Awareness, Attitude and Practice of Smoking among Medical Sciences& Non-Medical Sciences Students at Taif University: Comparative Study

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Abstract: *Tobacco use is increasing among young people, especially in Gulf nations such as Saudi Arabia, and has been predicted to cause the deaths of 10 million per year by 2020 worldwide. Objectives: Identify student's awareness, attitude and smoking practice at Taif University, Saudi Arabia, and Compare medical with non-medical sciences students', awareness, attitudes, and practices of smoking at Taif University. Methods: A cross-sectional study was carried among medical and non-medical sciences students Results: 900 students answered the questionnaire. The prevalence of smokers was 20% of the total sample, male represents 29.4% and female 11.4%. No statistical significant difference between medical and non-medical sciences students' awareness and positive attitude regard smoking. The main reasons of smoking among student are friends and medical sciences students more willing for quiet smoking than non-medical sciences students. Conclusions: no significant difference regard prevalence of smoking among medical and non-medical sciences students, believe that health professionals should receive specific training to quit smoking. Recommendation: The study revealed a critical need for integrating cessation counseling training into medical and non-medical sciences education, especially for adolescents, because this stage is critical and adolescents are more vulnerable to many negative behaviors including smoking behaviors.*

Keywords: Smoking cessation, Awareness; Attitude; Practices; Smoking index

1. Introduction

Tobacco smoking is a global epidemic. The World Health Organization (WHO) has estimated that tobacco and its products kill over 3.5 million people worldwide every year and it is predictable that by the decade 2020- 2030, tobacco will kill 10 million people a year [1]. The bad effects on general health of tobacco smoking are well documented and on average, cigarette smokers die ten years younger than non-smokers [2, 3]. WHO states that "Much of the disease burden and premature mortality attributable to tobacco use unreasonably affect the poor" out of the 1.22 billion smokers, 1 billion of them live in developing or transitional economies. Rates of smoking have level off or declined in the developed world [4].

Research studies, in Saudi Arabia, have clearly indicated that cigarette smoking is one of the major health hazard etiologies [5,6,7], covering a wide range of preventable morbidity and mortality[8,9,10]. Cigarette smoking and its grave consequences on health such as lung cancer, chronic bronchitis, and carcinoma of the oral cavity (larynx, esophagus, and tongue) and urinary bladder, are all well documented. Smoking is one of the major public health problems in Saudi Arabia and it is increasing at an alarming rate [5,6,7].

Epidemiological studies among different university student populations in Arab and Eastern Mediterranean countries demonstrated a marked variation in the prevalence of smoking [11–12]. Prevalence ranged from 13.0% to 42.5%, being the highest in Turkey (42.5%) [12] and Kuwait (42.2%)

[11]. An increasing trend is expected to occur among university students and this could be related to alleviation of stress, life problems, peer pressure, social acceptance, family history of smoking, lower educational level of parents and the desire to attain high personality profile [13]. In contrast, religion, negative health effects, bad taste and smell, adverse physiological responses and issues related to family are considered good reasons for not smoking [13,14].

There were many studies conducted to assess awareness, knowledge, and attitude of people in general – toward smoking, and now there is an increase in researches conducted on students because there is an increase in prevalence in tobacco use among young people especially students at all levels [15-21]. Most of the recent researches were done in Arab countries revealed that smoking behaviors is strongly associated with gender as that the majority of smoker are males [15-19]. In their effort to study smoking habits of students of the Faculty of Medicine and Allied Sciences in King Abdulaziz University, Zakai et al (2002) work showed that religious beliefs and parents' smoking behaviors are significantly associated with students' smoking attitudes and behaviors as that smoking behaviors are less prevalent among students with high religious beliefs and whose parents are non-smokers [17]. Additionally, friends' behaviors and attitudes were shown to be as the strongest factors affecting students in Basrah University in Iraq[16]. The effect of type of college to which the students belong also was studied in previous researches.

Musmar (2012) study revealed that most of smokers are from Humanities College [19]. On the other hand, Ali et al (2010) work showed that smoking behavior was more prevalent among students of colleges of Arts, Administration and Economics [16]. Both of Musmar (2012) and Ali et al (2010) researches showed that smoking attitudes among sciences and health college students were the least prevalent among all colleges [18].

Few studies were conducted to compare medical and non-medical students' smoking awareness, attitudes, and behaviors in Saudi Arabia. So, The purposes of this study are to:Identify student's awareness, attitude and smoking practice at Taif University, Saudi Arabia, and Compare medical with non-medical sciences students', awareness, attitudes, and practices of smoking at Taif University.

2. Subject & Methods

2.1 Research Design

A descriptive cross-sectional comparative study was conducted from 1st of Mar. To 30th of May 2014 with the aim of assessing the awareness, attitudes and practices of smoking among medical and non-medical sciences students in Taif University, Saudi Arabia .

2.2 Settings

The study was conducted in, applied medical sciences, included (nursing, X-ray, physiotherapy& laboratory department) &non-medical sciences included (colleges of computing, science, education, Shari & preparatory years) At Taif University.

2.3 Subjects of the study

A sample of 900 out 1000 students (One hundred of the students were excluded from the sample because they did not complete the questionnaires) male & female students who are studying in the Taif University were selected randomly at different educational level.

a)**Inclusion criteria;**
 Students who are willing to participate in this study.
b)**Exclusion criteria;**
 Students who are refusing to give informed consent.

2.4 Instrumentation

An interview questionnaire sheet was developed by the researchers in Arabic language to collect information based on the relevant literature. It included the following:

Part I: Socio-demographic data of students included (sex, age; marital status; economic status, medical problem, student housing, do you smoke.

Part II: Data on smoking included ten questions, which were: Is one of your relatives smokes What the main reasons that made you smoke ,How old were you when it started smoking ,How many times have you smoke, type of tobacco used (cigarette, goza, or combined), How many cigarettes smoked per day& Do you have a desire to quit smoking. Smokers were classified according to the packet /year SI(17) (No. of cigarettes x years / 20) into mild (SI <10), moderate (SI=10-20) & heavy smokers (SI>20). As regard hubble-bubble (Goza) smoking, Atypical 1-hour-long hubble-bubble (Goza) smoking session involves inhaling 100–200 times the volume of smoke inhaled from a single cigarette [23].

Part III: Questions concerning awareness and attitudes of students toward smoking: Included 26 questions that uses a 5-point Likert scale. This questionnaire is designed to confine students' attitude and awareness. Scores assigned to each item are between 0 and 4 points as follows; (strong agree, agree, strong disagree, disagree, and I do not know).According to range of total scores lie between 0-104,Considering good awareness as 50% of the range of total score, students were classified as : positive attitude &aware if their total score was>52, and were classified as negative attitude & not aware if their total score was < 52.(Appendix)

Part IV: Questions concerning previous smoking cessation trials &intention to quit smoking: Included 6 questions, Do you want to stop smoking now, Have you ever tried to stop smoking during the last year .What's the main reason for the decision that you want to stop smoking, Do you think that you have the ability to quit smoking if you want it, How many times have tried to stop smoking, Did you receive any help or advice to help quit smoking. The validity of the tool was confirmed by a panel of nursing experts who are interested in nursing research topic and hold a doctorate degree in nursing. The reliability of the tool was examined using test-retest method and calculating the reliability coefficient. It was 0.7 or more, it is considered reliable.

2.5 Pilot study

It was carried out on 10 students for testing the clarity of the sheet and to estimate the time needed to apply scale and fulfill sheet. According to the results of the pilot study the essential modifications in the sheet were done and the final form was developed. Participants included in the pilot study were excluded from the study.

2.6 Method of Data Collection

After obtaining approval from the institutional review board at Al-Taif University and the selected colleges. Once the participants who meet inclusion criteria are identified, the research assistants were explained the purpose of the study to all students. Then the questionnaires were distributed to the students after informed consent obtaining from all participants. Students were spent 15-20 minutes to complete the questionnaire while the class instructor was outside the teaching room to ensure that students completed the questionnaire unaided and to ensure confidentiality. After all questionnaires being filled by each participant, all data had been installed into computer for data analysis by utilizing SPSS program.

2.7 Statistical Analysis

The statistical Package for (SPSS) version (19) was used to analyze data. Descriptive statistics was used for the quantitative data in the medical &non-medical questionnaire and the demographic data. Descriptive statistics included: Mean, standard deviation, frequencies, and percentages. Pearson correlation and cross tabulation between mean scores of medical &non-medical Sciences students were done. The level of significance for this study was set at (p = 0.05) to detect any indication of differences found in the data available.

2.8 Ethics and Human Rights

An informed consent was obtained from all the participants before collecting any data. Explanation of the study aim in a simple and clear manner was done to each participant. All data was considered confidential. Participants were informed about their rights to withdraw from the study at any time without giving any reason.
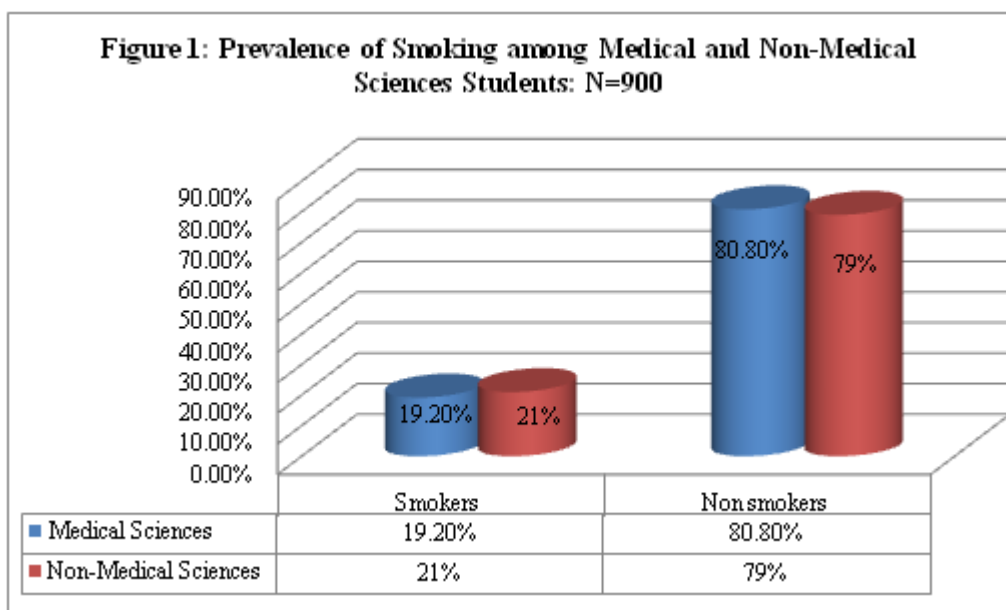
3. Results

Figure 1: Prevalence of Smoking among Medical and Non-Medical Sciences Students: N=900

	Smokers	Non smokers
■ Medical Sciences	19.20%	80.80%
■ Non-Medical Sciences	21%	79%

Table 1: Number and percentages of smokers students related to their sex N=900

Variables	Sex		Total N%	Pearson Chi-Square	P. Value
	Male, N%	Female, N%			
Yes	126(29.4%)	54(11.4%)	180(20.0%)		
No	302(70.6%)	418(88.6%)	720(80.0%)	45.4	0.00**
Total	428	472	900		

(*) Statistically significant at p ≤0.05   (**) Statistically significant at p<0.01=high significant

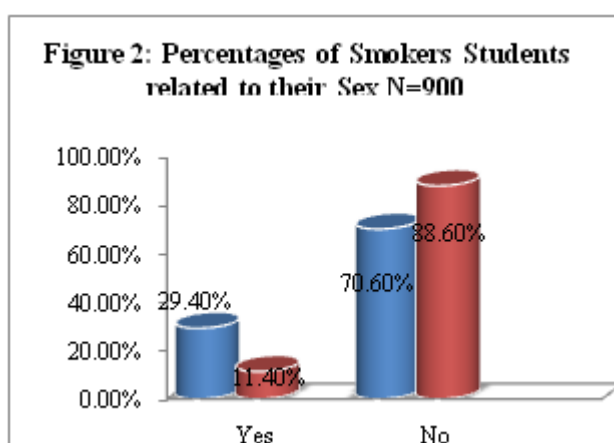Figure 2: Percentages of Smokers Students related to their Sex N=900

Table 2: Socio Demographic Characteristics among Medical and Non-Medical Sciences Students. N=900

Variables	Colleges		Pearson Chi-Square	P. value
	Medical *Sciences* Colleges 469	Non-Medical *Sciences* Colleges 431		
Sex Male Female	247 (52.7%) 222 (47.3%)	181 (42.0%) 250 (58.0%)	10.25	0.00** S
Age group 18< 20 years 20<25 years 25< 30 years 30 and more years	187 (39.9%) 182(38.8%) 85 (18%) 15(3.2%)	175 (40.6%) 239 (55.5%) 12(2.8%) 5 (1.2%)	66.56	0.00** S
Marital status Single Married	386(82.3%) 83(17.7%)	384(89.1%) 47(10.9%)	8.38	0.00** S
Economic status High level Average level Low level	104(22.2%) 361 (77%) 4 (0.9%)	101(23.4%) 322(74.7%) 8 (1.9%)	2.00	0.36 NS
Student housing With family With friends Alone	403(86%) 21(4.5%) 45(9.6%)	391(90.7%) 17(3.9%) 23(5.3%)	6.12	0.04* S
Students have medical problems	33(7.0%)	27(3.3%)	.21	0.64 NS
Smokers students	90(19.2%)	90(21%)	.40	0.526 Ns

(*) Statistically significant at p ≤0.05   (**) statistically significant at p<0.01

Table 3: Characteristic of Smoking Habits among Smoker Students N=180

Variables	Colleges		Pearson Chi-Square	P. value
	Medical Sciences Colleges 90((19.2%)	Non-Medical Sciences Colleges 90(21%)		
Students have smokers relatives Parents Brothers Sisters other	88 (98.2%) 15 (17.4%) 44 (50%) 4 (4.5%) 25 (28.4%)	84(93.3%) 20(23.8%) 33(39.2%) 1(1.1%) 30 (35.7%)	3.65	0.06 Ns
Reasons of smoking Family Friends Imitation Boredom Other	----- 36(40.0%) 10(11.1%) 39(43.3%) 5(5.6%)	5(5.6%) 27(30 %) 16(17.7%) 25(27.7%) 17(19%)	16.83	0.00** S
Age of starting smoking 15< 25-35 years	77(85.5%) 13(14.5%)	84(93.3%) 6(6.7%)	43.00	.00** S
Times of smoking Every day 3-5day\week One time per week A few times a month	55(61.1%) 16(17.8%) 6(6.7%) 13(14.4%)	55(61.1%) 15(16.7%) 8(8.9%) 12(13.3%)	.45	0.930 Ns
Type of tobacco used Cigarette Shisha Sniff	71(79%) 19(21%) -----	74(82.2%) 11(12.2%) 5(5.6%)	9.62	0.02* S
Number of cigarettes /day Less than 20 cigarette\day More than 20 cigarette \day	58(81.6%) 13(18.4%)	64(86.5%) 10 (13.5%)	.75	0.68 Ns
Times of shisha smoking /week 1-10 time\weeks 11-20time\week	18(94.7%) 1(5.3%)	8(72.7%) 3(27.3%)	14.71	0.14 NS

(*) Statistically significant at p ≤0.05   (**) Statistically significant at p<0.01

Table 4: Attitudes of Smoker Students toward Smoking Habits N=180

Variables	College		Pearson Chi-Square	P. value	Total
	Medical Sciences College 90((19.2%)	Non-Medical Sciences College 90(21%)			
Positive attitudes	64(71.1%)	55(61.1%)	2.00	0.15 NS	119
Negative attitudes	26(28.9%)	35(38.9%)			61

(*) Statistically significant at p ≤0.05   (**) Statistically significant at p<0.01

Figure 3: Awareness of Smoker Students toward Smoking Habits N=180

	Aware	Not aware
Medical students	83.30%	16.70%
Non medical students	72.20%	27.80%
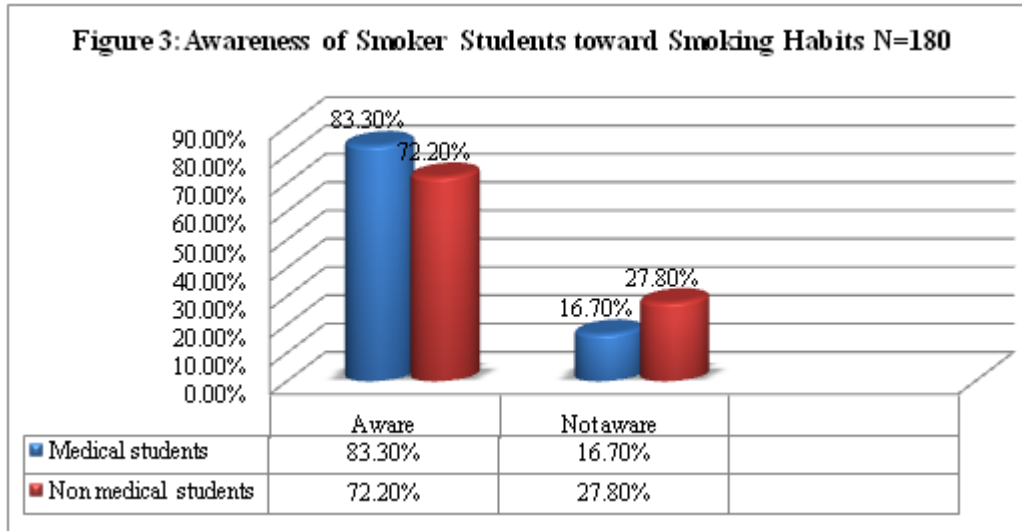
Table 5: Attitudes of all Students toward Smoking Habits N=900

Variables	Colleges		Pearson Chi-Square	P. value
	Medical Sciences Colleges 469	Non-Medical Sciences Colleges 431		
Positive attitudes	245(52.0%)	219(50.8%)	0.66	.414 NS
Negative attitudes	224(48.0%)	212(49.2%).		

(*) Statistically significant at p ≤0.05   (**) Statistically significant at p<0.01

Figure 4: Awareness of all Students toward Smoking Habits N=900

	Aware	Not aware
Non medical students	54.50%	45.50%
Medical students	56.50%	43.50%

Figure 5: Desire to Quit Smoking among Smoker Students N=180

	Student wants to stop smoking
Medical college	80%
Non medical college	72.20%
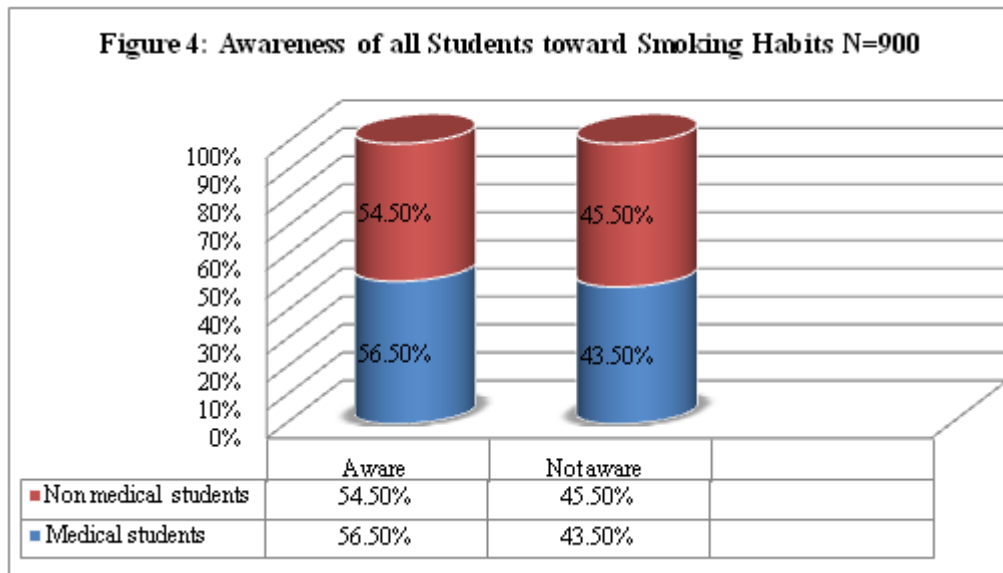
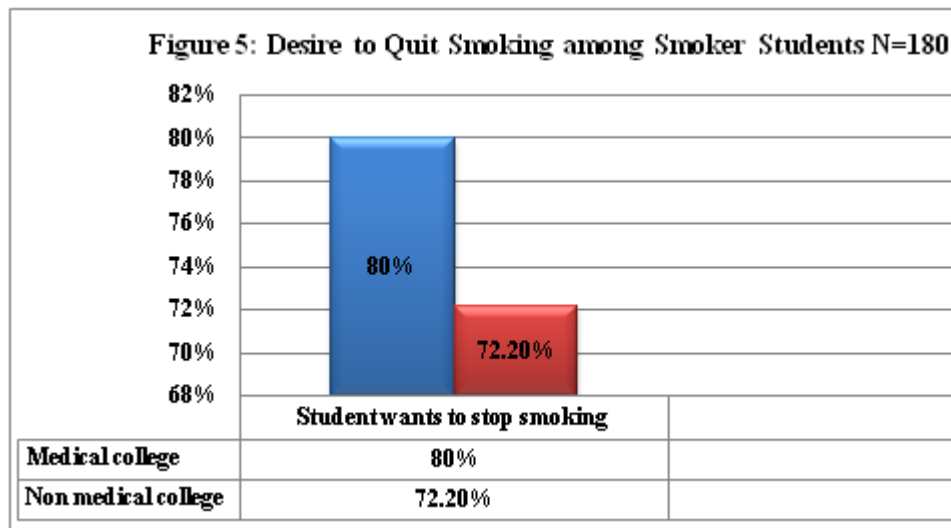**Table 6:** Previous smoking cessation trials & intention to quit smoking N=180

Variables	Colleges		Pearson Chi-Square	P. value
	Medical Sciences Colleges 90((19.2%)	Non-Medical Sciences Colleges 90(21%)		
Students want to stop smoking	72(80%)	65 (72.2%)	0.02	.873NS
Students tried to stop smoking last year	62(68.9%)	64(71.1%)	0.49	.484 NS
The main reasons for the decision to stop smoking -To maintain may health -To save money -Because my family is not in favor of smoking -Because my friends do not like smoking -Other reasons	68(75.5.9%) 8(8.8%) 8(8.8%) 4(4.4%) 2(2.2%)	64(71.1%) 8(8.8%) 8(8.8%) 5(5.5%) 5(5.5%)	5.07	.280 NS
Students have the ability to quit smoking if they want	73(81.1%)	59(65.5%)	4.89	.027*S
Times of terriers to stop smoking Had no terriers times One to three times Four times and more	24(26.7%) 41(45.5%) 25(27.8%)	33(36.7%) 34(37.8%) 23(25.5%)	4.27	0.233 NS
Sources of students' receiving advices to quit smoking Students didn't receive any help Students received help through a program or a specialist Students received help through their friend Students received help through their family members	27(30%) 16(17.8%) 31(34.4%) 16(17.8%)	22(24.4%) 10(11.1%) 30(33.4%) 28(31.1%)	6.48	.090 Ns

(*) Statistically significant at p ≤0.05   (**) Statistically significant at p<0.01

The purposes of this study are to: Identify student's awareness, attitude and smoking practice at Taif University, Saudi Arabia, and Compare medical with non-medical sciences students', awareness, attitudes, and practices of smoking at Taif University.

Figure 1: showed prevalence of smoking among students in the medical and nonmedical sciences colleges, it was found that the prevalence of smoking among students in the non-Medical Sciences colleges is slightly higher compared with those in the medical colleges with no statistical significant difference p ≤*0.05.*

Figure 2 and table 1: demonstrated number and percentages of smokers' students related to their sex. A statistical significant difference was observed between males and females students related to smoking with higher rate among males than females 126(29.4%) and 54(11.4%) respectively P<0.00.

Table (2) :illustrated socio demographic characteristics among medical and non-medical sciences students, statistical significant differences were found between medical and non-medical sciences students related to their sex, age and marital status, more than half of the participants in the medical sciences were males (52.7%)

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while 58% of them in the non-medical sciences were females. p<00. As for age of participants, the table showed that 39.9% and 40.6% of participants of medical and non-medical students were constituted in the age group from 18<20 years, while 38.8% and 55.5% of them respectively were constituted in the age group ranged from 21<25 years. Majority of participants 82.3% in the medical sciences and 89.1% of them in the non-medical sciences respectively were single P<0.00. In addition majority of students in the medical and non-medical sciences are living with their families (86% and 90%) respectively P<0.04. No statistical significant differences were observed between the medical and non-medical students related to their socio economic status, medical problems and practices of smoking.

Table (3): showed characteristics of smoking habits among smoker students in the medical and the non-medical sciences, majority of smokers' students stated that they have smoker's relatives 98.2% and 93.3% respectively they are including parents, brothers and sisters with no statistical significant differences were observed between them. Statistical significant differences were found between students in the medical and non-medical sciences related to their reasons of smoking, age of starting smoking and the type of tobacco used, Boredom was the more prevalent reason of smoking stated by 43.3%, followed by friends 40.0%, among students in medical sciences, while friends were considered the most common reason for smoking by 30%, followed by boredom 27.7%, and imitation 17.7% Among students in the non-medical sciences P<0.00. Majority of students started smoking at age from 15<25 years in medical and non-medical sciences (85.5%, 93.3 %,) P<0, 00. Cigarette smoking was observed more prevalent among students in medical and non-medical sciences it constituted in 79% and 82.2% of them respectively followed by shisha P<0.022. More than half of students in the medical and the nonmedical sciences using smoking every day (61.1%) , 81.6% and 86.5% of smokers using <20 cigarette per day among students in the medical and non-medical sciences with no statistical significant differences .

(Table 4 and figure 3) illustrated awareness and attitudes of smokers' students in the medical and non-medical sciences toward smoking. No statistical significant difference was found between smoker students in the medical and non-medical sciences related to their awareness and attitudes about smoking with high prevalence of awareness and positive attitudes among students in the medical sciences than those in the non-medical sciences P<0.15.

(Table 5and figure 4) noted awareness and attitudes of all students in the medical and non-medical sciences toward smoking. No statistical significant difference was found between students in both groups related their awareness and attitude about smoking (52.0%and 50.8% respectively) P<0.414.

Figure (5) demonstrated that 80% of students in the medical sciences compared with 72.2% of them in the non-medical sciences have a desire to quit smoking.

Table (6) showed previous smoking cessation trials & intention to quit smoking among smokers students in the medical and non-medical sciences, no statistical significant differences were found between students in both groups related to items of students want to stop smoking, students tried to stop smoking during the last year, Reasons for decision to stop smoking, number of terriers to stop smoking and students who received advices to quit smoking. While statistical significant difference was observed between students in the medical and non-medical sciences related item of having the ability to quit smoking as stated by (81,1%) compared with (65.5%) respectively P<0.05

4. Discussion

Tobacco use is increasing among young people, especially in Gulf nations such as Saudi Arabia. A compendium of tobacco consumption surveys in Saudi Arabia during the past decade (1999–2009) has shown that the prevalence estimates of tobacco use among young adults of university age range from 2.4%–37.0%[34].Many studies were conducted to explore tobacco use among health related college students, and most of these studies showed that cigarette smoking was prevalent among these students despite of their knowledge and realization of its dangerous effects on the human bodies [24-25].The prevalence of smoking among students in our study was180 student out of 900, represent (20%) of total students. Medical students represent 19.2%, and non-medical student also 21 % and most of smokers are males represent 29.4% and female's represent 11.4%, as shown in table 1, figur1, 2.

The results of this study showed that there is no statistical significant difference was found between students in the medical and non-medical sciences related to the prevalence of smoking behavior. This may be interpreted as that there are factors affecting smoking behaviors other than knowledge and awareness of smoking hazardous effects. Rational for this result: World Day to combat smoking campaigns, which are held at universities, schools and markets through awareness about the harmful effects. The results of this study showed that there is no significant difference in prevalence in smoking behavior between medical and non-medical students, and this may be interpreted as that there are factors affecting smoking behaviors other than knowledge and awareness of smoking hazardous effects. rational for this result : World Day to combat smoking campaigns, which are held at universities, schools and markets through awareness about the harmful effects of smoking and health, and how to stop smoking, as well as advertisements in the streets in addition to television and newspapers, enhanced awareness among student, also, medical students are a group that should be more aware than young people of the same age about the health hazards associated with smoking&should not smoke as they are role model in society and it is a part of their individual responsibility to curb the problem of smoking and take care an active part in raising awareness of the health risks in the general population , If medical students are smoking then the credibility of anti-smoking messages to the public is lost.

Gender was the major factors which have significant effects on the smoking behaviors among participants. It is obvious

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from the results that male students smoke more than females and this may be related to culture and social issues in Saudi Arabia , where there is strict observation conducted over females , and most of Saudis consider female smoking as social stigma. This result is congruent with many previous studies conducted in Arab and some Mediterranean countries in which smoking behaviors are more prevalent among males than females, since that they consider female smoking as an unacceptable social behavior [26, 27, and 19].

The study showed that , there are statistical significant difference regard age group in medical college most of age group ranged between 18-25 years compared with non-medical more half age ranged between 21-25,most of student single and living with family in both college, as shown in table2.P:≤0.000.this result congruent with khader e al.,[26], who reported that 85.5% of smokers started smoking at or after the age of 15 years ,also ,Al-Musmar,[19],found that, most of smokers were over 20 years of age .The study showed that most smokers were over 20 years of age. A reason for that may be the family pressure against smoking during adolescence. Once students get older and acquire more freedom, they start to smoke. Crofton,[28],told that, It is still a fact that adolescents need to open their eyes and ears to what is really going on their lives if they indulge in this risky behavior . This may mean using education from an early age to keep them safe rather than deny or ignore the problem. Al-Musmar, [19], reported that, the great majority of students were single (92.7%) and living with their parents (73.5%), and about half the students' families (51.9%) had average income. Also, Al-Mohamed et al,[27],reported that, Parental guidance and living with   parents was protective against taking up smoking . Gfroerer et-al.[29]. Also showed that among a sample of USA college students, those who lived with their parents were less likely to have smoked in the last month compared to students who did not.

According to the results in current study, friends and boredom are the main reasons that urged both medical and non-medical student to smoke. These results are congruent with findings of previous studies reported that, friends were considered the major reason for starting smoking [25, 26, 28, 29, 30], and this necessitate establishment of developed educational programs in schools, about negative effects of smoking and methods of how to stop smoking. Additionally, these educational programs should be focused on adolescents and young adults since that this age group is at high risk of moral corruptive behaviors.

The findings of this study are consistent with results of earlier ones , where cigarette smoking is more prevalent than other types of smoking such as Hookah (Shisha) and sniffing pattern of smoking[26,27,28,30], and this may be explained as that cigarette smoking is more easy to use and prepare and less expensive if used frequently.

In congruence with findings of many previous studies[24, 31,32, 33], this study showed that medical students are more knowledgeable and aware about smoking negative effects and showed greater willingness to stop smoking than non-medical students do. This may be explained as curriculum courses of medical specializations – in general- addresses to smoking hazardous effects and how to stop smoking. It is obvious from the results of this study that there is defect in advisory and educational roles of health and community organizations in spreading health awareness in society, and this will affect the behaviors of citizens toward smoking especially young people[29].

5. Conclusion

Findings of the present study revealed that smoker and nonsmoker students in the medical sciences students had more awareness and positive attitude than those in the non-medical sciences related to smoking with no statistical significant difference. Also, no statistical significant difference was observed between students in the medical and non-medical sciences students related to prevalence of smoking, the main reason of smoking among student are friends. Medical students have more willing for quiet smoking than non-medical sciences students.

6. Recommendations

From the results of current study, it recommend to:

- Critically integrate cessation counseling training into medical and non-medical sciences education.
- Develop educational program for people early in adolescence stage, and activate the role of medical related organization in spreading health awareness in the community.
- Introduce special courses for smoking behaviors and cessation in the curriculum for medical students to increase their awareness and encourage them to stop smoking and this boost their credibility as health care providers especially in cases of health education and consultation.
- Provide special on-campus managed services that help smokers kick this addictive habit.
- Utilize sports facilities located on campus in the exercise that the youth students to ventilate their energy in right way.
- Activate the celebration of World No Tobacco Day on 31st May each year.

7. Acknowledgments

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Variables	Colleges					
	Medical Sciences Colleges 469			Non-Medical Sciences Colleges 431		
	agree & Strongly agree	Disagree & Strongly disagree	I do not know	Strongly agree	Disagree & Strongly disagree	I do not know
There are many harmful chemicals in cigarettes	460	3	6	415	9	7
Passive smoking can negatively affect the health of non-smokers	452	11	6	411	11	9
Nicotine in cigarettes is not addictive to humans	137	284	48	130	235	66
Smoking causes serious diseases such as lung cancer, stroke and diseases of the mouth and tooth loss	453	12	4	408	11	12
Smoking behavior outcast by society	382	78	9	353	71	6
Smoking means of entertainment	151	298	20	146	269	16
Smoking a way to prove manhood	72	381	16	93	323	15
Smoking reason to relax the smoker	193	224	52	147	240	44
Smoking helps to concentrate and think	106	320	43	70	321	40
I allow smoking in my house	89	368	12	69	350	12
I allow my kids to smoke in the future	59	394	16	57	361	13
Should be strictly prohibited smoking in public places	325	132	12	306	110	15
Smoking personal freedom and not for others and the right to intervene	204	252	13	166	245	20
The best accompaniment friends who do not smoke	310	98	30	320	92	19
I accept to marry a man or a woman Smoker	98	340	31	79	325	27
Male students who smoke have more friends	77	292	100	104	240	87
Female students who smoke have more friends	52	310	107	93	235	103
Smoking makes male students attractive	50	382	37	63	335	33
Smoking makes female students attractive	53	371	45	59	327	45
Shisha smoking is less harmful than smoking cigarettes	152	219	98	96	216	119
Smoking harmful to health	414	43	12	365	56	10
Quitting smoking is a matter of the will	390	44	35	357	41	33
Smoking light cigarettes less dangerous than regular cigarettes	172	157	140	140	144	147
Shisha smoking in women for psychological reasons rather than an outlet for stress, exercise freedom and imitating men	199	141	129	188	119	124
Shisha smoking does not lead to addiction	108	256	105	89	221	121
Use of electronic shisha or cigarette less harmful than normal	117	151	200	105	142	183

Appendix
Awareness and attitudes of students toward smoking habit   N=900