



Research Paper

Knowledge Attitude and Practice Towards Cigarette Smoking among Male college students in Al-leith, Umm Al-Qura University, Kingdom of Saudi Arabia

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ABSTRACT: This was cross sectional descriptive study was conducted to assess the prevalence, knowledge, attitude and practice of cigarette smoking among male college students in Al-leith, Umm Al-Qura University, Kingdom of Saudi Arabia. The study was conducted during October, 2019 to March, 2020. About 201 students were selected randomly to fill the questionnaire to gather information on knowledge, attitudes of students towards cigarette smoking, socio-demographic information, number of cigarettes smoked during the day, reasons leading students to smoking, the most preferable place for smoking and history of cigarette smoking among the students. Data were analyzed using the statistical package for social sciences (SPSS) for windows version 21. The prevalence of cigarette smoking among students was found 68%. There were 58% of the smoker from age group of 21-23 years, followed by 27% from age group of 24-26 years, while 10% from more than 27-year-old, 3% from the age group of 15-17 years and 2% from the age group of 18-20 years. Most of the students 30.6% were found smoke 3-5 cigarettes during the day and 22.6% of them were smoke more than 10 cigarettes during the day. 40% of students indicated that the reason for smoking was to imitate a family member, 24.8% to imitate friends, 13.1% to express for their maturity, 11.6% to relive crises and 12.4% because addiction. The favorites places for cigarette smoking were found home 34%, on the road 24%, friend house 22% and the cafe 16%. Majority of smoker 42.3% were found had low average family income. 73.1% of students were single. The knowledge of students toward tobacco consumption is adequate about the hazards of these practices and positive attitude towards their future role to quit.

Key Worlds: knowledge, Attitude, Students, Al Leith, Prevalence

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I. INTRODUCTION

Tobacco is deadly in any form. Smoked tobacco products contain over 7000 chemicals, including at least 250 chemicals known to be toxic or to cause cancer. Exposure to second-hand smoke has also been implicated in adverse health outcomes, including death. Newer tobacco products contain similar chemicals to traditional tobacco products and are harmful to health (WHO, 2019). Majority of the smokers in the world live in the low and middle-income countries (WHO, 2015). Smoking is declining in most of the developed countries due to intense public health measures, while it is increasing in the developing countries due to massive promotional activities of cigarette companies (Abou-Faddan and Ahmed, 2012). Tobacco smoking causes annually 6 million deaths worldwide and is projected to exceed 8 million by 2030 (Nasser *et al.*, 2018). The second-hand smoking effect is associated with lung cancer and asthma in adults, and ear infections and bronchitis in children (Blake *et al.*, 2010). For different reasons such as emotional problems resulting from family separation, age condition, psychological pressures, absence of parental control, a sense of personal growth and independence, relative financial independence and presence of friends who smoke, they are at risk for smoking (Panhahiet *et al.*, 2016). Parental smoking has a strong influence on adolescent smoking at the initiation stage, student's smoking status is also associated with their perceptions of teacher smoking. Adolescents who were receptive to tobacco industry

advertising and promotions were more likely to progress towards smoking. Other important factor in smoking is easy access to cigarettes (Ertas, 2006). Various surveys in both the developed and developing countries have reported the high prevalence of smoking habits among youth annually. 28.7% of smokers were aged at 18 – 24 years mainly college students. The prevalence of smoking among the students of medical universities is more than 20% (Panhahiet *et al.*, 2016). In Saudi Arabia, the prevalence of smoking is approximately 21% among the general adult population and 25% among university students (Al-Haqwiet *et al.*, 2010; Hoda and Ali, 2014). A compendium of tobacco consumption surveys in Saudi Arabia during the past decade (1999-2009) has shown that the prevalence estimates of tobacco use among young adults of university age range from 2.4% - 37% (Bassiony, 2009). As per 2008 statistics, the prevalence rate of smoking was about 37.6% among males and 6% among female in the Kingdom of Saudi Arabia. A study conducted in Bahrain found the prevalence of smoking shisha among the young male students was 13% (Al-Mohaithef and Sriram, 2018). A household survey conducted by the WHO in some Arab countries in 2012 stated that the prevalence of smoking any tobacco product among those aged ≥ 15 years in 2009 was 24% and 1% in the KSA, 46% and 31% in Lebanon, 47% and 6% in Jordan, 35% and 4% in Kuwait, 34% and 8% in Bahrain, 58% and 5% in Tunisia, and 35% and 11% in Yemen, among males and females, respectively (Abdulsalam *et al.*, 2018). Furthermore, tobacco consumption rates in Saudi Arabia have risen from 21.9% of males and 0.6% of females in 1996 to 37% of males and 6% of females in 2012 (AlQahtani, 2017). Higher prevalence has been associated with age, being male, single and highly educated (Felimban and Jarallah, 1994; Al-Yousef and Karim, 2001). Smoking causes coronary heart diseases, blood vessel constriction, and the nicotine stimulates adrenal epinephrine secretion, which increases blood pressure and heart rate. In addition, smoking is a leading cause of respiratory diseases such as emphysema, bronchitis, pneumonia and chronic airway obstruction by damaging the airways and alveoli of the lungs. Risk of cancer in smokers is 23 times greater than non-smokers (Heydar *et al.*, 2013). Tobacco users are at risk for several other types of cancers such as carcinoma of the upper respiratory tract, cervix, throat, larynx, mouth, pancreas, kidney, bladder and acute myeloid leukemia (Askarian *et al.*, 2013). Smoking in both women and men reduces fertility. Smoking in pregnancy causes underdevelopment of the foetus and increases the risk of miscarriage, neonatal death, respiratory disease in the offspring, and is probably a cause of mental health problems in the offspring (Action on Smoking and Health, 2014). About, 5.4 million people die from tobacco-related diseases each year and 80% of those deaths occur in developing countries (Al-Haqwiet *et al.*, 2010). In most high-income countries those aged 18–24 years (typically, college students) had no substantial change in smoking rate over the past two decades in spite of the decrease in tobacco consumption among both adults and teenagers (Alotaibi *et al.*, 2019). A study conducted in China in 2014 on knowledge, attitude, and practice of students about tobacco use showed that all students were aware of the dangers of cigarette but did not have a good attitude (Hamzeh *et al.*, 2019). People smoke on routine basis and face extreme difficulty if decision to quit was taken due to the physical and psychological addiction to nicotine, the main active ingredient in tobacco products (Abdulkareem *et al.*, 2018).

II. MATERIALS AND METHODS

This was cross sectional descriptive study was conducted to assess the prevalence, knowledge, attitude and practice of cigarette smoking among male college students in Al-leith, Umm Al-Qura University, Kingdom of Saudi Arabia. The study was conducted during October, 2019 to March, 2020. Sample size was determined by using the following formula:

$$N = \frac{z^2 pq}{d^2}$$

N = Desired sample size, Z = 1.96 (Critical value and a standard value for the corresponding level of confidence), P = Expected prevalence (based on previous research was 15.4), q = 1-p and d = 0.05 Margin of error or precision. Simple random sampling was used to select the participants from non-health science college departments include Arabic Language, Physics, Mathematics, English and Chemistry. Data was collected by using questionnaire includes questions about knowledge, attitudes of students towards cigarette smoking, socio-demographic information, number of cigarettes smoked during the day, reasons leading students to smoking, the most preferable place for smoking and history of cigarette smoking among the students. Data were analyzed using the Statistical Package for Social sciences (SPSS) for Windows version 21. Frequency and percent tables were used to describe the socio-demographic characteristics, Knowledge, smoking practice of the participants.

III. RESULTS

The present study reveals that the prevalence of cigarette smoking among students was 68% (Figure 1). There were 58% of the smoker from age group of 21-23 years, followed by 27% from age group of 24-26 years, while 10% from more than 27-year-old, 3% from the age group of 15-17 years and 2% from the age group of 18-20 years (Figure 2). Most of the students 30.6% (N= 42) were smoke 3-5 cigarettes during the day and 22.6% (N= 31) of them were smoke more than 10 cigarettes during the day (Figure 3). 40% of students

mentioned that the reason for smoking was to imitate a family member, 24.8% to imitate friends, 13.1 to express for their maturity, 11.6% to relive crises and 12.4 because addiction, are shown in Figure 4. The favorites places for cigarette smoking were found home (34%), on the road (24%), friend house (22%) and the cafe (16%). Table 1 shown history of the cigarette smoking among the students. The majority of students (42.3%) who smoke are among the average family whose income is between 6000-8000 SR., most of students were single. The Sociodemographic information of the study students are shown in table 2. Majorities of students have adequate knowledge on smoking they indicated that smoking could cause serious illness effects, as shown in Table 3. Table 4 shows the questions on attitudes of students towards smoking they have positive attitudes and to quit smoking in the future.

Table 1: History of Cigarette Smoking among Students:

		Less than one year	2-3 years ago,	4-5 years ago,	Over 5 years	Total
Age	15-17	3	1	0	0	4
	18-20	1	1	0	0	2
	21-23	29	28	11	2	80
	24-26	11	6	13	7	37
	more than 27	3	2	6	3	14

Fig. 1: Prevalence of Cigarette Smoking among Students:

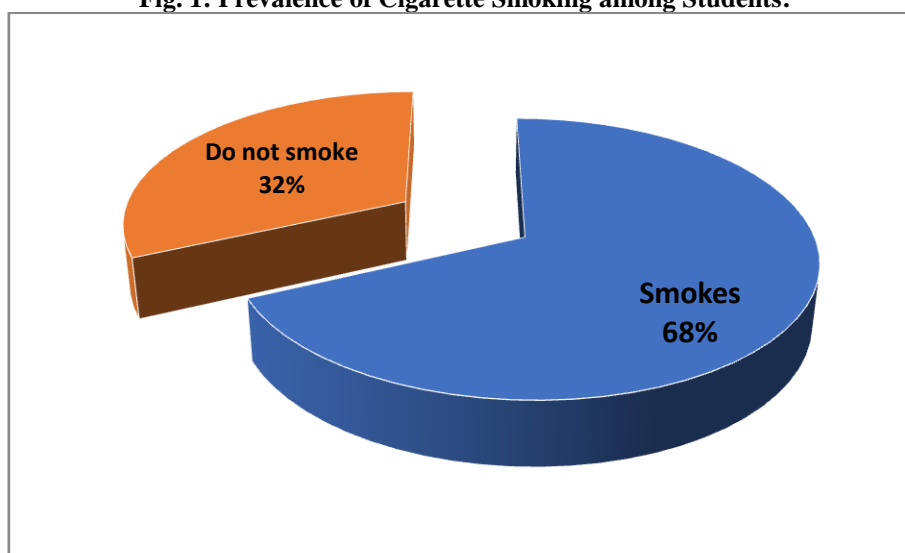


Table 2: Sociodemographic Information of the Students:

		smoke cigarettes		Total
		Yes	No	
Average family income per month	3000-5000	29	11	40
	6000-8000	58	22	80
	7000-9000	1	1	2
	10000-12000	24	24	48
	13000-15000	19	6	25
	more than 15000	6	0	6
Academic level	First year	31	22	53
	Second year	37	18	55
	Third year	28	15	43
	Fourth year	41	9	50
Social status	Single	96	51	147
	Married	41	13	54
Living	Town centre	52	22	74
	outskirts of the city	49	20	69
	Badia	36	22	58

Fig. 2: Distribution of Smokers According to Age Groups:

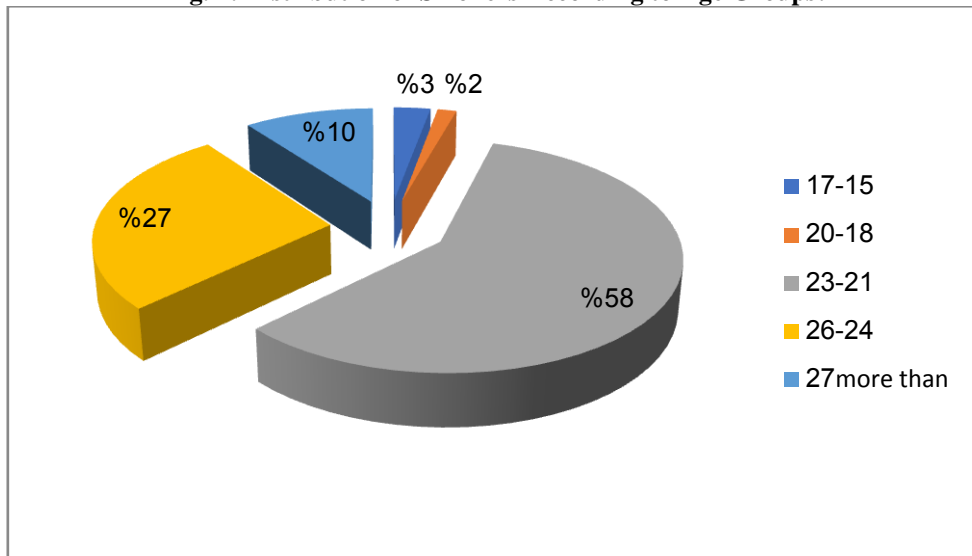


Fig. 3: Number of Cigarettes Smoked During the Day:

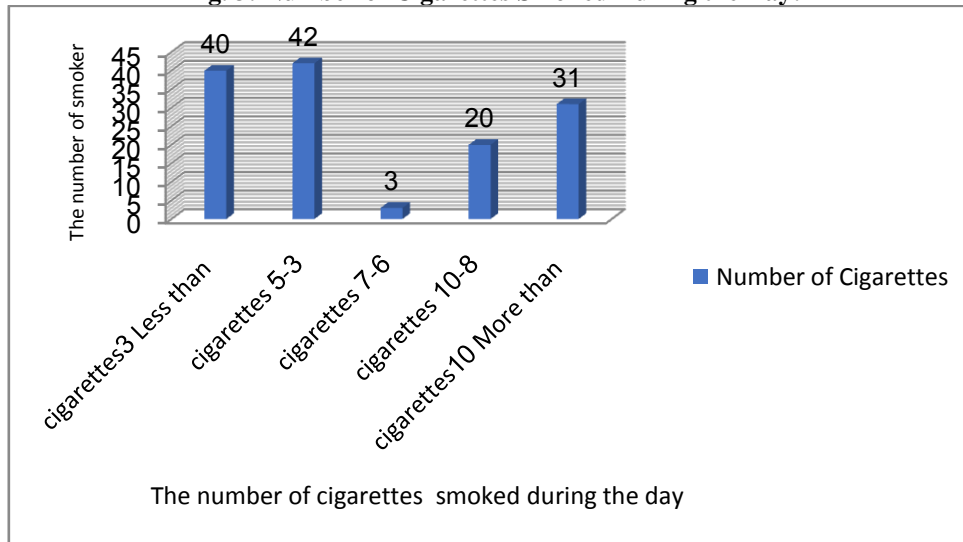


Fig. 4: The Reasons Leading to Smoking among Students:

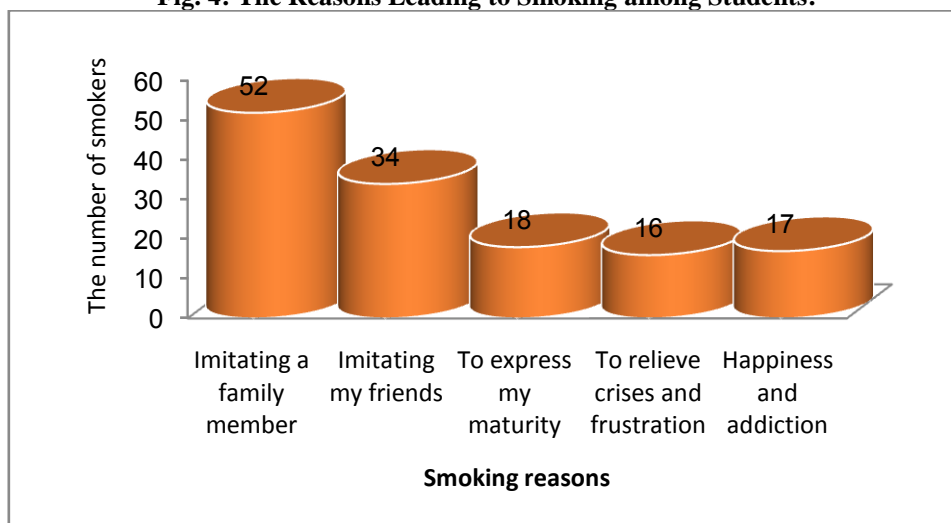


Fig. 5: The Most Preferable Place for Smoking:

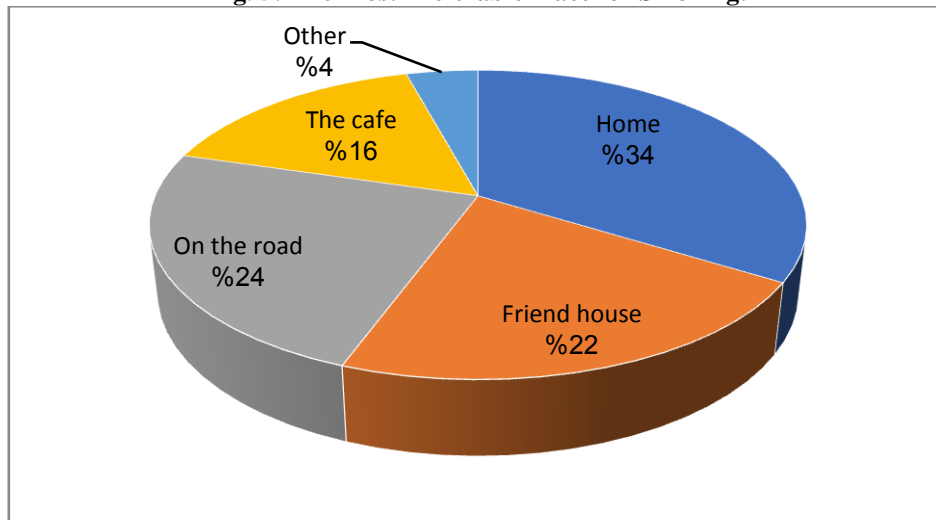


Fig. 6: The Practice of Smoking among Family Members and the Desire to Quit Smoking among Smokers:

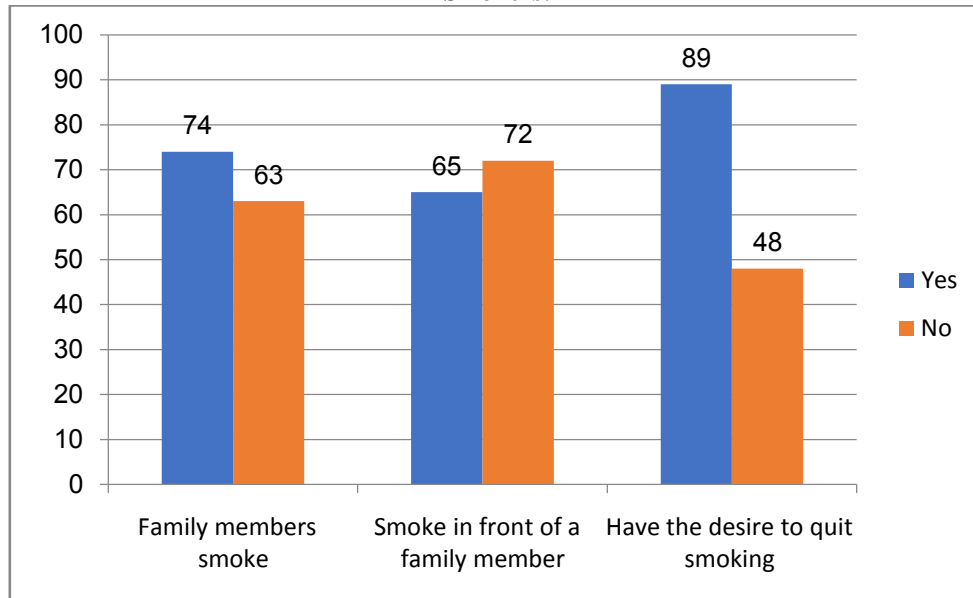


Table 3: Questions on the Knowledge of the Students Towards Cigarette Smoking:

Questions on the Knowledge	smoke cigarettes		Total	
	Yes	No		
Do you think the smoke from cigarette smokers will harm your health	Yes	91	42	133
	No	46	22	68
Does smoking cigarettes affect fertility and childbearing	Yes	89	39	128
	No	48	25	73
Smoking causes cancer	Yes	99	48	147
	No	38	16	54
Smoking causes heart disease	Yes	108	48	156
	No	28	16	44
Smoking causes mental disorders	Yes	83	47	130
	No	54	17	71
Smoking increased mortality rates	Yes	101	49	150
	No	36	15	51

Table 3: Questions on the Attitudes of the Students Towards Cigarette Smoking:

Questions on the Attitudes	smoke cigarettes		Total	
	Yes	No		
Selling cigarettes to teenagers and children should be prohibited	Yes	97	41	138
	No	38	23	60

Taxes on cigarettes and tobacco products must be increased	Yes	86	50	136
	No	51	14	65
Advertising and promotion of cigarettes must be prohibited	Yes	96	39	135
	No	41	25	65
Parents should not smoke in front of children	Yes	103	45	148
	No	34	19	53
Health precautions must be printed on the package	Yes	99	39	138
	No	38	25	62
Health education increases the chances of quitting smoking	Yes	88	50	138
	No	49	14	63

IV. DISCUSSION

The result of this study reveals that the prevalence of cigarette smoking among students was found 68% it is higher when compared with previous studies conducted by Al-Haqwiet *al.*, (2010); Hoda and Ali, (2014) they were stated that in Saudi Arabia, the prevalence of smoking is approximately 21% among the general adult population and 25% among university students. Also, Bassiony, (2009) reported that a compendium of tobacco consumption surveys in Saudi Arabia during the past decade (1999-2009) has shown that the prevalence estimates of tobacco use among young adults of university age range from 2.4% -37%. Various surveys in both the developed and developing countries have reported the high prevalence of smoking habits among youth annually. 28.7% of smokers were aged at 18 – 24 years mainly college students. The prevalence of smoking among the students of medical universities is more than 20% (Panhahiet *al.*, 2016). Furthermore, tobacco consumption rates in Saudi Arabia have risen from 21.9% of males and 0.6% of females in 1996 to 37% of males and 6% of females in 2012 (AlQahtani, 2017). Higher prevalence has been associated with age, being male, single and highly educated (Felimban and Jarallah, 1994; Al-Yousef and Karim, 2001). Students indicated that tobacco is consumed to imitate a family member, to imitate friends, to express for their maturity, to relieve crises and because addiction. The findings of this study confirm similar reasons reported by Panhahiet *al.*, (2016) who stated that for different reasons such as emotional problems resulting from family separation, age condition, psychological pressures, absence of parental control, a sense of personal growth and independence, relative financial independence and presence of friends who smoke, they are at risk for smoking. In addition, Ertas, (2006) reported that the parental smoking has a strong influence on adolescent smoking at the initiation stage, student's smoking status is also associated with their perceptions of teacher smoking. adolescents who were receptive to tobacco industry advertising and promotions were more likely to progress towards smoking. Other important factor in smoking is easy access to cigarettes. Students had high awareness and knowledge of the hazards of smoking especially in relation to the significant role of smoking in lung cancer, mental disorders and cardiovascular diseases. Askarianet *al.*; Heydariet *al.*, (2013) they were mentioned that the smoking causes coronary heart diseases, blood vessel constriction, and the nicotine stimulates adrenal epinephrine secretion, which increases blood pressure and heart rate. In addition, smoking is a leading cause of respiratory diseases such as emphysema, bronchitis, pneumonia and chronic airway obstruction by damaging the airways and alveoli of the lungs. Risk of cancer in smokers is 23 times greater than non-smokers, Tobacco users are at risk for several other types of cancers such as carcinoma of the upper respiratory tract, cervix, throat, larynx, mouth, pancreas, kidney, bladder and acute myeloid leukemia. In this study students showed positive attitudes towards smoking and to quit in the future. People smoke on routine basis and face extreme difficulty if decision to quit was taken due to the physical and psychological addiction to nicotine, the main active ingredient in tobacco products (Abdulkareemet *al.*, 2018).

V. CONCLUSION

This study concluded that the prevalence of cigarette smoking among students was 68%. Majorities of the smoker from age group 21-23 (58%). The knowledge of students toward tobacco consumption is adequate about the hazards of these practices and positive attitude towards their future role to quit.

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