

RESEARCH ARTICLE

Reasons and Motivations for Cigarette Smoking and Barriers against Quitting Among a Sample of Young People in Jeddah, Saudi Arabia

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Abstract

Background: Cigarette smoking is one of the leading causes of death in the world. Tobacco consumption has grave negative consequences for health so that it is important to understand the reasons and motivations towards cigarette smoking and barriers against quitting smoking among the young generation for developing effective policies to control this widespread problem. **Materials and Methods:** This cross-sectional survey was carried out at the Faculty of Medicine, Rabigh, King Abdulaziz University, Jeddah, Saudi Arabia. A total of 438 young smokers participated from the University and the general population. Data were collected through anonymous, self-administered questionnaires in the Arabic language that contained questions about the reasons and motivations towards cigarette smoking and barriers against quitting smoking. The questionnaire also contained several questions regarding knowledge and attitude of the participants towards cigarette smoking. The data was analyzed on SPSS-16. **Results:** The mean age of the respondents was 22.9 ± 3.48 , out of 438 subjects 87 (19.9%) were married, and 351 (80.1%) were unmarried, and 331 (75.6%) belonged to urban areas while 107 (24.5%) were from the rural areas. Responding to a question about a number of cigarettes smoked per day, 31% answered 11-20, 29% answered 21-30, and 25% answered 1-10. Questioned about smokers in the family, 34.5% responded more than one, with 19% for brother and 13% for father. About the reasons for not quitting smoking, 26% described lack of willpower, 25% had no reason, 22% said that people around me smoke, and 15.3% responded stress at home/work. The major motivation for smokers was smoker friends (42%), for 33.8% others, for 12% father/brother and 7.8% media. **Conclusions:** There are several avoidable and preventable reasons and barriers against quitting smoking. However, knowledge and attitude about smoking were good, and the majority of the smokers were well aware of the associated hazards. Therefore, there is a need to search out ways and means to help them to quit this addiction.

Keywords: Cigarette smoking - university students - motivations - knowledge - attitude - Saudi Arabia

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Introduction

Smoking is known to be a prominent public health problem, which can lead to significant morbidity and mortality but could totally be abolished by preventive measures. The range of morbidity and mortality involves almost all the major organs of the human body including respiratory, cardiovascular, renal diseases and cancerous involvement of various body organs with a prominent share of lung cancer (Al-Mohamed & Amin, 2010). According to rough estimates, thousands are dying each day in this globe because of tobacco-related illnesses. Estimated death toll from smoking only is around millions

per year, and if the trend of smoking continues on the same pace, it is likely to cross eight million deaths by 2030 (Fulmer, 2015).

Young adults mostly become the victims of this lethal habit when they gain a certain degree of socializing independence and relatively more chances of mingling among young groups. Colleges and universities provide an excellent environment for all social activities (Moradi-Lekeh et al., 2013). Mostly, smoking starts as fun but with the passage of time, it becomes a habit (Al-Mohamed and Amin, 2010). It has been observed that the incidence of smoking increases from initial years to final year in University students. There is a great chance for a non-

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smoker to be away from this dangerous addiction if they are provided a smoking free environment in their teaching institutions (Leffredo et al., 2015). The chances of starting smoking are also very high among individuals who idealize their elders at home like father or elder brother. Smoking is also taken as a sign of maturity and independence (Alzayani and Hamadeh, 2015).

Smoking can be discouraged at both small groups level & national level. Governmental efforts by discouraging smoking at open places, in a public gathering, during flights & increasing taxes on tobacco sales have proved to be helpful in reducing the number of smokers in the society. However, all the positive effects are quite easily being nullified by the enthusiastic and powerful marketing by the tobacco companies (Awan et al., 2015). Moreover, the tobacco consumption is increasing in several part of the world in developed countries including Saudi Arabia(SA) and neighboring Muslim countries (Alzayani and Hamadeh, 2015). There is a need to change our attitude towards this dangerous problem (Almogbel et al., 2016).

However, a number of studies have been conducted in SA regarding the habit of smoking among university students. We consider that tobacco consumption can be effectively reduced once we are in the picture of the prevalence of smoking in different age groups, its reasons, motivational factors and factors refraining our youths to quit smoking. Therefore, the present study aimed to evaluate the reasons and motivations towards cigarette smoking and barriers against quitting smoking and explored their knowledge and attitudes towards smoking among a sample of the young population in Jeddah, Saudi Arabia. The results of the present study may reinforce national level efforts to overcome this dangerous and deadly problem among young Saudi's.

Materials and Methods

This cross-sectional survey was carried out at the Faculty of Medicine, Rabigh, King Abdulaziz University, Jeddah, Saudi Arabia. The participants were randomly selected from the King Abdulaziz University as well as from the general population. Data was collected on a self-administered questionnaire in the Arabic language, which was developed with the help of previously published related studies. The questionnaire contained questions about the reasons and motivations towards cigarette smoking and barriers against quitting smoking and there were several questions regarding knowledge and attitude of the participants towards cigarette smoking. The researchers personally contacted and distributed a questionnaire to 500 young Saudi's smoker to participate in this study; all the participants were from university students as well as from general population. Out of 500 invited participants, only 438 (87.6%) returned the completely filled questionnaire. The Ethical approval was taken from the Ethical Review Committee of the Faculty of Medicine, Rabigh and we conducted this study according to the principles of Helsinki Declaration. The identification of any participants was not disclosed and from all the participants' informed consent was taken.

Statistical analysis

Statistical Package for Social Sciences (SPSS-16) was used for data entry and analysis. The frequency and percentages were calculated.

Results

Our sample included 438 young smokers. The response rate in our study was 87.6% (438/500), and the mean age of the respondents was 22.89±3.48. Eighty-seven (19.9%) of them were married, and 351 (80.1%) were unmarried, and 331 (75.6%) belonged to urban areas while 107 (24.5%) from rural areas. Analysis of the survey revealed following clear domains.

Age of Starting smoking

Our survey revealed that majority of the young Saudi's (61%) started smoking in 15-19 years of age. It is the time when a boy gains a certain degree of independence. Furthermore, 23% started it in the age group of 20-24 when one enters college and universities. A small minority i.e. 2% started it in later years. Only 14% started smoking at an early age in 10-14 years (Figure 1).

Smoking habits, and motivations for smoking

Our survey revealed that around 25.3 % of youngsters smoked about 1-10 cigarettes per day whereas 60.7% of them smoked cigarettes in the range of 11-30 per day. More than 3 packets of cigarettes (>30) were being consumed by around 14% of them (Table 1).

Overall, only 54 (12.3%) of our participants admitted the motivational drive from the family and whereas 188 (42.9%) pointed out that they started smoking under the

Table 1. Number of Cigarettes per Day, Smokers in Family, Reasons for Not Quitting Smoking and Motivation for Smoking

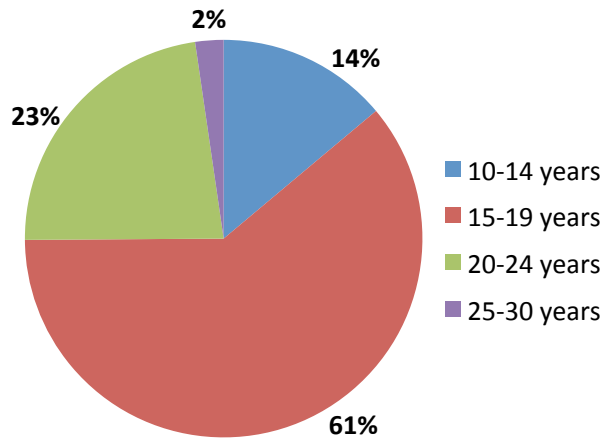
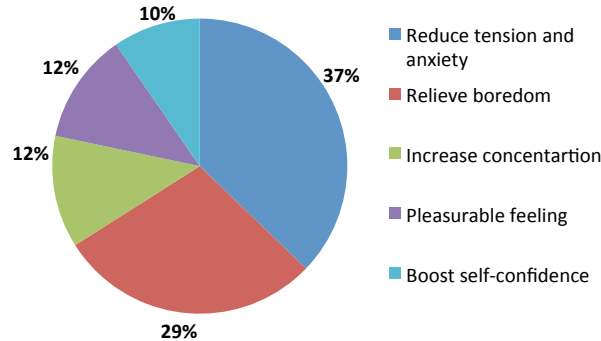
Questions	N(%)
No. of cigarettes smoked/day	
a) 1-10	111(25.3)
b) 11-20	138(31.5)
c) 21-30	128(29.2)
d) 31-40	41(9.4)
e) >40	20(4.6)
Do you have any smoking family member?	
a) Father	55(12.6)
b) Brother	85(19.4)
c) Other	71(16.2)
d) More than one	151(34.5)
e) None	76(17.4)
Reasons for not quitting smoking:	
a) Lack of willpower	114(26)
b) I like it very much	48(11)
c) People around me smoke	99(22.6)
d) Stress at home/work	67(15.3)
e) No reason	110(25.1)
What was the motivation for smoking?	
a) Friend	188(42.9)
b) Teacher	14(3.2)
c) Media	34(7.8)
d) Father/brother	54(12.3)
e) Other	148(33.8)

N= Number of participants, %= Percentage

Table 2. Knowledge and Attitude of Participants Towards Smoking

Questions	Yes	No
	N(%)	N(%)
Smoking is harmful to health	415(94.25)	23(5.25)
Smoking is harmful to health of others around you	390(89.04)	48(10.96)
Smoking is an addiction	334(76.25)	104(23.75)
Smoking causes lung cancer	401(91.55)	37(8.45)
Smoking causes heart disease	390(89.04)	48(10.96)
Smoking decreases life expectancy	316(72.15)	122(27.85)
Smoking is a sign of maturation	73(16.67)	365(83.33)
Smoking helps to mix in social gatherings	120(27.40)	318(72.60)
Do you want to quit smoking?	321(73.29)	117(26.71)

N= Number of participants, %= Percentage

**Figure 1. Participants Age at the Start of Smoking****Figure 2. Reasons for Continuing Smoking**

influence of their smoker friends. A small percentage of the participants 34(7.8%) started smoking under the influence of various advertisements and movies shown in the media. A small number of participants 14 (3.2%) started smoking by seeing their teachers and quite an important percentage of them, i.e., 33.8% could not relate their smoking habits to any motivational factor (Table 1).

Reasons for continuing smoking

Our survey revealed interesting reasons for continuing smoking. About one-third of the participants (37.20%) admitted that smoking help them in relieving tensions and anxieties of life, 28.80% of our participants were continuously smoking just of relieve boredom in life, 12.10% were of opinion that it provides them a pleasurable feeling, 12.30% students claimed achieving greater

concentration in studies with the help of smoking. A small group of students (9.60%) claimed that they continued it for boosting self-confidence (Figure 2).

Quitting the habit of smoking

The majority of our participants i.e. 321(73%) clearly mentioned their will to quit smoking (Table 2). One-quarter of the participants 110 (25.1%) couldn't relate it for any reason, but 114 (26%) admitted it as lack of their willpower in quitting this dangerous habit. Stress at home or working place was an important factor for continuing smoking in 67(15.3%) in our survey. A small number of participants 48(11%) mentioned their extreme liking towards smoking and 99(22.6%) of our participants mentioned the presence of other people around them being a smoker as a reason for the failure of quitting the smoking (Table 1).

Knowledge and attitude towards smoking

The majority of the participants 415(94%) were agreed to the harmful effects of smoking to the human health. Similarly, about 90% participants had clear perception that smoking causes the high incidence of lung cancer & heart diseases along with the harm of passive smoking to the people around the smoker. Two-thirds of them 334(76%) admitted that smoking is an addiction which needs dedicated efforts to be quit. Almost a quarter of youngsters 122(27.8%) didn't have any idea of a decrease in life expectancy of a smoker. Our survey revealed that 193(44 %) of them were of the opinion that continuing smoking is either a sign of maturity or helps one mixing in the different social gathering (Table 2).

Discussion

Tobacco is a well-known stimulant of the human brain, being used the world over including the middle east and Saudi Arabia. Due to various corrective measures, the trend of smoking is on the decline throughout the western world, but unluckily Saudi Arabia is among the top 10 countries spending maximum money on smoking. Its ranking was at 52 positions a few years back. Indeed, it is expected that percentage of smokers would be on rising if the corrective measure is not soon adapted (Bahaa et al., 2014)

A lot of studies have been carried out in Saudi Arabia on various prospects of smoking (Al-Mohamed and Amin, 2010; Al-Haqwi, et al., 2016; Almogbel et al., 2016).

We tried directly to approach the young smoker of King Abdulaziz University and the general public in Jeddah, and we tried to sort out various factors that motivated them for smoking, their knowledge about the hazards of smoking and attitude towards quitting smoking.

There is no clear-cut definition of smoking grades but according to a study, "Heavy smoking is defined as smoking 20 or more cigarettes per day, or 20 or more packs per year" (Neumann, 2013). The majority of our survey participants smoked on average 10-30 cigarettes per day, whereas around 14% smoked >30 cigarettes per day. It has been reported that heavy smokers have more probability of repeated failures of quitting attempts (Slopen et al., 2013).

Initiation of smoking at an early age depends on a lot of factors. More than half of the participants (61%) started smoking at the age of 15-19 years when they become socially independent and leave the school for joining colleges. Around 23% of them started smoking when they joined the professional colleges / Universities. Similar findings were pointed out in other studies carried out in different areas of the Kingdom (Al-Mohamed and Amin, 2010; Moradi et al., 2013; Al- Almogbel et al., 2016).

Young boys have mostly idealized their elders in the family and if any one of the elders is a smoker than the chance of initiation of smoking are very high. The presence of a smoker in the family has a very strong motivation for the young boys to start smoking (Mandil et al., 2014). It was revealed that majority of the smokers in our study had a close relative at home being a smoker. It was either father, brother, close relative or multiple members of the same family. Actually, kids imitate their parents; they do not do what they are taught, but they usually do what they see. Therefore, parents can play an important role in quitting the smoking addiction habit and keeping their young kids away from this addiction. Overall, only 54 (12.3%) of our participants admitted the motivational drive from the family, whereas 188 (42.9%) pointed out that they started smoking under the influence of their smoker friends. Few participants 34(7.8 %) started smoking under the motivation of various advertisements and movies shown in the media. A small number of participants 14 (3.2%) started smoking by seeing their teachers and quite an important percentage of them i.e. 148(33.8%) could not relate their smoking habits to any motivational factor. A Korean study revealed the similar relationship of the role of elder in the family; they reported that smoking was relatively more common in families with low socioeconomic status (So and Yeo, 2015). Similarly, social circle and a friend are the main source of inspiration for starting smoking when the boys enter in colleges or boarding houses, and other temptation included motivation from media and showing off maturity among class fellows (Tang and Loke, 2013).

Being the university students and having essential basic knowledge about the hazards of continued smoking around 80% to 90% of our participants were aware of health related problems in chronic smokers including the lung malignancies and increased incidence of heart diseases. More than half of the participants (60%) clearly accepted that smoking is an addiction. A similar pattern of awareness was observed in other studies in Saudi

Arabia (Al-Haqwi et al., 2010; Moradi-Lakeh et al., 2013; Almogbel et al., 2016). A relevant study mentioned continued smoking in young population in spite of having clear-cut idea of dangers associated with heavy smoking (Kumar and Borker, 2013)

To quit smoking is a very fascinated and easy thought for each smoker but practically Nicotine addiction is the most difficult of all to quit. There is a need for a lot of perseverance and commitment on the part of the smokers and the society around (Compton, 2015). The chronic smoker is physically dependent on smoking that the morning puffs enslave almost all the body functions. Strong willpower and acknowledgment of the dangers of smoking are deciding factors in quitting smoking (Rubinstein et al., 2013). Mostly, it has been observed if an individual presents with some associated disease process like respiratory illness or cardiovascular problem then it is an easy task for the health care workers to pursue the patient for quitting the Nicotine addiction. All the participants in our study were young individuals, and hardly any one of them had health related problems. We observed that almost all of them had some excuses for the continuation of smoking whether it blames to lack of willpower, excessive liking or the group smoking and even no reason was mentioned by one-quarter of the participants. Relevant studies revealed that increasing the cost of cigarettes or their restricted availability was an important factor in discouraging Nicotine addiction.

We suggest that in the Kingdom more strict measures are needed to be implemented for preventing young generation from this fatal addiction. In our survey almost 60% of our survey participants showed their willingness for quitting smoking, but no serious effort was being practiced, and similar type of lack of active ambition of quitting smoking has been observed in a recent study (Albrithen and Singleton 2015).

In conclusions, there are several avoidable and preventable reasons and barriers against quitting smoking. The knowledge and attitude about smoking among a sample of young Saudi population was good, and the majority of the smokers were well aware of the associated hazards. Therefore, there is a need to search out ways and means to help them out from this addiction. Special efforts are needed to educate a young generation that smoking is not the effective strategy to manage stress. The designing of anti-tobacco policy is very easy, but implementation on it needs a lot of committed efforts and strict measures. In this regard, parents, mass media and governments combine efforts can play very important role.

References

- Albrithen AA, Singleton EG (2015). Brief Arabic tobacco craving questionnaire: An investigation into craving and heavy smoking in Saudi Arabian males. *J Fam Community Med*, **22**, 8-12.
- Al-Haqwi AI, Tamim H, Asery A. (2010). Knowledge, attitude and practice of tobacco smoking by medical students in Riyadh, Saudi Arabia. *Ann Thorac Med*, **5**, 145-8.
- Almogbel YS, Abughosh SM, Almeman AA, et al (2016). Factors associated with the willingness to quit smoking among a cohort of university students in the KSA. *J Taibah Uni Med*

- Sci*, **11**, 128-33.
- Al-Mohamed HI, Amin TT (2010). Pattern and prevalence of smoking among students at King Faisal University, Al Hassa, Saudi Arabia. *East Mediterr Health J*, **6**, 56-64.
- Al-Turkstani AM, Alkail BA, Hegazy AA, et al (2016). Knowledge, attitude, and practice among primary health-care physicians toward smoking cessation in Makkah, Saudi Arabia. *Int J Med Sci Public Health*, **5**, 714-24.
- Alzayani S, Hamadeh RR (2015). Tobacco Smoking among Medical Students in the Middle East: Identifying Areas for Intervention. *Int J Innov Educ Res*, **3**, 72-8.
- Awan KH, Hammam MK, Warnakulasuriya S (2015). Knowledge and attitude of tobacco use and cessation among dental professionals. *Saudi Dent J*, **27**, 99-104.
- Bahaa-Eldin E, Mahfouz MS, Yagoub U, et al (2014). Practice and attitude of cigarette smoking: A community-based study. *PLoS one*, **9**, 92939.
- Compton W (2015). Understanding Nicotine Addiction and Its Brain Reward Systems. In 2015 AAAS Annual Meeting (12-16).
- Demir M, Karadeniz G, Demir F, Karadeniz C, et al (2015). The evaluation of the factors that affects the smoking behaviors in a group of high school students in Turkey. *Eur Respir J*, **46**, 1199.
- Fulmer EB, Neilands TB, Dube SR, et al (2015). Protobacco media exposure and youth susceptibility to smoking cigarettes, cigarette experimentation, and current tobacco use among US youth. *PLoS one*, **10**, 134734.
- Loffredo CA, Radwan GN, Eltahlawy EM, et al (2015). Estimates of the prevalence of tobacco smoking in Egypt. *Open J Epidemiol*, **5**, 129-35.
- Mandil A, BinSaeed A, Ahmad S, et al (2014). Pattern of tobacco consumption and influencing factors among male school children in Riyadh, Saudi Arabia. *J Addict Res Ther*, **5**, 192.
- Moradi-Lakeh M, El Bcheraoui C, Tuffaha M, et al (2015). Tobacco consumption in the Kingdom of Saudi Arabia, 2013: findings from a national survey. *BMC Public Health*, **15**, 1.
- Neumann T, Rasmussen M, Heitmann BL, et al (2013). Gold standard program for heavy smokers in a real-life setting. *Int J Environ Res Public Health*, **10**, 4186-99.
- Rubinstein ML, Shiffman S, Moscicki AB et al (2013). Nicotine metabolism and addiction among adolescent smokers. *Addiction*, **108**, 406-12.
- Slopen N, Kontos EZ, Ryff CD et al (2013). Psychosocial stress and cigarette smoking persistence, cessation, and relapse over 9–10 years: a prospective study of middle-aged adults in the United States. *Cancer Causes Control*, **24**, 1849-63.
- So ES, Yeo JY (2015). Factors associated with early smoking initiation among Korean adolescents. *Asian Nurs Res*, **9**, 115-9.
- Tang SM, Loke AY (2013). Smoking initiation and personal characteristics of secondary students in Hong Kong. *J Adv Nurs*, **69**, 1595-606.