Research Article

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Smoking prevalence among male secondary school students in Makkah region

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ABSTRACT

Background: Many previous researches have been conducted in different regions of Saudi Arabia to identify the prevalence of smoking among the intermediate, secondary and high school but no studies have been conducted at Makka region. This study aimed to calculate smoking prevalence among the male secondary school students in Makka region and try to explore its causes.

Methods: This cross sectional study was conducted at three male secondary schools in Makka region selected randomly. The age of the students was ranged from 15 to 18 years. Data was collected by an Arabic questionnaire and was analysed by using the statistical package of social science (SPSS) version 16.

Results: It was found that 20.2% (83 students out of 411) were smokers, 77.1% of them were Saudis. Cigarette smoking was found to be the commonest type (44%) of smoking among them. About 20% of the smokers reported that they started smoking because they have smoker friends, while about 19% reported that they started smoking because they have one or two smokers in their family and about 10% reported they began smoking as they were seeing it as one sign of manhood. Unfortunately, only 65.1% of the smoker students attempted to quit smoking.

Conclusions: Despite the apparent awareness of the general public regarding the hazardous effects of smoking, the prevalence of smoking in Makkah secondary school students is relatively high. Extensive health education and religious orientation program is urgently needed to combat the expected future epidemic of smoking.

Keywords: Smoking prevalence, Secondary school students, Makkah, Saudi Arabia

INTRODUCTION

Smoking harms the body gradually and insidiously in different ways. Teenagers, in particular, may be overly complacent about smoking because they believe, incorrectly, that they can smoke for a few years and then quit, without suffering any long-term effects. It is estimated that there are about 1 billion smokers worldwide and in 2014 smokers consumed 5.8 trillion

cigarettes globally.² The World Health Organization (WHO) estimates that annually nearly 6 million people are killed by tobacco-related illnesses. If current trends continue, it is projected that by 2030, tobacco will be responsible for more than 8 million deaths each year and 80% of these premature deaths will be among people living in low and middle income countries.³ Globally, among middle-aged people tobacco use is the primary

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risk factor for premature death in men and the second (after high blood pressure) for women.²

Research shows that children in developing countries are also influenced by tobacco industry marketing. A 2013 study showed that the majority of young children in low-and middle-income countries could correctly identify cigarette brand logos, and nearly a third of children in India reported that they wanted to smoke when they grow up. 4.5

Most teenagers are aware of the hazards of smoking; however, few are worried about them. Moreover, most teenage smokers quickly become addicted to nicotine and experience high relapse rates and debilitating withdrawal symptoms when they attempt to break the habit.⁶

Many previous researches have been conducted in different regions of Saudi Arabia to identify the prevalence of cigarette smoking among the intermediate, secondary and high school but to our knowledge, no studies with this aim have been conducted among the secondary school at Makka region. Therefore, this study was conducted to calculate smoking prevalence among the secondary school students in Makka region and try to explore its causes.

METHODS

This study was a cross sectional one. The target population was the secondary school male students in Makka region whose age ranged from 15 to 18 year old. An Arabic questionnaire was created and revised from content validity by three experts in the field of Psychometric analysis.

Three secondary schools from different social classes were selected according to the simple random sample technique. After having permission from the school administrators, the questionnaire was administered to a total of 411 students (about 137 students from each school) under supervision of the authors and in absence of the classroom teachers to ensure confidentiality of the students. Students with age below 15 or above 18 years and those who were resident outside Makhha region were excluded from this study.

The data was analyzed by using the statistical package of social science (SPSS) version 16, Chicago. This study was approved by the biomedical research ethics committee at the Faculty of medicine, King Abdulaziz University, Jeddah, Saudi Arabia.

RESULTS

The data were collected from 411 students, whose ages ranged from 15 to 18 years. A total of 83 students (20.2%) were smokers and 328 students (79.8%) were non-smokers (Figure 1). Among those who were

smoking, 64 (77.1%) were Saudis and 19 (22.9%) were not (Figure 2).

Cigarette smoking was found to be the commonest type of smoking among smokers in the target group. It constituted about 44% (36 out of 411) of the total number of smokers. Narghile came after cigarette smoking and it constituted about 34% (28 students out of 411) of the smokers. About 23 of the smokers were smoking Narghile and cigarettes together (19 students out of 411) (Figure 3).

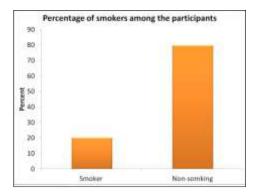


Figure 1: Percentage of smokers among the participants.

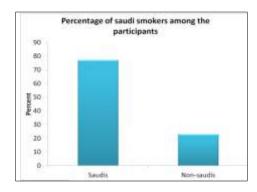


Figure 2: Percentage of the Saudi smokers among the participants.

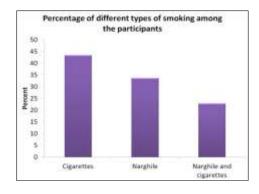


Figure 3: Percentage of different types of smoking among the participants.

Students gave a wide variety of answers when they were asked why they began smoking for the first time. About

20% of the smokers (17 out of 83) reported that they started smoking because they have smoker friends, while about 19% of the smokers (16 out of 83) reported that they started smoking because they have one or two smokers in their family. On the other hand, about 10% of the smokers (8 out of 83) reported they began smoking as they were seeing it as one sign of manhood while and the remaining smokers (42 out of 83) reported that they have other unlisted cause to start smoking (Figure 4).

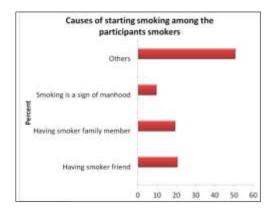


Figure 4: Causes of starting smoking among the participants smokers.

It was observed that 66.3% of the smokers (55 out of 83) reported that other members of their families were also smokers. Unfortunately, only 65.1% of the smoker students (54 out of 83) attempted to quit smoking, while 34.9% of them (29 out of 83) did not attempt to do so.

DISCUSSION

Smoking continues to pose a significant problem among adolescents. This study aimed to identify the prevalence of smoking among the male secondary school students in Makka region and it is calculated to be 20.2%. This figure is considered higher when compared to 17% that was reported by Al-Faris in Riyadh. However, this difference could be attributed to many factors. First, the age group included in the study conducted at Riyadh was range between (12-18 years) which is somewhat lower that the age group included in this study. Adding to that the study conducted at Riyadh was 20 years prior to this study, presenting the risk of influence from external social, political, and economic factors not consistent between the two studies. Not only in Riyadh, but also in Madinah, the prevalence of cigarette smoking among the intermediate and secondary schools students was 15.17% as was stated by Al-Zalabani et al.8 Religion was considered the main factor against smoking among the adolescent non-smokers and health consideration among college students Almutairi.9

It is also quite possible that the prevalence of smoking amongst Makkah male secondary school students may be even lower than what was reported in other studies conducted in other area in Saudi Arabia and this could be due to pressure from social, cultural, and religious factors. The prevalence of smoking among secondary school students in Al-Hassa was 21.7% as was estimated by Amin et al¹⁰ in Jeddah, the prevalence of smoking among male secondary school students was 37% as was recorded by Fida and Ismail.¹¹

These results suggest that the influence of friends and family is often a key factor in the decision to begin smoking. The influence of friends and family is not surprising, and is consistent with other studies which have found that young people take up smoking largely due to peer pressure. Amin et al, found that smoking of close relatives and friends were statistically significant determinants of current smoking status among secondary school students in Al-Hassa. The peer pressure from smoker friends was among the most common reasons given for smoking among male secondary school students in Jeddah as it was stated that smoking friends and parents play an important role in the increased risk of smoking in the adolescents. 9,11-13

CONCLUSION

This study showed a relatively high prevalence of smoking in Makkah secondary school students. Despite the apparent awareness of the general public regarding the hazardous effects of smoking, adolescents and young adults begin smoking at a young age. The authors believe that health education and religious orientation should be the cornerstones for any organized tobacco control programs, which are urgently needed in order to combat the expected future epidemic of smoking-related health problems.

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