	40.9
Never	15	2.1
Unknown	12	1.7
Total	718	100%

From table (23), (336) members of the study sample represent 46.8% of the total study sample who when they are watching movies or TV shows, they see a lot of smoker's actors, which are the most, while the (294) of them represent 40.9% of the total study sample who when they are watching movies or TV shows, they sometime see the actors smoke, compared to (61) of them represent 8.5% of the total members of the study sample who do not watch TV. (15) of them represent 2.1% of the total study sample who when they are watching movies or TV shows, they do not watch actors smoke, and (12) of them represent 1.7% of the total members of the study sample who did not show that.

Table 24

During the last month how many ads for any kind of cigarettes you have seen in magazines or newspapers? – Answers among KSU students in 2011

	Frequency	*Percentage*
A lot	93	13.0
Few	348	48.5
Never	261	36.4
Unknown	16	2.2
Total	718	100%

From table (24), (348) members of the study sample represent 48.5% of the total members of the study sample who during the last month have seen few ads for cigarettes in magazines or newspapers, which are the most, while the (261) of them represent 36.4% of the total members of the study sample during the last month have never seen ads for cigarettes in magazines or newspapers, compared to (93) of them represent 13.0% of the total members of the study sample who during the last month have seen a lot of ads for cigarettes in Magazines or newspapers, and (16) of them represent 2.2% of the total members of the study sample who did not show that.

Table 25: Have company representatives offered you a cigarette for free? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	99	13.8
No	606	84.4
Unknown	13	1.8
Total	718	100%

From table (25), (606) of the sample of the study, represent 84.4% of the total members of the study sample who during the last month have never been offered which is the most, while the (99) of them represent 13.8% of the total members of the study sample who during the last month they have been offered a free cigarette, compared to (13) of them represent 1.8% of the total members of the study sample who did not show that.

Table 26

During this year at the university, have lectures or discussions about the smoking's harmful effects been given? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	224	31.2
No	475	66.2
Unknown	19	2.6
Total	718	100%

From table (26), (475) members of the study sample represent 66.2% of the total members of the study sample who answered ―No‖, which are the most. While (224) of them represent 31.2% of the total members of the study sample who answered ―Yes‖. (19) of them represent 2.6% of the total members of the sample who didn't show that.

Table 27: Have you noticed declarations for banning smoking at King Saud University? – Answers among KSU students in 2011

	Frequency	*Percentage*
No	46	6.4
Yes, posters	529	73.7
Yes, brochures	112	15.6
Others	19	2.6
Unknown	12	1.7
Total	718	100%

From table (27), (529) members of the study sample represent 73.7% of the total members of the study sample who have noticed posters for the banning Smoking at King Saud University, which are the most, while the (112) of them represent 15.7% of the total members of the study sample who have noticed brochures for the banning Smoking at King Saud University. (46) of them representing a percentage of 6.4% of the total study sample who haven't noticed the declarations for the banning Smoking at King Saud University. (19) of them represent 2.6% members of the total study sample who have observed other declarations for banning smoking at King Saud University, and (12) of them represent 1.7% of the total sample of the study who did not show that.

Table 28: Is the smoking banned at king Saud university? – Answers among KSU students in 2011

	Frequency	*Percentage*
No	30	4.2
Yes, in all areas	332	46.2
Yes, in specific areas	327	45.5
Others	13	1.8
Unknown	16	2.2
Total	718	100%

From table (28), (332) members of the study sample represent 46.2% of the total members of the sample who

believe that smoking is banned in all areas in the university, which are the most, while the (327) of them represent 45.5% of the total members of the sample who believe that smoking is banned at the University of King Saud in specific areas only, (30) of them represent 4.2% of the total sample of the study who believe that smoking isn't banned at the University of King Saud. (16) of them represent 2.2% of the total members of the sample who did not, and (13) of them represent 1.8% of the total study sample who have answered others.

Table 29: During the last week how many days someone smoked in your presence? – Answers among KSU students in 2011

	Frequency	*Percentage*
None	187	26.0
1-2 days	229	31.9
3-4 days	120	16.7
5-6 days	33	4.6
Daily	132	18.4
Unknown	17	2.4
Total	718	100%

From table (29), (229) members of the study sample represent 31.9% of the total members of the study sample who during the last week someone has smoked 1-2 days in their presence, which are the most, while (187) of them represent 26.0% of the total members of the study sample who during the last week no one has smoked in their presence. (132) of them represent 18.4% of the total sample of the study who during the last week someone smoked every day in their presence, and the (120) of them represent 16.7% of the total sample of the study who during the last week 3-4 days, someone smoked in their presence, and (33) of them represent 4.6% of the total sample of the study who during the last week ,five to six days, someone smoked at their presence, and (17) of them represent 2.4% of the total members of the sample who did not show that.

Table 30: Do you support banning smoking in public places? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	546	76.0
No	154	21.4
Unknown	18	2.5
Total	718	100%

From table (30), (546) members of the study sample represent 76.0% of the total members of the sample agree with the banning of smoking in public places, which are the most, while the (154) of them represent 21.4% of the total members of the study sample who aren't agreed with banning of smoking in public places, (18) of them represent 2.5% of the total members of the sample who did not show that.

Table 31: Have you ever smoked even once? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	283	39.4
No	435	60.5
Total	718	100%

From table (31), (435) members of the study sample represent 60.4% of the total members of the study sample who had never smoked even once, which are the most, while the (283) of them represent 39.4% of the total members of the study sample who had smoked.

Table 32: How old were you when you smoked for the first cigarette? – Answers among KSU students in 2011

	Frequency	*Percentage*
From 10-13 years	48	6.7
From 14-17 years	99	13.8
From 18-21 years	108	15.0
From 22-25 years	15	2.1
From 26 and more	1	0.1
Non-smokers	447	72.3
Total	718	100%

From table (32), (108) of the sample study represent 15.0% of the total members. The study sample who when they have smoked for the first time they were at the age of 18 to 21 years, (99) of them represent 13.8% of the total number of sample who when they have smoked for the first time they were at the age of 14 to 17 years, and the (48) of them represent 6.7% of the total number of sample who when they have smoked for the first time they were at the age of 10 to 13 years, while the (15) of them represent 2.1% of the total number of the sample who when they have smoked for the first time they were at the age 22 to 25 years, and (1) of them which represents 0.1% of the total sample of the study who when he has smoked for the first time he was at the age of 26 years and over.

Are you currently smoker? – Answers among KSU students in 2011

Table 33

	Frequency	*Percentage*
No	578	80.5
Yes, cigarette	76	10.6
Yes, water pipe	28	3.9
Yes, both	32	4.5
Chewing Tobacco	3	0.4
Others	1	0.1
Total	718	100%

From table (33), (578) members of the study sample 80.5% of the total members of the study sample do not smoke, which are the most, while (76) of them represent 10.6% of the total members of the study sample who are smoking cigarettes. (32) of them represent 4.5% of the total members of the study sample who are smoking cigarettes and shisha. While (28) of them represent 3.9% of the total members of the study sample who are smoking shisha, Also, (3) of them represent 0.4% of the total members of the study sample who are using chewing tobacco, and (1) of them which represents 0.1% of the total members of the study sample who is smoking other types.

Table 34: During the past month how many days did you smoke? – Answers among KSU students in 2011

	Frequency	*Percentage*
None	3	2.1
1-2 days	14	10.0
3-5 days	12	8.6
6-9 days	6	4.3
10-19 days	15	10.7
20-29 days	14	10.0
All the month	73	52.1
Unknown	3	2.1
Total	140	100%

From table (34), (73) members represent 52.1% of the total smokers of the study sample during the past month smoked through it all, which are the most, while (15) of them represent 10.7% of the smokers of the study sample who during the past month they have smoked in10-19 days, (14) of them represent 10.0% of smokers of the study who during the last past month they've smoked in the 1-2 days, and that (14) of them represent 10.0% of the smokers of the study who during the past month they've smoked in 20-29 days, while (12) of them represent 8.6% of the smokers who during the past month they've smoked in 3-5 days. (6) of them represent 4.3% of the smokers who during the past month they have smoked in 6-9 days, while (3) of them represent 2.1% of the smokers who during the past month they haven't smoked, and (3) of them represent 2.1% of the total smokers who did not show that.

Table 35: How many cigarettes you smoke per a day? – Answers among KSU students in 2011

	Frequency	*Percentage*
One	19	13.6
2-5 cigarettes	31	22.1
6-10 cigarettes	24	17.1
11-20 cigarettes	36	25.7
More than 20 cigarettes	16	11.4
Unknown	14	10.0
Total	140	100%

From table (35), (36) of the sample of the study, represent 25.7% of the smokers of the study sample who have smoked 11-20 cigarettes, which are the most, while the (31) of them represent 22.1% who have smoked 2-5 cigarettes, (24) of them represent 17.1% of the total study sample who have smoked 6-10 cigarettes, and that (19) of them represent 13.6% who have smoked one cigarette per day, while (16) of them represent 11.4% who have smoked more than 20 Cigarettes, and (14) of them represent 10.0% of the smokers didn't show that.

Where do you smoke usually?

Table 36

	Frequency	*Percentage*
At the residency place	28	20.0
At the university	20	14.3
At workplace	2	1.4
With friends	39	27.9
In public places	14	10.0
Others	31	22.1
Unknown	6	4.3
Total	140	100%

From table (36), (39) members of the study sample represent 27.9% of the smokers who usually smoked with friends which are the most, while (31) of them represent 22.1% who usually smoke in other places, while (28) of them represent 20.0% who smoke usually in the housing, and the (20) of them represent 10.3% who smoke usually at the university, while (14) of them represent 10.0% who usually smoke in public places, and (6) of them represent 4.3% of who did not show that, and (2) of them represent 1.4% who usually smoke in the workplace.

Table 37: Do you smoke usually as soon as you wake up, or you feel that you want to smoke a cigarette? – Answers among KSU students in 2011

	Frequency	*Percentage*
No	49	35.0
Yes, sometimes	50	35.7
Yes, always	31	22.1
Unknown	7	10.7
Total	140	100%

From table (37), (50) members represent 35.7% of the smokers who answered —Yes, sometimes" which are the most, while the (49) of them represent 35.0% who do not smoke as soon as wake up, (31) of them represent 22.1% who answered "Yes, always", and (7) of them represent 10.7% who didn't show that.

Table 38: Do you want to quit smoking? – Answers among KSU students in 2011

	Frequency	Percentage
Yes	92	65.7
No	42	30.0
Unknown	6	4.3
Total	140	100%

From table (38), (92) members represent 65.7% of smokers who want to quit smoking, which is the most, while (42) of them represent 30.0% who do not want to quit smoking, and (6) of them represent 4.3% didn't show that.

Table 39: During the past year, have you ever tried to stop smoking cigarettes? – Answers among KSU students in 2011

	Frequency	*Percentage*
Yes	72	51.4
No	33	23.6
Unknown	35	25.0
Total	140	100%

From table (39), (72) members of the study sample represent 51.4% of smokers who during the past year, tried to quit smoking, which is the most, while (35) of them represent 25.0% who during the past year, did not try to quit smoking, and (33) of them represent 23.6% who did not answer.

Table 40: What was the main reason you decided to quit smoking? – Answers among KSU students in 2011

	Frequency	*Percentage*
Religious reasons	21	15.0
Family desire	14	10.0
Friends desire	5	3.6
Healthy reasons	30	21.4
To save money	4	2.9
Others	8	5.7
Unknown	58	41.0
Total	140	100%

From table (40), (30) member represent 21.4% of the smokers, the main reason that made them tried to quit smoking is health reasons, and (21) of them represent 15.0% whose main reason that made them tried to quit smoking is religious reasons, while (14) of them represent 10.0% their main reason that made them tried to quit smoking is the family desire. (8) Of them represent 5.7% their main reason that made them tried to quit smoking, other reasons, while (5) of them represent 3.6% whose main reason that made them tried to quit smoking is friends desire, and (4) Of them representing 2.9% whose main reason that made them tried to quit smoking is that —to save money".

Table 41: Do you think you will be able to quit smoking when you want to? – Answers among KSU students in 2011

	Frequency	*Percentage*
No	18	12.9
Yes	46	32.9
I don't know	22	15.7
Unknown	54	38.3
Total	140	100%

From table (41), (46) members represent 32.0% of smokers who believe that they are able to quit smoking when they want, and (22) of them represent 15.7% who do not know that if they are able to quit smoking when they want, and (18) of them represent 12.9% who do not believe that they are able to quit smoking when they want.

Table 42: Have you ever received help or advice to help you to quit smoking?

No	22	15.7
Yes, from a friend	49	35.0
Yes, from a family member	35	25.0
Yes, from an educational campaign	10	7.1
Yes, from one of the health team members	9	6.4
Others	6	4.3
Unknown	9	6.4
Total	140	100%

From table (42), (49) members represent 35.0% of the smokers who had received help and advice to quit smoking from one of the friends, which is the most, while the (35) of them represent 25.0% who had received help and advice to quit smoking from a family member, and (22) of them represent 15.7% who never had received help and advice to quit smoking, (10) of them represent 7.1% who previously received help and advice to quit smoking from an educational campaign, (9) of them represent 6.4% who had received help and advice to quit smoking from a health team members (doctor, nurse ...), compared to (9) of them represent 6.4% who did not show that, compared to (6) of them represent 4.3% who had received help and advice to quit smoking by other sources.

2. Bivariate relationships

The relationship between smoking and the place of residence:

Table 43: Shows the results of the chi square test of the relationship between smoking and place of residency

Residency Place	*Frequency*	*Smoking*		*Total*
	Percentage %	Non-smoker	smoker	
Out-university housing	Frequency	280	64	344
	Percentage %	81.4%	18.6%	100%
Inside university housing	Frequency	256	71	327
	Percentage %	78.3%	21.7%	100.0%
Total	Frequency	536	135	671
	Percentage %	79.9%	20.1%	100.0%
Chi square				1.008
The statistical significance				0.315

From the results described above, it is clear that there is no relationship at 0.05 level or less between smoking and place of residency, which shows no effect of place of residency on smoking.

The relationship between smoking and the parents smoking:

Table 44: Shows the results of the chi square test of the relationship between smoking and parents smoking

Parent's smoking	*Frequency*	*Smoking*		*Total*
	Percentage %	Non smoker	smoker	
Non-smoker parents	Frequency	452	95	547
	Percentage %	82.6%	17.4	100.0%
One of them is a smoker	Frequency	86	41	127
	Percentage %	67.7%	32.3%	100.0%
Total	Frequency	538	136	674
	Percentage %	79.8%	20.2%	100.0%
Chi square				14.238
The statistical significance				0.00

From the results described above, it is clear that there is a relationship at the level of significance 0.1 and less between smoking and smoking parents, which demonstrate the impact of parental smoking on sons.

The relationship between the father's smoking and the smoking:

Table 45: Shows the results of the chi square test of the relationship between smoking and father's smoking:

Father's smoking	*Frequency*	*Smoking*		
	Percentage %	Non-smoker	smoker	
Non-smoker father	Frequency	469	102	571
	Percentage %	82.1%	17.9%	100.0%
Smoker father	Frequency	69	34	103
	Percentage %	67.0%	33.0%	100.0%
Total	Frequency	538	139	674
	Percentage %	79.8%	20.2%	100.0%
Chi square				12.429
The statistical significance				0.000

From the results described above, it's clear there is a relationship at the level of significance 0.01 or less between smoking and smoking father, which explains the impact of smoking father on sons.

The relationship between smoking and mother's smoking:

Table 46: Explain the results of the chi square test of the relationship between smoking and mother's smoking

Mother's smoking	*Frequency*	*Smoking*		*Total*
	Percentage	Non-smoker	Smoker	
Non-smoker mother	Frequency	526	132	658
	Percentage	79.9	20.1	100.0%
Smoker mother	Frequency	12	4	16
	Percentage	75.0%	25.0%	100.0%
Total	Frequency	538	136	674
	Percentage	79.8%	20.2%	100.0%
Chi square				0.237
The statistical significance				0.627

From the results described above, it's clear there is no relationship at 0.05 level or less between smoking and mother's smoking, which shows no effect of maternal smoking on sons.

The relationship between smoking and friends' smoking:

Table 47: Shows the results of the chi square test of the relationship between smoking and friends smoking

Friends' smoking	*Frequency*	*Smoking*		*Total*
	Percent	Non-smoker	Smoker	
Non-smoker friends	Frequency	116	4	120
	Percent	96.7%	3.3%	100.0%
Smoker friends	Frequency	420	131	551
	Percent	76.2%	23.8%	100.0%
Total	Frequency	536	136	674
	Percent	79.9%	20.1%	100.0%
Chi square				25.620
The statistical significance				0.000

From the results described above, it's clear there is a relationship at the level of significance 0.01 or less between smoking and friends' smoking, which shows the impact of friends' smoking on their friends.The relationship between smoking and parental smoking in general:

Table 48: Shows the results of the chi square test of the relationship between smoking and parents smoking.

Parent's smoking in general	*Frequency*	*Smoking*		*Total*
	Percentage %	Non-smoker	Smoker	
None is smoker	Frequency	449	95	544
	Percentage %	82.5%	17.5%	100.0%
Both are smokers	Frequency	5	3	8
	Percentage %	62.5%	37.5%	100.0%
Mother only	Frequency	11	3	14
	Percentage %	78.6%	21.4%	100.0%
Father only	Frequency	69	34	103
	Percentage %	67.0%	33.0%	100.0%
Total	Frequency	534	135	669
	Percentage %	79.8%	20.2%	100.0%
Chi square				14.522
The statistical significance				0.002

From the results described above, it's clear there is relationship at the level of significance 0.01 or less between smoking and parent's smoking in general, which shows the effect of parent's smoking on sons.

The relationship between smoking and smoking friends in general:

Table 49: Shows the results of the chi square test of the relationship between smoking and friends' smoking in general:

Friend's smoking	*Frequency*	*Smoking*		*Total*
	Percentage %	Non-smoker	Smoker	
None is smoker	Frequency	116	4	120
	Percentage %	96.7%%	3.3%	100.0%
Some of them	Frequency	332	57	389
	Percentage %	85.3%	14.7%	100.0%
Most of them	Frequency	81	67	148
	Percentage %	54.7%	45.3%	100.0%
All of them	Frequency	7	7	14
	Percentage %	50.0%	50.0%	100.0%
Total	Frequency	536	135	671
	Percentage %	79.9%	20.1%	100.0%
Chi square				94.302
The statistical significance				0.002

From the results described above, it's clear there is relationship at the level of significance 0.01 and less between smoking and number of friends' smoking, which shows the effect of friends' smoking on their friends.

Attitude Score:

	Frequency	*Percentage*	*Valid Percentage*
1.Non-smoker			
Poor	1	0.6	14.3
Moderate	2	1.2	28.6
Good	3	1.8	42.9
Perfect	1	0.6	14.3
Total	7	4.2	100.0
Missing	158	95.8	
Total	165	100.0	

	Frequency	*Percentage*	*Valid Percentage*
2.Smoker			
Poor	19	13.6	25.3
Moderate	26	18.6	34.7
Good	28	20.0	37.3
Perfect	2	1.4	2.7
Total	75	53.6	100.0
Missing	65	46.4	
Total	140	100.0	

	N	*Mean*	*Std. Deviation*
Attitude score for all the sample	82	2.21	0.857

	N	Mean	Std. Deviation
Attiude score for the non-smokers	7	2.57	0.976

	N	Mean	Std. Deviation
Attiude score for the smokers	75	2.17	0.844

2. Knowledge Score

	Frequency	*Percentage*	*Valid Percentage*
1.Non-smoker			
Poor	10	6.1	6.3
Moderate	92	55.8	57.9
Good	48	29.1	30.2
Perfect	9	5.5	5.7
Total	159	96.4	100.0
Missing	6	3.6	
Total	165	100.0	

	Frequency	*Percentage*	*Valid Percentage*
2.Smoker			
Poor	17	12.1	12.6
Moderate	83	59.3	61.5
Good	34	24.3	25.2
Perfect	1	0.7	0.7
Total	135	96.4	100.0
Missing	5	3.6	
Total	140	100.0	

	N	*Mean*	*Std. Deviation*
Knowledge score for all the sample	686	2.28	0.718

	N	Mean	Std. Deviation
Knowledge score for the non-smokers	159	2.35	0.686

	N	*Mean*	*Std. Deviation*
Knowledge score for the smokers	135	2.14	0.625

Discussion

Our results showed prevalence of smoking 21.1% in King Saud University students. This prevalence is less than 35.9% which was been reported in smoking determinants in Turkish University Students [15]. Our study showed the prevalence between students live in housing KSU __21.7% is higher than those who live with their families__18.6%. There is a near result in a study of determinants in Turkish University Students, which the prevalence of smoking in those who live away from their family was 36.8% and it was higher than those who live with their family 31% [15].

In our study 76% of students think smoking should be banned in public places. This proportion is the same for other study has been reported in Saudi Arabia [11]. In another study between Austrian Students showed less aggressive attitude on smoking banning in public [20]. In our study 64.3% will not smoke in the future while 13.6% sure they will smoke and 21.2% they may be smoke.

In our study if their best friends give them cigarette smoking, 65.5% of the sample they will not smoke it, 22% may smoke it, and 11.1% sure will smoke it. In another study considering all ever-smokers, the main sources of the first cigarette were relative/neighbor (25%), school friend (18.9%) and friend outside school (18.9%) [9]. In our study 65.7% want to stop smoking and 30% do not want to stop smoking. We have high proportion 65.7% want to stop smoking. Also There is another study have high proportion 74.3% had considered stopping smoking [19]. In another study also we have high number want to stop smoking over 7 in every 10 smokers want to quit [11]. In our study, 12.9% of the smokers think that they aren't able to stop smoking when they want, 32.9% think that they are able to do that when they want, 15.7% do not know if they are able to stop smoking or not when they want.
In another study, (38.9%) of the smokers did not know if they would quit smoking in the future, compared with about 37% who claimed that they intended to quit smoking in the future [1].

Regarding the knowledge extracted, our study revealed that 51.3% of the sample believe in that smoking results in decrease in body weight, and 86.4% believes that it harms body health. These results are near from the results in a study conducted by H.I. Al-Mohamed and T.T. Amin in which 42.6% believes in weight decreasing effect of smoking and 88.9% believes that it harms the health of the body [7].

A strange unexpected result has been investigated that less than half of university student (46.2%) know that smoking is banned in all areas of university and housing which expected and should be higher than that.

Most of our subject, 74.2%, thought that cigarettes smoke could hurt passive smokers. A study conducted at Silpakorn University in Thailand revealed that 92.7% of their students believe in that [4]. This could be due to the increase in the global awareness of smoking.

In our study, 51.4% of the students reported that they had tried to stop smoking within the last twelve months. Around 38.7% of student in University of Brasília in Brazil have tried that [8]. It's more in our study and this difference may be due to religious considerations here.

Smoking by parents seems to be important in the initiation as well as the continuation of smoking [7]. These findings are consistent with our study, that those people are exposed to risk when parents are smokers. We found that those people who had either of parent's smokes are more likely to smoke 32.3% when compared with those who had not 17.4%. This also has been found in another study by which smokers who had smoker parents. (65.2%) are more prone to smoke than those who had not (34.8%) [2].

Smoking by friends appeared to be the most important factor influencing smoking behavior of our respondents, in which most smokers are significantly influenced by having one or more friends who are smokers (23.2**%**) as compared with those who have no smoker friend (3.3**%**),this is strongly promoted by another study conducted by Y.S. Khader and A.A. Alsadi in which the friends were considered the major reason for starting smoking 47.4% [1].Another study by A. Mandil et al shows that those who have smoker friends are consist (86.7%) of the total smokers [6], Saima Siddiqui, et al shows that friends' influence was a more common reason for starting smoking than the influence of a family member [19].However our results could be underestimate as it involves male gender only.

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