The prevalence of smoking among male students of Majmaah University, KSA

Saad G. Al-Ghaneem a, * and Osama S. Al-Nefisah b

a Research Department, College of Medicine, Majmaah University, Majmaah City, KSA
b College of Medicine, Imam Muhammad Ibn Saud Islamic University, KSA

Received 8 December 2015; revised 27 January 2016; accepted 28 January 2016; Available online 3 March 2016

Abstract

Objectives: The objective of this study was to determine the prevalence of tobacco smoking among male students of Majmaah University, KSA. The study also aimed to record the pattern of tobacco use and determine the social factors that influence tobacco smoking.

Methods: In this cross-sectional study, 23,424 male students from three faculties of Majmaah University were enrolled and registered to participate in a survey-based research study. We randomly selected the faculties of Applied Sciences, Education, and Business Administration for inclusion. A semi-structured questionnaire was administered to the sample, and the Statistical Package for Social Science (SPSS) was used for data analysis.

Results: The prevalence of smokers among male students was 30.4%. The majority of tobacco smokers (70.7%) used cigarettes, and most (41.3%) consumed between 10 and 20 cigarettes per day. The majority of smokers started smoking during secondary school. The results showed that 39% of students had attempted to quit smoking once or twice, while 28.2% never tried to quit smoking. Most (73.4%) of the students spent less than 500 Saudi Riyals (SR) on smoking every month.

Conclusion: This study has shown that the prevalence of smoking among male students at Majmaah University is higher than the prevalence of smoking reported by other studies in KSA. Most students had previously tried to quit smoking, which is a finding that indicates that healthcare agencies should introduce new smoking cessation campaigns and raise awareness about non-smoking attitudes in schools and universities.

Keywords: Majmaah University; Saudi; Smoking prevalence; Tobacco; University students
Introduction

Smoking has been identified as the single most important cause of preventable morbidity and premature death. Although many of the adverse health effects of tobacco occur later in life, smoking leads to health complications in young people as well. Smoking tobacco is also associated with other high-risk behaviours among young people, including abuse of other drugs, fighting and high-risk sexual behaviour. Each day, nearly 4800 adolescents smoke their first cigarette; of these, approximately 2000 will become regular smokers. Smoking-related health problems are a function of smoking duration (number of years smoking) and intensity (number of cigarettes/day). Most adult smokers began to smoke or had already become addicted before 18 years of age. While many adolescents want to quit smoking, only a small number of them succeed. Indeed, there has been a dramatic increase over the past decade in the number of college-age smokers. Several studies have reported that the prevalence of smoking increases from the first to final years among university students, underlining the importance of targeting anti-smoking activities to the early university years. For instance, students who enter college as non-smokers are 40% less likely to begin smoking if they live in a smoke-free campus. With regard to Arab countries in particular, the World Health Organization has reported widely different prevalence rates of smoking among young people: 7% in Oman, 18% in Kuwait, 23% in Iraq, 25% in KSA and Jordan, 31% in Syrian Arab Republic, 43% in Yemen and 53% in Lebanon. However, the trend and pattern of smoking as well as the cessation rate, especially among college university students, are largely unknown in many of these countries, including KSA. One study estimated the prevalence of active smoking among male medical students at King Saud University to be approximately 13%. The objectives of the current study, therefore, were to determine the prevalence of tobacco smoking among male students at Majmaah University in KSA, verify the pattern of tobacco use and determine the social factors that affect smoking.

Materials and Methods

This was a cross-sectional and institutional—based study conducted at Majmaah University located in Majmaah city, which is the capital of Majmaah province. Majmaah is located 180 km north of Riyadh, the capital city of KSA. The study population included 23,424 male university students located 180 km north of Riyadh, the capital city of KSA. Majmaah is the capital of Majmaah province. Majmaah University. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
smoking in secondary school, intermediate school and the university, respectively. The percentage that started in primary school and kindergarten was 1.7%.

A majority of the students who smoke (n = 117, 39.1%) had tried to quit smoking once or twice, while a smaller proportion (n = 99, 32.8%) had tried 3 times or more. Eighty-five students (28.2%) never tried to quit smoking. With regard to monthly financial expenditures on tobacco, a majority of smokers (73.4%) spend less than 500 Saudi Riyals (SR) (equivalent to $133). Fewer (23.3%) spend 500–1000 SR ($133–267), and a small proportion (2.0%) spend more than 1000 SR monthly ($267), as shown in Table 2.

### Discussion

The prevalence of smoking in the sample was 30.4%. This prevalence is higher than the prevalence rate of 27.8% reported in 2014 among dental students at King Saud University, KSA. In addition, that number is higher than the 24.8% prevalence rate among male medical students in the western region of KSA and the 17.6% rate among medical students at King Fahad Medical City in Riyadh, KSA. This finding is also higher than the findings of a study conducted among students of Malaysian University, which revealed a prevalence rate of 29%. On the other hand, the prevalence rate in this sample is lower compared to findings from a study of smoking among Jordan University students that showed an overall prevalence of 50.2%. Our prevalence rate in this sample is also lower than the 37% prevalence rate of smoking among secondary school students in Jeddah. Most smokers were from urban rather than rural areas, but the relationship between tobacco smoking and residence was not significant, contradicting a previous study that showed a significant difference in smoking prevalence between urban and rural areas. In the present study, there was a significant association between the different colleges and smoking (p = 0.041). Specifically, we found the highest prevalence of smokers from the College of Education (n = 88, 33.2%), followed by Business Administration (n = 188, 30.8%). The College of Applied Sciences showed the lowest smoking prevalence (n = 20, 19.8%). This finding is in line with another study among applied medical science students at King Saud University, KSA. The primary smoking agent among the smokers in our sample was cigarettes (n = 212, 70.7%), followed by water pipes (n = 82, 27.3%) and cigars (n = 6, 2.0%). While this finding is consistent with another study conducted in KSA, it contradicts another study conducted at King Saud University, which found that most smokers used a water pipe. This may represent a growing trend and present-day popularity in using water pipes. Our results also showed that the number of cigarettes used per day was medium (11 to 20). This carries a high risk for smokers because smoking tobacco one to four times daily carries a risk of 2.74 dying of ischemic heart disease and 1.14 from lung cancer compared to nonsmokers. Most of the smokers in our sample began smoking in secondary school. This finding is inconsistent with the results from a national survey of the general public in the kingdom that showed that initiation of tobacco smoking was more common around the age of nineteen years. At such an age, students are expected to be in the college.

We found that the majority (71.8%) of student smokers had previously tried to quit smoking once or twice; however, more than one-quarter of the students had never tried to quit smoking tobacco. This finding is higher than a result from cessation trials among students at King Faisal University, Al Hassa, KSA and secondary school students in Jeddah, which showed that 60% and 63.2%, respectively, of the smokers there had tried to quit smoking.

### Limitations of the study

A limitation of this study arises from the notion that some students may not disclose their smoking status even though they were told that their data would be kept confidential.

### Conclusion

The prevalence of smoking among male students at Majmaah University is high. Most of the students are...
moderate smokers and initiated smoking during secondary school. A majority of students had tried to quit smoking at least once; this finding may be a basis on which to develop cessation programs, raising awareness and reinforcing non-smoking attitudes in area schools and universities.

Recommendations

1. Arrange yearly smoking campaigns on the campus to increase the awareness of smoking.
2. Increase the number of cessation smoking clinics at the university.
3. Help smokers cope with the psychosocial parts of their lives.
4. Help smokers find ways to improve their financial status and income.

Conflict of interest

The authors have no conflict of interest to declare.

Authors’ contribution

SGA conceived and designed the study, conducted research, provided research materials, and collected and organized the data. EYM analyzed and interpreted data. MAA wrote initial and final draft of article, and provided logistic support. MRR finalized and corrected the interpretation of data. OSA collected the data as well and reviewed the final draft of article. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

Acknowledgements

We acknowledge Business and Administration, Applied Medical Sciences, the College of Education and their associated students for their cooperation in this work. We further thank the rector of Majmaah University, who supported this research. We would like to express our gratitude to Dr. Mohammed A. Al-Mansour, Dr. Elsadig Y. Mohamed, Dr. Moattar R. Rizvi, (the supervisors of our research) for their guidance and support in this research.

References

3. Regional Office for South East Asia. Health situation in the South-East Asia, South East Asia; 2002.

10. Faculty Senate. Special report of the health council concerning a tobacco free campus. Available at: http://www.umass.edu/senate/fs_docs/SEN_DOC_NO-03-014_TOBACCO_FREE.pdf; 2003 [accessed 10.11.09].

How to cite this article: Al-Ghanem SG, Al-Nefisah OS. The prevalence of smoking among male students of Majmaah University, KSA. Journal of Taibah University Medical Sciences 2016;11:175—178.