

Factors of Smoking Among Saudi Youth in the Northern Border Region

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Abstract

Background: Smoking is the most important avoidable cause of premature morbidity and mortality in the world. The estimated annual death rate of 4.9 million people in 1999 is expected to rise to 10 million by the 2020s and 2030s, 7 million of which will occur in developing countries. **Objectives:** The present study aims to determine the factors of smoking among the Saudi youth in the Northern Border Region of the Kingdom of Saudi Arabia, besides studying the impact of Smoking on expenses, savings and smoker sensitivity to price.

Methods & Materials: Across-Sectional study was conducted of 1022 among the secondary schools students 656 for males, Northern Border University students 139 for males, Northern Border University students 153 for females and 74 for café visitors. The qualitative data was collected from focus group discussions and interviews.

Results: Results revealed that prevalence of smokers was 24.7%, 38.1%, 9.8% and 70.3% for the four groups of youth respectively. The most common reason for initiating smoking among youth groups was being the frequent contact with others with following proportions: (65.5%) for secondary school students, (74.3%) for male university students, (82%) for café visitors. In contrast the most common reason for female university students to smoke was feeling comfort (41.7).

Conclusion: Smoking is high among the youth in the Northern Border Region, Saudi Arabia. Interventions are needed to decrease the prevalence of smoking in Saudi Arabia.

Keywords: cigarettes, Saudi Arabia, tobacco, youth, quitters

Introduction

Smoking is a major worldwide public health problem. It is the most important avoidable cause of premature morbidity and mortality in the world, occupying the heaviest burden of morbidity and mortality compared to any other risk factor on people. Each day in the United States, over 3,800 young people less than 18 years of age smoke their first cigarette, and over 1,000 youth under age 18 become daily cigarette smokers. The estimated death rate of smoking was 4.9 million people in 1999 and is expected to rise to 10 million by the 2020s, 7 million of which will occur in developing countries. Smoking is more prevalent globally among males than among females. In developing countries, it is estimated that about 48% of males and 7% of females are smokers. Most smokers start the habit during adolescence; less than 2% of them start smoking after their 22nd birthday. In Saudi Arabia, smoking is a leading cause of lung diseases and cancer deaths among Saudi males suggesting that cigarette smoking is becoming an important public health problem among the Saudi youth. Nevertheless, there are no statistics available about the current prevalence of cigarette smoking in the Northern Border Region of KSA. But the prevalence of smoking in adults in 2000 was reported as 11.6%, being higher among males (21.1%) than among females (5.2%) (Koura, 2011).

Although there are many surveys addressing the prevalence of smoking in Saudi Arabia, most of these surveys end up with different conclusions, likely because there is no nationwide studies on the prevalence of tobacco smoking have been performed in Saudi Arabia. Moreover, many studies did not follow a standardized protocol, sample size, or sample selection. Moreover, between 1987 and 2008 there were 34 studies conducted among school students, university students, adults, and other population groups in Saudi Arabia. According to these studies, the prevalence of current smoking among the Saudi population ranges from 2.4 to 52.9% with a median of (17.5%). The difference in prevalence among studies is due to the inclusion of different populations, using different criteria for current smoking, and estimating the prevalence in different regions, and at different times. Most studies recruit people from schools, universities, and health care facilities.

These weaknesses limit the generalization of the findings and increase the need for further studies in the community including people from both genders, all age groups and different socio-demographic backgrounds and from all cities of the kingdom. (Bassiony, 2009). In the present study the prevalence of smoking among the youth in the Northern Border Region is well calculated based on the criteria of inclusion of the young people from both genders with their different socio-demographic background and age group ranged between 15 to 24.

On the other hand, the prevalence of smoking among Saudi university students over the age of 18 has been investigated in several studies. These studies also did not follow a standardized protocol, and therefore showed changeability in the percentages, which ranged between 13 and 20% of male students and 9–11% of female students.

The most recent survey, which used a modified version of GYTS, was conducted in 2010 at a university in Riyadh, Saudi Arabia and revealed an overall smoking prevalence of 14.5% (32.7% of male students and 5.9% of female students) (Al Ghbain, 2011).

Most of the accessible data in these studies covered age groups between 15 years and 25 years. However, to our knowledge, a study on the smoking among young people in the Northern Border Region of the Saudi Arabia has not been reported to this date. This study was designed to fill this gap in knowledge, focusing on the factors of smoking and impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price in Northern Border Region, Saudi Arabia.

Problem Statement

This study investigates the phenomenon of smoking among Saudi youth in the Northern Border Region, Kingdom of Saudi Arabia. Smoking has become one of the most important causes of public health risks particularly among the youth. However, there are no accurate statistics available on the number of smokers in the Northern Border Region, in addition, the factors of smoking and ways of controlling it are varied depending on the nature of the Tobacco Control Program and the quality of services it offers.

Significance of the Study

The importance of this study lies in the type of information it provides to researchers, health practitioners, decision makers and society as a whole about the factors of smoking. The findings of the study may help decision makers to develop plans and policies to combat this negative phenomenon.

Objectives of the Study

The main objective of the study is to determine the factors of smoking in the region. Also, the study aims to clarify the relationship between smoking and price.

Questions of the Study

- a. What are the factors of smoking among the youth in the Northern Border Region?
- b. What is the relationship between smoking and savings, expenses and price?

The Response of the Kingdom of Saudi Arabia to the Framework Convention on Tobacco Control Program

The Kingdom of Saudi Arabia ratified the World Health Organization's Framework Convention on Tobacco Control in 2005, thus it is considered the 65th country to do so. As a ratifying country Saudi Arabia has to ban tobacco advertising, taking measures to protect nonsmokers from second hand smoking, increasing the cost of tobacco products, and making efforts to stop tobacco smuggling. The framework aims at preventing children from smoking and to help adults to stop the habit.

The Gulf Cooperation Council proposed certain measures in 1987 to be implemented by all Gulf States. These measures include limits on tar and nicotine levels and a health warning showing that smoking is the main cause of lung and heart diseases to be printed on cigarette packets. It also proposed that the importing of chewing tobacco should be banned, and the imposition of curbs on the advertisement and promotion of cigarettes. In addition, designing sweets to look like cigarettes or cigarette packets to promote smoking is banned. The Saudi Multi National Multisectoral Committee adopted a national tobacco control program. This program trated with the epidemiology of smoking in terms of (prevalence, consumption, morbidity and mortality) and the primary and secondary prevention. Moreover, there are many policies of banning smoking in health and educational facilities, and public transportation (Bassiony, 2009).

Definition of Tobacco

Tobacco is a green, leafy plant that is grown in warm climates. After it is picked, it is dried,

ground up, and used in different ways; smoked in a cigarette, pipe, or cigar; chewed (called smokeless tobacco or chewing tobacco); or sniffed through the nose (called snuff). Nicotine is one of the main chemicals in tobacco or cigarettes that make it addictive or habit forming. Once smoked, chewed, or sniffed tobacco, nicotine goes into the bloodstream, and it makes the body needs certain level to function normally. The nicotine in tobacco makes it a drug, because nicotine is a stimulant, it speeds up the nervous system, and gives a feeling of having more energy. It also makes the heart beat faster and raises blood pressure (World Health Organization (WHO, 2009).

Tobacco Use

Tobacco use is defined as the use of any nicotine containing tobacco products, such as cigarettes, cigars, and hookah. Therefore, it is important to identify all types of tobacco when investigating the prevalence of tobacco use among youth (Al Agili DE etal, 2012).

Types of Tobacco

There are many different kinds of tobacco products (e.g., cigarettes, cigars, cigarillos, bidis, kreteks, pipe tobaccos, and smokeless products), the most common form of tobacco is the manufactured cigarette (Wigand, 2006).

Cigarettes

Cigarettes are a product consumed through smoking and manufactured out of cut tobacco leaves and reconstituted tobacco, often combined with other additives, which are then rolled into a paper-wrapped cylinder (Wignad, 2006).

Hookah

Hookah is a single or multi-stemmed water pipe for smoking. Historically, the hookah was used as a symbol of pride and honour for the landlords, kings and other high class people. Now, the hookah has gained immense popularity, especially in the Middle East.

A hookah operates by water filtration and indirect heat. It can be used for smoking herbal fruits or tobacco (Parkash, 1992).

Cigar

Cigar is tobacco, and it is very dangerous to the health. A cigar is defined, as “any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco,” while a cigarette is “any roll of tobacco wrapped in paper or any substance not containing tobacco.” Unlike most cigarettes, traditional cigars do not usually have filters (Parick, 2008).

Electronic Cigarette

The electronic cigarette was devised in 2003 by a Chinese druggist named Hon Lik. It was introduced into the Chinese market in 2004. It began to be marketed abroad from 2005 by Golden Dragon Holdings company in which Hon Lik worked. Electronic Cigarettes are defined as “battery operated devices that have been developed as an alternative to normal cigarettes. These are made up of a heater, a battery and a cartridge that contains a solution of propylene glycol, nicotine and some other chemicals”. The electronic cigarette gives a smoker the apparent effect of nicotine intake without delivering the toxic elements of tobacco like, Carbon Monoxide and Tar that harms the lungs, (What are Electronic Cigarettes? Available at <http://www.primehealthchannel.com/electronic-cigarette-dangers-and-side-effects.html>).

Operational Definition of Youth

For the purpose of this research we mean by the term youth the 15 – 24 years age group.

We are using the term ‘youth’ interchangeably with ‘young people’. In qualitative terms youth is defined as a phase when a person moves from a time of dependence (childhood) to independence (adulthood). Therefore four distinct aspects of this move can be identified:

- Leaving the parental home and establishing new living arrangements;
- Completing full-time education;
- Forming close, stable personal relationships outside of the family, often resulting in marriage and children; and testing the labor market, finding work and possibly settling into a career, and achieving a more or less sustainable livelihood (A youth Guide to Resources in Delta BC, 2010).

Smoking Motivations

Motivations of smoking among people are varied as shown below:

- a. Socio- psychological smoking and its function is to display manhood.
- b. Sensational smoking and its motivation is to feel happy.
- c. Relaxing smoking is considered as the most prevalent smoking type, as a smoker feel with pleasure during relaxation time, especially after taking a food.
- d. Smoking for the purpose of relieving stress.
- e. Activating smoking is used after exerting physical and intellectual efforts.
- f. Addictive smoking is not practiced for the purpose of raising happiness, rather it is a reaction for the body’s needs for the nicotine (Rabiee, 1997: 485).

Smoking Influences

Young people tend to smoke when they expose themselves to some influences such as:

Social Influences

Adolescents and young people are very susceptible to social influences.

Young people are more likely to smoke because they see their friends or family members use tobacco. Teens and young adults highly value their friendships and want to fit in with their group.

What their peers do and especially what the leaders of their social groups do can have a strong influence on what they do. Young people whose friends smoke are more likely to smoke as well.

Environmental Influences

Teens and young adults are sensitive to what they see and hear in the world around them. If they are exposed to images that portray smokers as cool, attractive, rebellious, fun-loving, risk-taking, then young people may attempt to smoke, too.

Movies Influences

Images are powerful because they can make smoking seem like a normal, acceptable, or even attractive activity. Young people may also look up to movie stars, both on and off screen, and may want to imitate behaviors they see, (A Report of the Surgeon General, Preventing Tobacco Use among Youth and Adult Youth. Available at: www.Surgeongeneral.gov).

Factors of Smoking

1. Adult imitation: When an adolescent feels that he has become a man, he starts to imitate adults' behaviour.
2. Feeling of frustration.
3. Family environment: It is proven that children and young people are influenced by their family members. In a family where there is a person who smokes, it is more likely for an adolescent to become smoker (Jaafar, 2002).
4. Self-assertion: Many people smoke because they think that smoking offers them space of freedom and compensating their failure or drawing girls attention (Awadallah, 2008).

The Effects of Smoking

The negative effects of smoking on people differ from one person to another and generally depend on individual susceptibility to chemical substances contained in tobacco or cigarette,

the number of cigarettes smoked per day, the number of years of smoking, and the smoking onset age. The immediate effects of smoking are represented by an increase in blood pressure and heart rate and a decrease in peripheral blood flow, a stimulation of cerebral activity for a short time period, followed by its reduction; other manifestations are dizziness, nausea, lacrimation and increased gastric secretion, as well as a reduction of appetite and taste and smell sensitivity. In the long term, the effects of smoking are multiple.

The incidence of respiratory infections and chronic obstructive pulmonary disease (COPD) as well as mortality from these diseases increase with the number of cigarettes smoked and the duration of smoking. Moreover, cardiovascular diseases and cerebrovascular accidents, are directly related to smoking. Children living with smoking adults have a higher risk of becoming smokers in the future, the thing that makes health problems of the future generations (Donca V., & others, 2011: 228).

On the other hand some studies have shown that 90 per cent of lung cancer cases are caused by smoking. In the KSA about 250 cases of cancer are every year caused by smoking. The proportion of cancer infection is 4.5 for every one hundred thousand men and 1.4 for every one hundred thousand women (Tobacco Control Program: http://www.sa-tcp.com/newsite/user/arabic_news/index.htm).

Price of Cigarettes and Youth Smoking

Many studies have examined the effects of prices and tobacco control policies on overall cigarette demand. Increases in cigarette prices, which could be achieved by increasing cigarette taxes, will lead to significant reductions in cigarette smoking rates.

Economists use the term “price elasticity of demand” to describe the impact of a change in price on consumption, defining it as the percentage change in consumption that results from a percent increase in price. Most of these studies ignored the addictive aspects of tobacco use. In other words changes in addictive behavior in response to changes in price will not occur quickly, as would for nonaddictive goods. As result several recent studies have theoretically and empirically modeled addiction. Moreover, Economic theory suggests that the price sensitivity of cigarette demand will be inversely related to age for several reasons.

First, peer influence is more important to youth than to adults. This has a positive multiplying effect for cigarette price increases and the same positive effect can be seen in case of reducing smoking of a given youth who directly influenced by his peer.

Second, youth are generally assumed to behave more myopically than adults towards tobacco future consequences and tobacco monetary price (Smoking and Tobacco Control Monograph No. 14, 2001).

Literature Review

Studies on the Prevalence and Reasons of Smoking.

Study on the prevalence and factors associated with cigarettes smoking among medical students in the Faculty of Medicine King Fahd Medical City in Riyadh, Saudi Arabia, explained that the most important reasons for smoking were leisure, imitation of other people, a means of relieving psychological pressure, curiosity and smoking as a result of impact of publicity and advertising. The study found that the health and religious considerations are among the most powerful motives to refrain from smoking (Al-Kaabba et al, 2011).

The study of Alamri on the Phenomenon of smoking among Saudi society revealed that the most important factors that encouraging people to smoke are influences of peers with (29.73) percent, personal experience (21.62) percent, imitating of a family member (16.22) percent, desire to increase self-confidence (12.61) percent, and a desire to discover the secrets of smoking (11.17) percent. The study also found that 37.84 of the sample has experienced personal, family, and social problems (Alamri, 2009).

Methods and Materials

Study Design

In the present study a hybrid study design was used employing both qualitative and quantitative methods. In the quantitative method a cross-sectional study was conducted. The qualitative method constituted from the focus group discussions.

Sampling

Three different outlets are used to reach the specific categories of youth of 15 to 24 years old; they are namely, secondary schools, Northern Border University and Cafés. Four different samples from them were collected, and they are as follows:

- A sample of size (656) from male secondary schools.
- A sample of size (139) from the Northern Border University students – males section.
- A sample of size 153 from Northern Border University students – females section.
- A sample of size (74) from café visitors.

The sample size for each group was calculated based on sample size formula for proportion and at significance level of 0.05, marginal error of 0.05 and estimated proportion of 0.5.

Data Collection, Management and Analysis

The quantitative data was collected through the means of self administered questionnaire. The questionnaire was designed, reviewed by experts and it was piloted. The collected questionnaires subjected to editing process where incomplete and inconsistent questionnaires were removed. The data was captured and processed in IBM SPSS 19.0. While the qualitative data was collected through three focus group discussions (each group size is 12) with females from Northern Border University and three in-depth interview with the Tobacco Control Program Coordinator in Arar.

The quantitative data was summarized in terms of counts and percentages. The results are presented in tables. Chi-square test is used where appropriate. With regard to qualitative general theses were extracted and summarized.

Results

The results are presented in five subsections. First, participants' profile, smoking status and factors influence smokers to smoke. Second, the participants' awareness of Anti-Tobacco Program. Third, Anti-Tobacco Clinic utilization and efficiency and participants opinions on

Anti-Tobacco Program efficiency. Fourth, this subsection handles the issue of sensitivity of smoking to price. Finally, the qualitative data and a brief discussion are highlighted in this study.

Participants Profile, Smoking status and Influential Factors.

The study sample comprises of a total of 1022 participants of which 656 are male secondary schools students, 139 male university students, 153 female university students and 74 café visitors (Table 1)

Table 1: Participants Profile

Secondary schools students	University students – Males	University students – Females	Cafe' visitors	Total
656	139	153	74	1022

Table 2: Participants Smoking Status per Group

Group			Smoking status		Total
			Smoker	Non smoker	
Secondary school students	Count	162	494	656	
	%	24.7%	75.3%	100.0%	
University student – Males	Count	53	86	139	
	%	38.1%	61.9%	100.0%	
University students – Females	Count	15	138	153	
	%	9.8%	90.2%	100.0%	
Cafe' Visitors	Count	52	22	74	
	%	70.3%	29.7%	100.0%	

Table 2 shows the smoking status for the study sample per group. The group of youth in the café has the highest percentage of smokers

(70.3%) followed by male university students (38.1%), male secondary school students (24.7%), and female university students (9.8%).

Table 3a: Factors Influencing Smokers to Smoke (secondary school students).

Factor*	Response	%
Family	Yes	11.9%
	No	88.1%
Friends	Yes	54.7%
	No	45.3%
Feeling comfort	Yes	39.4%
	No	60.6%
Tension	Yes	35.1%
	No	64.9%
Anxiety	Yes	34.4%
	No	65.6%
Feeling lonely	Yes	43.5%
	No	56.5%
Frequent contact with smokers	Yes	65.5%
	No	34.5%
Social problems	Yes	20.5%
	No	79.5%
Low price of cigarette	Yes	16.3%
	No	83.7%

*Note that a participant might select more than one factor

Table 3a shows that the most influencing factor stimulating secondary school students to smoke are being in frequent contact with smokers (65.5%) followed by friends (54.7%) and feeling

lonely (43.5%) while the least influential factors are family (11.9%) and low price of cigarette (16.3%).

Table 3b: Factors Influencing Smokers to Smoke (university students -males).

Factor*	Response	%
Family	Yes	15.6%
	No	84.4%
Friends	Yes	64.1%
	No	35.9%
Feeling comfort	Yes	62.1%
	No	37.9%
Tension	Yes	46.4%
	No	53.6%
Anxiety	Yes	44.4%
	No	55.6%
Feeling lonely	Yes	53.3%
	No	46.7%
Frequent contact with smokers	Yes	74.3%
	No	25.7%
Social problems	Yes	50.0%
	No	50.0%
Low price of cigarette	Yes	33.3%
	No	66.7%

*Note that a participant might select more than one factor.

For university students, the leading factor that influenced them to smoke is being in contact with smokers (74.3%) followed by friends (64.1%) and feeling good when smoking

(62.1%) and the least influential factors are family (15.6%) and low price of cigarette (33.3%).

Table 3c: Factors Influencing Smokers to Smoke (university students - females)

Factor*	Response	%
Family	Yes	.0%
	No	100.0%
Friends	Yes	38.5%
	No	61.5%
Feeling comfort	Yes	41.7%
	No	58.3%
Tension	Yes	16.7%
	No	83.3%
Anxiety	Yes	25.0%
	No	75.0%
Feeling lonely	Yes	16.7%
	No	83.3%
Frequent contact with smokers	Yes	25.0%
	No	75.0%
Social problems	Yes	8.3%
	No	91.7%
Low price of cigarette	Yes	16.7%
	No	83.3%

*Note that a participant might select more than one factor.

Table 3c shows factors influencing female university students to smoke. The leading factor is feeling comfort when smoking (41.7%)

followed by friends (38.5%) while the family factor has no role (0%).

Table 3d: Factors Influencing Smokers to Smoke (café visitors)

Factor*	Response	%
Family	Yes	40.9%
	No	59.1%
Friends	Yes	70.5%
	No	29.5%
Feeling comfort	Yes	76.2%
	No	23.8%
Tension	Yes	71.7%
	No	28.3%
Anxiety	Yes	63.6%
	No	36.4%
Feeling lonely	Yes	73.3%
	No	26.7%
Frequent contact with smokers	Yes	82.0%
	No	18.0%
Social problems	Yes	70.5%
	No	29.5%
Low price of cigarette	Yes	68.2%
	No	31.8%

*Note that a participant might select more than one factor.

Table 3d shows that being in frequent contact with smokers was the leading factor of café visitors to smoke (82%) followed, by feeling comfort when smoking (76.2%), feeling alone (73.3%), tension (71.7%), friends (70.5%),

social problems (70.5%) and low prices of cigarette (68.2%) while family was the least important (40.9%).

The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price.

Table 10a: The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price (all participants)

	Yes		No	
	Count	%	Count	%
Does smoking influence your expenses?	157	61.3%	99	38.7%
Does smoking influence your savings?	141	56.2%	110	43.8%
Will you continue smoking if cigarette prices increase?	181	71.3%	73	28.7%
Will you continue smoking if hookah prices increase?	113	46.5%	130	53.5%

Table 10a indicates that individuals who smoke will continue smoking cigarettes and water pipe even if the price increases (71.3%, 46.5%).

These are relatively large portion of smokers. It might mean that they are not sensitive to price.

A proportion of (61.3%) of smokers said that smoking influence their expenses while (56.2%) indicated that it influences their savings. As per group analysis shows (table 10b to 10e), females

were the least who subjected to economic consequences of smoking, followed by secondary school students and male university students.

The café visitors are the most who subjected to economic consequence and less sensitive to cigarette price where 98% of them indicated that smoking influences their expenses and 74% influences their savings. However, 84% of them they said they will continue smoking cigarette even if the price of cigarettes increases.

Table 10b: The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price (Secondary school students)

	Yes		No	
	Count	%	Count	%
Does smoking influence your expenses?	74	50.3%	73	49.7%
Does smoking influence your savings?	70	49.0%	73	51.0%
Will you continue smoking if cigarette prices increase?	101	69.7%	44	30.3%
Will you continue smoking if hookah prices increase?	61	43.6%	79	56.4%

Table 10c: The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price (university students - male)

	Yes		No	
	Count	%	Count	%
Does smoking influence your expenses?	29	63.0%	17	37.0%
Does smoking influence your savings?	29	64.4%	16	35.6%
Will you continue smoking if cigarette prices increase?	32	69.6%	14	30.4%
Will you continue smoking if hookah prices increase?	22	52.4%	20	47.6%

Table 10d: The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price (university students - female).

	Yes		No	
	Count	%	Count	%
Does smoking influence your expenses?	5	38.5%	8	61.5%
Does smoking influence your savings?	5	38.5%	8	61.5%
Will you continue smoking if cigarette prices increase?	6	46.2%	7	53.8%
Will you continue smoking if oka pipe prices increase?	5	41.7%	7	58.3%

Table 10e: The Impact of Smoking on Expenses, Savings and Smoker Sensitivity to Price (Café visitors).

	Yes		No	
	Count	%	Count	%
Does smoking influence your expenses?	49	98.0%	1	2.0%
Does smoking influence your savings?	37	74.0%	13	26.0%
Will you continue smoking if cigarette prices increase?	42	84.0%	8	16.0%
Will you continue smoking if oka pipe prices increase?	25	51.0%	24	49.0%

Qualitative Data

Focus Group Discussions

In this study a focus group discussion method was used to derive themes from participants' responses in order to grasp better understanding of the factors behind the initiation of smoking among the female students of the Northern Border University. In December 2013, three focus groups of twelve participants each were conducted among female smokers who were enrolled at the Northern Border University. Participants were between the ages of 18 and 21. Participants were asked open-ended questions about the factors that led them to smoke.

Factors of Smoking among Females

According to the participants, females' smoking occurs within the web of social relations that encourage many types of youth experimentation and behaviours. In fact, females' smoking arises from society, family, school, peer and media influences:

“When girls do not see or feel love from their parents, or when they feel that nobody cares for them. It is then that the girls take up the habit of smoking [A group of university female students, smokers and non-smokers, 19-20 years old]”.

Some participants believed that smoking has many perceived advantages (relieves boredom, stress, anxiety, etc). Moreover, the participants stated that girls tend to smoke because they think that smoking gives them sense of power and challenge just like men.

Other group of participants emphasized the effects of social structures on individual risk behaviours such as smoking:

“In a society where individuals have feelings of injustice or psychologically pressured may lead to a higher rate of cigarette smoking [A group of university female students, smokers and non-smokers, 19-20 years old]”.

Recommendations

This study makes the following recommendations:

6.1 The Tobacco Control Program and other government organizations have to coordinate their efforts to encourage large number of smokers to visit the Clinic so as to be quitters.

6.2 Schools, family and anti-tobacco clinics should play an important role in disseminating the knowledge or health education about the risks of tobacco.

6.3 The TCP should design special programs and activities for café visitors in order to decrease the number of smokers among them.

6.4 The TCP has to improve both the quality of the service offered by the Anti-Tobacco Clinic and the internal environment of the clinic.

6.5 The TCP has to choose a suitable site which is well known and reachable to the visitors.

6.6 The TCP has to extend its working hours to encourage smokers to visit the clinic during the day.

Discussion

In the present study there was relatively large proportion of smokers who smoked cigarettes and hookah (71.3%, 46.5%) respectively. This may indicate that smokers insisted to smoke even if the price of the tobacco products (cigarettes and hookah) increases. So, the smokers were not sensitive towards price. This positive relationship between the increases in the price of tobacco and increases in the amount demanded, can be understood from several studies conducted on the effects of prices and tobacco control policies on overall cigarette demand. However, young people are generally assumed to behave more myopically than adults towards tobacco and tobacco price (Smoking and Tobacco Control Mongraph No. 14, 2001).

Conclusion

The findings of this study revealed important and in-depth information for developing effective cigarette smoking prevention programs.

Based on these results, the Tobacco Control Program policies in Arar City need to be strengthened and to involve adolescents, youth, parents, peer groups, schools, the media, community, government sent organizations and law enforcement agencies.

Because of its addictive nature, the long-run reduction in tobacco use result from sustained macro-level interventions. Although there were several factors for smoking, high among them were frequent exposure to someone who smokes. Adolescents who have friends who smoke are most likely to be smoker too, and the same was confirmed in this study too (Brok, et al). Also, having a parent who smokes represents a significant factor for the adolescent to initiate smoking. The effect of these factors may be due to the fact that during adolescence, children are more readily likely to succumb to peer social influences to satisfy their need for social interaction with their peer group (Ashley, et al 2008). Therefore, any interventional strategy developed should take into consideration the effect of peer pressure.

Acknowledgement

It is my pleasure to express my deepest appreciation to all those who provided me the possibility to complete this study. A special gratitude I offer to the Northern Border University vice-chancellor and the Deanship of Scientific Research for their support and encouragement.

Furthermore I would also like to acknowledge with much appreciation the crucial role of the staff of the Tobacco Control Program mainly Dr. Ahmed Elnagib Abdelrahim the Director of the program, who provided me the necessary data to complete this study.

Special thanks go to our Dean, Faculty of Business Administration Dr. Sultan O. Almarshad, for his valuable suggestions on the study. My thanks also go to the statistical analyst Dr. Zakaria. Once again we would like to appreciate the efforts of Mrs. Asmah Ibrahim Salman for administering the focus group discussions among the female students of the

Northern Border University. Last but not least, many thanks to the General Directorate of Education for facilitating the distribution of questionnaires among the secondary schools students.

List of Abbreviations

TCP	Tobacco Control Program.
KSA	Kingdom of Saudi Arabia.
ATC	Anti-Tobacco Clinic.
FCTCP	Framework Convention on Tobacco Control Program.
NBR	Northern Border Region.
NBU	Northern Border University

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