

Study on prevalence of cigarette smoking among a sample of students of technical institute of Babylon

Israa Dawood Salim

Abstract

Objective: To determine the prevalence of smoking among students, and to identify the reasons for smoking.

Method: The cross-sectional, descriptive and analytical study was conducted from April 1 to May 9, 2019, at the Technical Institute, Al-Furat University, Babylon, Iraq, and comprised students of either gender who were selected randomly. Data was collected through structured interviews using a questionnaire. Data was analysed using SPSS 24.

Results: Of the 147 subjects, 115(78.2%) were males and 32(21.8%) females. The largest age group was 19-28 years 125(85%), and 115(78.2%) hailed from rural areas. There were 78(53%) smokers; 73(63.5%) from among males and 5(15.6%) from among females. The most cited reason for smoking was feeling of enjoyment 40%. Smoking was significantly associated with age, gender as well as level and type of education ($p < 0.05$). The association of friends and family with the smoking habit was significant ($p < 0.05$). Among the smokers, 72(92.3%) were aware of the harmful effects of the habit ($p < 0.05$).

Conclusion: Cigarette smoking was found to be widespread among the students.

Keywords: Smoking, Family, Tobacco, Habits, Masculinity, Students, Smokers. **DOI:**

Introduction

Unfortunately, smoking is increasing in almost all developing countries. Cigarette smoking continues to pose a serious public health threat, killing about 6 million people each year and adding to the burden on healthcare systems and societies.¹ There is close association between cigarette smoking and most health problems in the form of early onset of deceases.²⁻⁴ While cigarette smoking has decreased in the developed world, it is increasing elsewhere at a rate of 3.4% per years.⁵ According to a report by the World Health Organisation (WHO), smoking is the biggest cause of preventable deaths worldwide, with an expected 1 billion smoking-related deaths reported by the end of the 21st century, and 10 million deaths annually feared by 2030. Anti-smoking programmes are of great importance in WHO strategies because smoking has a very serious impact on public health.^{6,7} Several attempts have been made to develop guidelines on smoking cessation through the participation the primary healthcare with smoking cessation services.⁸ In colleges, cigarette smoking has become an important public health issue.⁹ In recent years, the prevalence of smoking by university students has increased during the 2000s in developing countries

such as Iraq, but it has since levelled off and has seen a continuous and steady decline especially in high-income countries. Health education about the dangers of cigarette smoking is one of the most important reasons for this decline.^{4,10}

The current study was planned to determine the prevalence of smoking among students, to identify the relationship between cigarette smoking and socio-demographic factors, and reasons for smoking.

Subjects and Methods

The cross-sectional, descriptive and analytical study was conducted from April 1 to May 9, 2019, at the Technical Institute, Al-Furat University, Babylon, Babil Governorate, Iraq. After approval from the institutional ethics review committee, the sample was raised using simple random sampling technique. Those included were first and second grade students of either gender. Those not willing to participate were excluded.

After taking informed consent from all the subjects, data was collected using a predesigned questionnaire in Arabic, the local language, that was filled during face-to-face interviews. The first part of the questionnaire related to sociodemographic characteristics, like age, gender, area of residence, educational level, type of education and economic status. The second part included questions related to smoking habit, reasons and knowledge about its harmful effects.

Middle Technical University, Baghdad, IRAQ, Institute of Medical Technology
AL-Mansour.

Correspondence: Israa Dawood Salim email: mmm514490@gmail.com

Data was analysed using SPSS 24. Data was expressed in frequencies and percentages. $P < 0.05$ was considered significant.

Results

Among the 147 subjects, the largest age group was 19-28 years 125(85%) (Table 1), 115(78.2%) were males and 32(21.8%) were females (Table 2). There were 78(53%) smokers (Figure 1); 73(63.5%) from among male subjects and 5(15.6%) from among the female subjects. There were 115(78.2%) subjects with a rural background (Table 3), while education level and type were also noted (Tables 4-5). The most cited reason for smoking was feeling of enjoyment 40% (Figure 2).

Smoking was significantly associated with age, gender as well as level and type of education level and type ($p < 0.05$). The association of friends and family with the smoking

Table-1: The distribution of study sample according to age

Variable		Smoking		Total n (%)	p- value*
		Yes (smoker) n (%)	No (non-smoker) n (%)		
Age	Age ≤18 (Years)	4 (5.1)	2 (2.9)	6 (4.1)	0.198**
	19-29 (Years)	68 (87.2)	57 (82.6)	125 (85.0)	
	30≥(Years)	6 (7.7)	10 (14.5)	16 (10.9)	

* p-value calculator after inducing Age ≤18 (Years) and 19-29 (Years) into one.

** Fisher exact test

Table-2: The distribution of study sample according to gender

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Gender	Male	73 93.6%	42 60.9%	115 78.2%	0.000
	Female	5 6.4%	27 39.1%	32 21.8%	

Table-3: The distribution of study sample according to level of education

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Residence	Urban	16 20.5%	16 23.2%	32 21.8%	0.423*
	Rural	62 79.5%	53 76.8%	115 78.2%	

* Fisher exact test

Table-4: The distribution of study sample according to level of education

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Level of education	First stage	4 5.1%	1 1.4%	5 3.4%	0.003*
	Second stage	74 94.9%	68 98.6%	142 96.6%	

* Fisher exact test

Table-5: The distribution of study sample according to type of education

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Type of education	Medical	20 25.6%	34 49.3%	54 36.7%	0.003
	Non-medical	58 74.4%	35 50.7%	93 63.3%	

* Fisher exact test

Table-6: Distribution of the studied sample according to the impact of smokers on their friends.

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Have smoker friends	Yes	66 84.6%	34 49.3%	100 68.0%	0.000
	No	12 15.4%	35 50.7%	47 32.0%	

Table-7: Distribution of the studied sample according to the impact of smokers on their family members.

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Have smoker family members	Yes	44 56.4%	53 76.8%	97 66.0%	0.007
	No	34 43.6%	16 23.2%	50 34.0%	

Table-8: knowledge of the studied sample regarding the harmful effects of smoking.

Variable		Smoking		Total n (%)	p- value*
		Yes	No		
Do you know the harmful effects of smoking	Yes	72 92.3%	39 56.5%	111 75.5%	0.000
	No	6 7.7%	6 43.5%	30 24.5%	

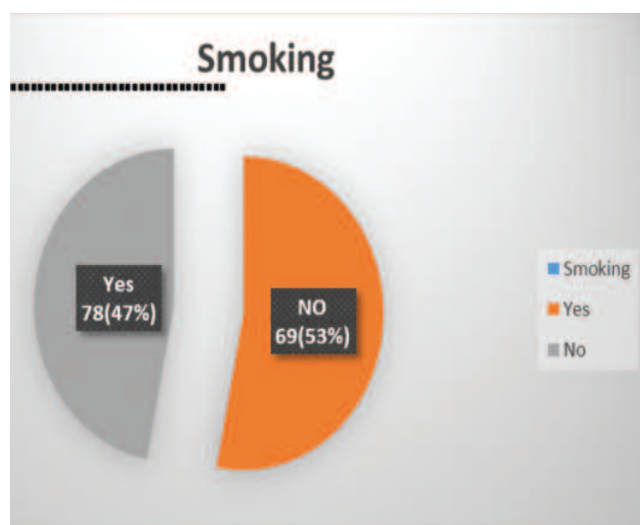


Figure 1: The distribution of study sample according to smokers and non-

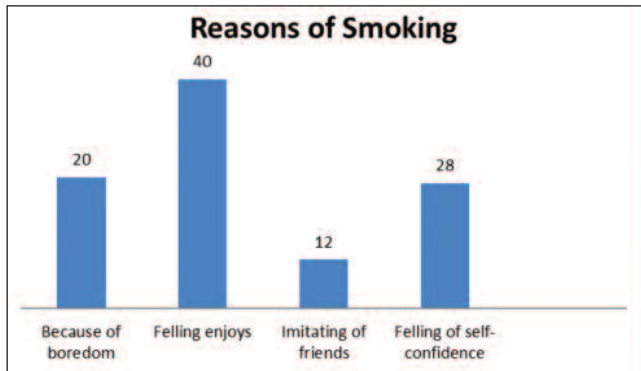


Figure 2: Distribution of the studied sample according to reasons for smoking.

habit was significant ($p < 0.05$) (Tables 6-7). Among the smokers, 72(92.3%) were aware of the harmful effects of the habit ($p < 0.05$) (Table 8).

Discussion

Although the harms of smoking are well known, it is still common among college students. In the current study, 53% of subjects were smokers, which was consistent with a study done in Lebanon.¹¹

Age was significantly associated with smoking in the current study, which is probably because boys growing up tend to have the desire to highlight their masculinity.

Most of the smokers in the current study were studying management, law and engineering, while students in medical or allied departments were less likely to smoke, which was consistent with earlier studies.^{12,11}

The influence of friends and family members on smoking habit was confirmed in the current study, as most smokers acquired the habit in the company of a friend 66(85%) or a family member 44(56%). This has been reported by studies done in other countries as well.¹³⁻¹⁵

The most common reason given by the students for smoking were their perceived feeling of enjoyment and expression of masculinity. Another reason cited was pleasure and relief from the pressures of life and boredom. This finding was supported by earlier reports.¹⁶ Regarding smokers' knowledge of the harmful effects of smoking, most of the students were aware of the association of smoking with various diseases. The knowledge of first-year students of medicine or allied disciplines related to smoking-related diseases was very poor 4(5.1%). This was consistent with a study done in Sudan.¹³

Conclusion

Cigarette smoking was found to be widespread among the students.

Limitations: The current study has limitations as the sample size was not calculated due to time constraints. All

students were present during the study and were allowed to participate.

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References

- World Health Organization (WHO). WHO report on the global tobacco epidemic, 2015: raising taxes on tobacco. Geneva, Switzerland: WHO Press; 2015. [Online] 2015 [Cited 2022 July 20]. Available from URL: <https://apps.who.int/iris/handle/10665/178574>
- Dhala A, Pinsker K, Prezant DJ. Respiratory health consequences of environmental tobacco smoke. *Med Clin North Am* 2004;88:1535-52, xi. doi: 10.1016/j.mcna.2004.06.005.
- Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. *BMJ* 2004;328:1519. doi: 10.1136/bmj.38142.554479.AE.
- Ezzati M, Lopez AD. Estimates of global mortality attributable to smoking in 2000. *Lancet* 2003;362:847-52. doi: 10.1016/S0140-6736(03)14338-3.
- Crofton J, Simpson D. Tobacco: A global threat. London (UK): Macmillan; 2002.
- Boutayeb A, Boutayeb S. The burden of non communicable diseases in developing countries. *Int J Equity Health* 2005;4:2. doi: 10.1186/1475-9276-4-2.
- World Health Organization (WHO). WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package. Geneva, Switzerland: WHO Press; 2008. [Online] 2008 [Cited 2022 July 20]. Available from URL: <https://apps.who.int/iris/handle/10665/43818>
- World Health Organization (WHO). Tobacco or health: A global status report. Geneva, Switzerland: WHO Press; 1997. [Online] 2008 [Cited 2022 July 20]. Available from URL: <https://apps.who.int/iris/handle/10665/41922>
- Ministry of Health Bahrain. National action plan for prevention and control of non communicable diseases in the kingdom of Bahrain: Integrated framework for Action. Manama, Bahrain: Ministry of Health Bahrain; 2005.
- Doll R, Peto R, Boreham J, Sutherland I. Mortality from cancer in relation to smoking: 50 years observations on British doctors. *Br J Cancer* 2005;92:426-9. doi: 10.1038/sj.bjc.6602359.
- Khan FM, Husain SJ, Laeeq A, Awais A, Hussain SF, Khan JA. Smoking prevalence, knowledge and attitudes among medical students in Karachi, Pakistan. *East Mediterr Health J* 2005;11:952-8.
- Chidiac A, Tamim H, Kanso M, Tfayli A. Smoking among Lebanese medical students: Prevalence and attitudes. *Ann Thorac Med* 2016;11:183-90. doi: 10.4103/1817-1737.185757.
- Mbatchou Ngahane BH, Atangana Ekobo H, Kuaban C. Prevalence and determinants of cigarette smoking among college students: a cross-sectional study in Douala, Cameroon. *Arch Public Health* 2015;73:e47. doi: 10.1186/s13690-015-0100-1.
- Elamin OE, Elamin SE, Dafalla BA, El-Amin ME, Elsiddig AA. Cigarette smoking among medical students in The National Ribat University, Sudan. *Sudan J Paediatr* 2013;13:45-51.
- Singh VV, Singh Z, Banerjee A, Basannar DR. Determinants of Smoking Habit among Medical Students. *Med J Armed Forces India* 2003;59:209-11. doi: 10.1016/S0377-1237(03)80008-4.