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Smoking Habits of Students in the Faculty of Medicine and Allied Science, King Abdulaziz University

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ABSTACT. Smoking is one of the major health hazards. The objective of this study is to establish a baseline data on the smoking habits of students of the Faculty of Medicine and Allied Sciences, King Abdulaziz University, Jeddah, Saudi Arabia. The participating subjects were students of the Faculty of Medicine and Allied Sciences with the range of 18 to 26 years old. An experimental design with prestructured questionnaire, and simple random sampling was administered to 226 participants. Out of 226 respondents, 58 (25.6%) were current smokers. Of those that indicated that they were currently smoking 53 (23.5%) were male and 5 (2.2%) were female. The 19-24 years old age group exhibited the highest prevalence of smoking. Most of the respondents were cigarette smokers and appeared to be light smokers consuming less than 10 cigarettes per day. Also, moassel and shisha smokers were light smokers consuming less than 7 moassel and shisha per week. It was found that 82,8% of the current smokers are aware of the hazards of smoking and 89.6% of them expressed a desire to cease smoking. The conclusion was that smoking is prevalent among one quarter of the students of the Faculty of Medicine and Allied Sciences. Smoking habits were significantly higher among males ($P < 0.05$) especially those over 21 years of age and whose fathers are smokers ($P < 0.01$).

Keywords. Smoking, Health hazards, KAAU students

Introduction

Cigarette smoking is one of the major health hazard etiologies[1-11], covering a wide range of preventable morbidity and mortality[12-24]. Cigarette smoking and its con-

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sequences on health, such as lung cancer, carcinoma of the oral cavity, and chronic bronchitis are all well documented[15-19]. Smoking is one of the major public health problems in Saudi Arabia[1-10] and it is increasing at an alarming rate[6, 9, 11]. Based on statistics from the Saudi customs office, the Kingdom of Saudi Arabia imported 4.5 million kg of tobacco in 1972, 5.5 million kg of tobacco in 1975, 27 million kg of tobacco in 1977, and 36.5 million kg of tobacco in 1981[20]. No official figures were available beyond 1981. this indicates that tobacco consumption and its subsequent cost increased rapidly.

In the western world, anti-smoking campaigns and smoking control programs are in full force. Limitation on advertising, prevalence of non-smoking zones in public areas and high cigarette prices acted as a powerful restriction on smoking. There is also an extensive attempt to introduce public health education messages into all levels of education. This study was done to establish a baseline data on the smoking habits of students of the Faculty of Medicine and Allied Sciences and to ascertain related demographic and socioeconomic parameters associated with those students.

Methods

The subjects consisted of 226 male and female students and were randomly selected from the Departments of Medicine, Medicine Technology, and Nursing students at the Faculty of Medicine and Allied Sciences, King Abdulaziz University, Jeddah, Saudi Arabia. The subjects ranged between 18-26 years of age. A 24-item structured questionnaire was developed including items such as age, sex, marital status, grade level, religious beliefs, socioeconomic status, parents educational levels, exercise behavior, use of tobacco, frequency of smoking, type of smoking, the idea of quitting, reasons to start smoking, the idea of smoking came from, smoking habits of parents and siblings, and the effect of smoking on health (Appendix 1). The preliminary questionnaire was tested among 25 students in a pilot study and revised by eliminating confusing items. The questionnaires were administered by a panel of trained personnel for administrating and collecting data from 250 participants. Of these, 226 (90.4%) completed questionnaires were returned and the remaining 24 (9.6%) questionnaires were eliminated due to incomplete reasons. The participant smoking status was defined as current smoker and non-smoker. Smokers were defined as those persons who are currently smoking at least one cigarette, moassel, or shisha per day.

Data was entered into an Excel spreadsheet and we analyzed using SPSS statistical software. ANOVA methods were used to test for hypotheses of significant differece where appropriate.

Results

Table 1 shows the distribution of demographic as well as socioeconomic parameters. Of the 226 participants, 58 (25.7%) were current smokers, 53 (23.5%) were males and

APPENDIX 1. Questionnaire

1. Sex: Male Female
2. Age: _____ years
3. Marital status: Single Married Divorced
4. Level in faculty: 1 2 3 4 5 6
5. Religious beliefs: Strongly religious 2 3 4 not at all
6. Family income: < 5,000 5,000 - 10,000 > 10,000
7. Highest educational degrees for your father:
   illiterate primary intermediate secondary college post-graduate
8. Highest educational degrees for your mother:
   illiterate primary intermediate secondary college post-graduate
9. Regular exercise?
   Yes No
10. Do you use tobacco? Yes No (go to question 21)
11. How do you use tobacco? Smoking Chewing
12. Do you smoke:
    daily 3-5 times/week once a week twice a month
13. If you smoke cigarettes, how many do you smoke per day?
    1-10 11-20 21-30 31-40 more than 40
14. If you smoke moassel, how many times per week?
    1-7 8-14 15 or more
15. If you smoke shisha, how many times per week?
    1-7 8-14 15 or more
16. Have you chewed tobacco?
    Yes No
17. What was your age when you started smoking?
    _____ years
18. Have you thought about quitting?
    Yes No
19. What is the most appropriate reason you started smoking? (Choose one only)
    a. to try it and then it bacame a habit
    b. to cope with friends
    c. to do like father or mother
    d. because of social, financial or psychological problems
    e. Others (specify) _____
20. Where have you learned about smoking for the first time?
    a. school
    b. home
    c. media
    d. Other_____
21. Does your father smoke?
    Yes No
22. Does your mother smoke?
    Yes No
23. Does your brother/sister smoke?
    Yes No
24. Do you think that smoking is bad for your health?
    a. Strongly agree
    b. Agree
    c. Disagree
    d. No comment

TABLE 1. Demographic breakdown by smoking status.

Breakdown	Current Smokers		Non Smokers	
	Number	Percentage	Number	Percentage
Gender				
Male	53	91.4	107	63.7
Female	5	8.6	61	36.3
Total	58	100	168	100
Significance	*P < 0.05*			
Age				
18 or less	0	0	15	8.9
19-21	28	48.3	96	57.2
22-24	28	48.3	55	32.7
25 or more	2	3.4	2	1.2
Significance	*P < 0.05*			
Socioeconomic status				
Upper Class	33	56.9	86	51.2
Middle Class	20	34.5	60	35.7
Lower Class	5	8.6	22	13.1
Significance	None			
Father's Education				
Illiterate	1	1.7	8	4.8
Elementary	9	15.5	15	8.9
Intermediate	7	12.1	14	8.3
High School	10	17.2	31	18.5
College	20	34.5	57	33.9
Post Graduate	11	19.0	43	25.6
Significance	None			
Mother's Education				
Illiterate	8	13.8	20	11.9
Elementary	11	19.0	23	13.7
Intermediate	7	12.1	26	15.5
High School	12	20.7	38	22.6
College	17	29.3	45	26.8
Post Graduate	3	5.1	16	9.5
Significance	None			
Parents/siblings smoking behavior				
Father smokes	28	48.3	49	29.2
Mother smokes	6	10.3	11	6.6
Brother or sister smokes	20	34.5	39	23.2
Significance	*P < 0.01*			
Religious Beliefs				
Low	14	36.8	24	63.2
Average	34	27.6	89	72.4
High	10	15.4	55	84.6
Significance	*P < 0.05*			
Regular Exercise				
Yes	19	32.8	65	38.7
No	39	67.2	103	61.3
Significance	None			

5 (2.2%) were females. The participants were broken down into four major groups: less than 19 years of age (6.9%) between 19-21 years of age (54.9%) between 22-24 years of age (36.7%), and 25 years or older (1.8%). Of the current smokers, the 19-21 and 22-24 age groups exhibited the greatest number of cigarettes smoked per day ($P < 0.05$). Smoking habits were significantly higher among males ($P < 0.01$) especially those whose fathers smoke ($P < 0.01$). Smoking habits were not associated with mothers nor with siblings smoking behaviors. Also, smoking behavior was not associated with regular exercise. Most of the respondents appeared to be light smokers. Table 2 shows the results of the responses to cigarette, moassel, and shisha consumption. Of those that smoked cigarettes, 47% smoked less than 10 cigarettes per day 27% smoked 11-20 cigarettes per day, 19% smoked 21-30 cigarettes per day, 3% smoked 31-40 cigarettes per day, and 5% smoked more than 40 cigarettes per day. Of those that smoked moassel, 84% smoked less than 8 moassel per week, 10% smoked 8-14 moassel per week, and 6% smoked more than 15 moassel per week. Of those that smoked shisha, 89% smoked less than 8 shisha per week, and 11% smoked 8-14 shisha per week.

TABLE 2. Distribution of smoking behavior by age.

Type	Number	Percentage
Cigarettes (per day)		
< 10	17	47
11-20	10	27
21-30	7	19
31-40	1	3
> 40	2	5
Moassel (per week)		
< 8	25	84
8-14	3	10
> 14	2	6
Shisha (per week)		
< 8	16	89
8-14	2	11
> 14	0	0

When asked of their awareness of health hazards of smoking, 82.8% of the current smokers answered that they were aware of the hazards and 89.6% of them expressed desire to cease smoking (Table 3).

TABLE 3. Responses of smokers to specific questions.

Questions	Number	Percentage
Do you think that smoking is harmful to your health?		
Strongly Agree	40	69.0
Slightly Agree	8	13.8
Disagree	1	1.7
No Comment	9	15.5
Have you ever thought about quitting smoking?		
Yes	43	74.1
No	15	25.9

The proportion of smokers significantly declined with increase in religious beliefs and knowledge of the negative effect of smoking ($P < 0.05$).

Discussion

The prevalence of smoking was addressed in many international studies[22-25]. Our results indicate a smoking rate of 26% among students at the Faculty of Medicine and Allied Sciences, King Abdulaziz University, Jeddah, Saudi Arabia. Comparison of the current rate of smokers and previous rates is not applicable since this is the first study on such an issue at the Faculty of Medicine and Allied Sciences in Jeddah. In 2000, Hisham[26] reported a smoking rate of 29% among students of Applied Medical Sciences in Riyadh. In a similar study, Saed and his co-workers[8] reported a smoking rate of 38% among male and 16% among female health care workers.

Of the 26% who are currently smoking, 83% reported that they were aware of the health hazards of smoking and 74% indicated that they have thoughts of quitting smoking. Social, finanical and psychological problems were the reason to start smoking in 38% of current smokers while 26% that they started smoking to try it and then it became a habit.

This study and other similar studies reemphasizes the imortance of invesing in antismoking programs in every health care providing institute. It also indicates the importance of establishing an applicable antismoking campaign especially among health care students who will become a role model for many people in the near future. Ideally, health professionals should play an important role in promoting healthy lifestyles and it is critical that they begin with quitting smoking themselves. As a conclusion, smoking is prevalent among students of the Faculty of Medicine and Allied Sciences. Smoking habits were significantly higher among males ($P < 0.05$) especially those over 21 years of age and whose fathers are smokers ($P < 0.01$). Religious beliefs play a significant role in contolling the habit of smoking ($P < 0.05$). Further investigations may be needed in the future to follow up the habit of smoking among students and to assess the smoking control program that will be applied in the Faculty of Medicine in the near future.

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عادة التدخين لدى طلاب وطالبات كلية الطب والعلوم الطبية بجامعة الملك عبد العزيز

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جـــدة – المملكة العربية السعودية

المستخلص. يعد التدخين من أهم العوامل المسببة للأمراض. والهدف من الدراسة هو إيجاد معلومات شاملة عن عادة التدخين بين طلبة وطالبات كلية الطب والعلوم الطبية بجامعة الملك عبد العزيز بجدة. وقد تم اختيار المشاركين عشوائيا وتراوحت أعمارهم بين (١٨، ٢٦) سنة. وقد تم إعداد استبيان وتم توزيعه على ٢٢٦ طالب و طالبة. وقد اتضح أن ٥٨ (٦ , ٢٥٪) من المدخنين منهم ٥٣ (٥ , ٢٣٪) من الذكور و ٥ (٢ , ٢٪) من ا لإناث. ووجد أن الذين تقع أعمارهم بين ١٩-٢٤ سنة هم أغلب المدخنين. كما وجد أن غالبية المدخنين يدخنون السجائر وغالبيتهم يدخنون أقل من ١٠ سجائر يوميا . وجد أيضا أن مدخنى المعسل والشيشة يدخنون أقل من ٨ مرات أسبوعيا. ووجد أن ٨ , ٨٢٪ من المدخنين على علم بأضرار التدخين كما أوضح ٦ , ٨٩٪ منهم محاولاتهم للاقلاع عنه. وخلص البحث إلى أن ربع طلاب الكلية من المدخنين وأن عادة التدخين أكثر شيوعا بين الذكور خاصة الذين تزيد أعمارهم عن٢١ سنة والذين أبائهم من المدخنين.