Papers

Cigarette Smoking Habits among Qatari Population

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Abstract

Objectives: *The aim of this study is to estimate the prevalence of smoking habits, and explore their attitudes toward cigarette smoking among Qatari population.*

Design: *A cross sectional community based survey conducted.*

Setting: *The Capital City Doha, including urban and rural areas.*

Subjects: *To select study subjects, we used World Health Organization questionnaire following the multi-stage stratified cluster sampling technique procedures. 3000 subjects aged 15 years and above selected randomly. The questionnaire included personal, social, educational characteristics of the respondents, smoking status, duration of smoking and daily cigarette consumption. A total of 2444 (81.5%) gave consent for the study.*

Main outcome measures: Association between current smoking and socio-demographic variables using univariate and multivariate analysis.

Results: *The prevalence of smoking among the studied group was 36.5% and the rest 63.5% denied that they have ever smoked in their lives. 71.9% reported friends as the first source of their cigarette. The response to the question " what do you believe makes people smoke?". 49% of the smokers claim that friend's effects is the most important factor while 45% social acceptance comes as the second most important factor. Overall in the present study, results revealed that forbidden smoking in public places and stopping advertisement are the best ways of prevention.*

Conclusion: *Well organized anti-smoking programs are needed in the Qatari community. One third of the population are already regular smoker as concluded from this study. A percentage which is liable to increase as they are starting school, university, work and academic carrier, but this percentage can be decreased if we know and admit that we have a problem and react adequately and effectively.*

Key Words:

Cigarette smoking; health education; teenage; adult; males, females; psychological and socio-economic factors; Qatar.

Introduction

The effects of smoking constitute the single largest cause of preventable disease and death throughout the world.[1] A lot of data from many parts of the world showed that the death rate for smokers is greater than for nonsmokers whatever the listed cause of death.[2]It was suggested that the best way to discourage smoking is by approaching children and adolescents since most people start smoking in their teenage years. Similarly children and adolescents should reject smoking if it is offered to them but first they must recognize that it is harmful to health.[3-4] Of the 54 million Americans who smoke 90% began smoking as a teenager.[5] Approximately 1 million young Americans each year become regular smokers in spite of the legal proscriptions on the purchase of tobacco products in 43 of the states but, in Britain[2] nearly one million people give up smoking every year. There is a substantial decline in smoking prevalence in the developed countries but the opposite is true in the developing countries.[6,7] This can be due to the lack of proper educational programs and the lack of effective measures for controlling such epidemic. Despite the decline, nearly one in every five deaths in the United States is caused by smoking.[1] The harmful effects of smoking not only affect the smoker but also the non-smoker. Children of parents who smoke have a higher frequency of respiratory infections and decreasing lung capacity as the lung matures.[8]

Most studies from Britain and the USA have shown that at the age of 16 years 25% of British boys admit to being regular smokers.[9] From the neighboring countries the prevalence of smoking was measured in, Bahrain 26.4%,[10] in Saudi Arabia where the smoking prevalence was vary among high school children 7.8% and 37% in Saudi Arabia,[11-12] in Kuwait[13] 30%, in Jordan[14] 17%. Furthermore in Japan[15] 37%, in Greece[16] 22.3%, in Ireland[17] 16-21%, in Australia[18] 25%, in China[19] 14-23%. In the United Arab Emirates (UAE), although smoking as a health hazard is existing[20] and its effect is highly noticed by all physicians in practice in UAE.[21]

There are no nationwide studies on the prevalence of tobacco smoking having been performed in Qatar. The aim of this study is to estimate the prevalence of the smoking habits, and explore their attitudes toward cigarette smoking among Qatari population.

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Material and methods

This cross-sectional study by questionnaire was carried out to determine the habits, knowledge, attitudes, and the perception of smoking among the Qatari population aged 15 and above. The survey was conducted during a period from November 1999 to January 2000.

A self-administered questionnaire which is a modified version of standard World Health Organization[22] (WHO/SMO.1984) questionnaire for surveying smoking habits was used. A larger sample was selected for the study to ensure that the population under study was fully represented and that the sample was distributed among the health Districts proportionate to the size of the population in each district. The sample was selected using a multi-stage stratified cluster sampling method. Then, schools boys, University students, Ministry Offices, Primary Health Care Clinics, Hospital Clinics and other organizations were randomly selected by simple random sampling technique. To fulfil the requirement of the objectives the required sample size was estimated to be approximately 3,000 using the formula provided by Cochran.[23] The effective sample size was based on analysis of 2444 subjects, giving a response rate of 81.5%. The questionnaire included personal, social, educational characteristics of the respondents, smoking status, duration of smoking, and daily cigarette consumption. Current smoking was defined as smoking one or more cigarettes daily for six months or more before the survey.

The data were coded and entered into a computer and processed on an IBM-PC compatible computer using the Statistical Packages for Social Sciences [SPSS].[24] Chi-square and Fisher exact test analysis was performed to test for differences in proportions of categorical variables. One-way analysis of variance [ANOVA] was employed for comparison of several groups and to determine the presence of significant differences between groups. The level $p<0.05$ was considered as the cut-off value for significance.

Results

Of the 2444 subjects surveyed in the present study 84% were males and 16% were females. The prevalence of current smokers were 36.5%, and 63.5% were non-smokers.

Table 1 shows the socio-demographic characteristic of population studied. There were statistical significant differences between smokers and non-smoker with the respect of sex, age, occupation, marital status and smokers in family ($p<0.0001$).

Table 2 gives the first source of smoking. As can be seen from this table friends (71.9%) is the first source of initiating smoking cigarette habits.

Beliefs and attitudes:

Table 3 shows the response to the question "what do you believe makes people smoke?" 49% of the smokers claim that friends effects is the most important factor while 45% social acceptance comes as the second most

Characteristics	Never Smoked n= 1553 (63.5%)	Smoker n= 891 (36.5%)	p-value
Sex			
Males	1188 (57.9)	864 (42.1)	
Females	365 (93.1)	27 (6.9)	p<0.0001
Age in years			
<15	215(88.5)	28(11.5)	
15-20	341(71.9)	133(28.1)	
21-30	509(59.1)	352(40.9)	
31-40	305(55.8)	242(44.2)	p<0.0001
41-50	158(59.4)	108(40.6)	
>50	25(47.1)	28(52.9)	
Marital status			
Single	766(69.6)	335(30.4)	
Married	770(58.6)	544(41.4)	p<0.0001
Widows/divorce	17(58.6)	12(41.1)	
Occupational Status			
Government officer	800(58.4)	569(41.6)	
Sedentary	129(66.1)	66(33.9)	
Army/Police	55(40.2)	82(59.8)	p<0.0001
Student	514(77.1)	153(22.9)	
Not working	21(27.7)	55(72.3)	
Smokers in family			
Yes	329(28.7)	562(43.3)	
No	818(71.3)	735(56.7)	p<0.0001

Table 1. The socio-demographic characteristics of population studied.

Source	Smoker n = 891(%)	
Home	40	(4.5)
Friends	643	(71.9)
Myself	194	(21.7)
Others	14	(1.5)

Table 2. Source of the first cigarette smoking.

Reasons	Smoker n = 891(%)	
Enjoyment	394	(44.2)
Living with smoker	60	(6.7)
Friends effects	438	(49.1)
Due to stress	163	(18.3)
Social acceptance	400	(45)
Others	53	(5.9)

Table 3. Responce to "why you are smoking?"

Reasons	Never smoked n = 1553(%)	Smoker n=891(%)	p-value
Warning on cigarette pack	14.1	12.8	NS
Stop advertisment	51.6	34.9	p<0.0001
Forbidden smoke in public	54.6	39.8	p<0.0001.
Increase pricing	50	30.2	p<0.0001
Posters	34.1	25.4	p<0.0001
Mass media, radio, TV	34.3	26.6	NS
Health Education	42.9	30.9	p<0.0001

Table 4. The best way to stop smoking.
*Multiple choices.NS = Non-significant.

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quarters of the subjects the source of the first cigarette was friends and in 71.9% it was bought which may be shared also with friends. In Qatari's study nearly two-thirds of the studied group started smoking before the age of 15 years. In a study done in King Saud university in Saudi Arabia 36-41% of the smokers started before the age of 15 years.[3] Western studies show that early experimentation with cigarettes tends to increase the likelihood of smoking when older.[9,10,27]

Religion can be a very effective motive to stop smoking and can play a fundamental role in any anti-smoking campaign since Islam consider smoking unlawful and distasteful. Indeed, religion and effect on health were the main reasons for not smoking also both reasons in addition to not socially acceptable were the reasons for thinking about stopping smoking. This was the same as found in Saudi Arabia. On the other hand in a country like the UK it was found that 80-90% found smoking a waste of money[11] compared to only 23% in this study. This may be explained by the fact that Qatar has one of the highest per capita incomes in the world and the students are totally dependant on the allowance given by their family which is most of the time a generous one. So the price of a pack of cigarettes will not constitute for them that much waste.

But also there are the millions of dollars spent every year by the cigarette manufacturers on advertising and other promotional activities that encourage people to smoke.[28] The tobacco industry spends $72 million on advertising in Britain each year[4] and the relationship between advertising and the prevalence of smoking is well established e.g. in New Zealand banning advertising reduced consumption by 5.5%; in Canada by 4%; in Finland by 7% at least; and in Norway by 16%. Therefore, banning advertising is a strong weapon against the smoking epidemic,[20] and must be used in Qatar.

All of this in addition to the fact that smokers were less concerned about the effect of smoking on their health and that 39.8% of them strongly or slightly agree with enforcing laws against smoking indicate the lack of proper health education among this age group and the deficiency of effective measures in the community in general against smoking. The World Health Organization [WHO][7] has recently provided countries with guidelines for comprehensive national tobacco control programmes, these guidelines include health promotion activities, encouragement of smoking cessation, media advocacy, legislative measures and fiscal measures.

CONCLUSION:

Well organized anti-smoking programs are needed in the Qatari community. One third of the population are already regular smokers as concluded from this study. A percentage which is liable to increase as they start school, university, work and academic carrier, but this percentage can be decreased if we know and admit that we have a problem and react adequately and effectively.

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important factor.

Table 4 shows the best of way stopping smoking. Although it is clear from the table that forbidding smoking in public places, running clinics stop smoking and stopping advertisements are the best ways of prevention.

Discussion:

Cigarette smoking and Tobacco consumption have risen in the last few years by as much as 25% in the Middle East Region.[12] The problem in Qatar is not less than the rest of the world but we can say that it may be more since no action is there for limiting its progress. The prevalence among the studied group was 36.5%. But it is also increasing with age from 14.9% in 15-20 years or less to 39.5% in 21-30 years. This sudden increase can be explained by that they are feeling more of starting adulthood so they are practicing what they are thinking that it is part of being an adult in addition of their feeling of independence and that they are not under the control of their family.

Table 5 shows the prevalence of smoking in different Arabian Gulf Countries. It can be concluded the prevalence is so variable all over the neighboring Gulf States and we can say that the reported prevalence in the Qatar is comparable to some Gulf Countries.

Table 6 presents adult smoking prevalence in selected countries by gender. As it can be concluded the prevalence is so variable all over the world and we can say that the reported prevalence in Qatar is comparable to some countries e.g. Australia, Belgium, USA, France, Greece, Ireland, Netherland, Spain, Italy, Hong Kong, Finland, and Sweden.[2,18] This can be attributed to many factors e.g. the students in Western countries may not have the same degree of stigma if they say that they are smokers compared to Qatar, Bahrain,[10] UAE,[20] Kuwait,[13] Saudi Arabia[3,8,12] or Jordan[14] and therefore there will be less degree of under reporting. Another possibility that the consideration that smoking is part of being modern and liberated which is the case in Western countries, while in Arab countries in general smoking is unaccepted among the young. Therefore, the figure 36.5% constitutes the minimum that smoking prevalence among adult in the Qatar can be which is not a negligible figure.

Two important associations with smoking status were nationality and father's education which both may be related since most of the university degree graduates in Qatar are not Qatari nationals. The increased prevalence among them can be part of social permissiveness among the highly educated group, it can also be that they are too busy to keep a close eye on their children. On the other hand the less educated fathers may be more strict in regard to smoking. An important point is also to know the prevalence in the community in general and its relation with educational level because this can be part of imitating their fathers by taking them as a role model. This is supported by the fact that mother education has no significant effect on the student's smoking state.

Another detected risk factor - the high daily allowance. Having more money to spend is associated with increased likelihood of smoking and if he is a smoker the more he is receiving as an allowance the more likelihood of being a heavy smoker. This can be used in advising parents to limit their son's income in order to use the economic part to control the prevalence especially as it was found in this study that saving money was not of the factor which encourage students to stop smoking.

Country	Reference, Author & year	Population Age in years	Prevalence %
Barhain	10.Hamadeh & Musaiger 2000	above 15	26.4
Kuwait	13.Moody et al. 1996	18-20	30.0
Qatar Present study	Al-Mulla & Bener	above 15	36.5
Saudi	3.Bener 1987	above 15	36.0
Arabia	11.Siddiqui et al. 2001	above 15	34.4
UAE	20.Bener et al. 1999	above 16	23.0

Table 5. Adult smoking prevalence in Arabian Golf Countries.*

*The smoking prevalence was not available for Sultanate of Oman.

Country	Latest year which Data is available	men %	women %
Australia	1995	27	23
Bangladesh	1984	70	20
Belgium	1993	31	19
Canada	1994	31	29
China	1986	61	7
Denmark	1993	37	37
Finland	1994	27	19
France	1993	40	27
Greece	1994	46	28
Hong Kong	1990	29	3
India	1985	61	7
Indonesia	1986	52	4
Ireland	1993	29	28
Italy	1994	38	26
Japan	1994	59	15
Korea (Republic)	1990	68	7
Malaysia	1986	40	7
Netherlands	1994	36	36
New Zealand	1992	24	22
Norway	1994	36	36
Poland	1993	51	29
Portugal	1994	38	15
Russian Federation	1993	67	30
Singapore	1995	32	3
Spain	1993	48	25
Sweden	1994	22	24
Thailand	1995	49	4
United Kingdom	1996	29	28
United States	1993	28	22

Table 6. Adult smoking prevalence in selected countries by gender*

*Sources: http://www: smoking prevalence in Australia compared with selected countries and Lopez *et el.*[2]; *Hill* et al.[18]

The role of the family is also seen in that the existence of a smoking member of the family provides an important model in learning smoking behaviour and the child or the teenager in such family will have both the risk of the passive smoking and the higher risk of acquiring such behaviour. Most probably the parent here is the father since culturally, in Qatar female smoking is totally unaccepted and the percentage of smokers is expected to be very low among them. Children who are raised in a family where parents or other family members smoke are at greater risk of initiating smoking.[2] All of these suggest the importance of a familial approach to smoking prevention in young people.

Friend's role is a crucial one in influencing the smoking habits of the students. Most studies indicate that the source of the first cigarette is most often a friend.[11] The Qatari population based study showed that in nearly three-