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The Prevalence of Tobacco Products Use among Kuwait Nursing College Students

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Abstract

Background: Nurses continue to reiterate that their professionals and students who smoke are potential barriers to smoking cessation interventions. Over four decades of numerous evidence based studies, and the debate still continues as to the best prevention and smoking cessation interventions for nursing professionals and students. Objectives: To determine the prevalence of tobacco use among students in College of Nursing, Kuwait and evaluate the best tobacco cessation intervention. Method: This was a cross sectional survey of 253 (82 males and 171 females) students using 50-item self-administered questionnaire in Arabic. Also, 25 faculty members were interviewed. Results: The prevalence of cigarette and shisha smoking were 18.2%, and 24.9% among male and female students respectively. Seventy seven percent male and 76% female smokers claimed they were initiated into tobacco use from an early age. College of Nursing curriculum adequately covers hazards of tobacco products and quitting interventions and was confirmed by 93% female and 80.8% male participants. **Conclusion:** Study hypothesis was confirmed. Despite adequate information and training, students still smoke tobacco, because of early age initiation by family and friends as a way of socializing. Recommendations: Dangers of cigarette and shisha smoking should be introduced in primary schools. Nursing institutions should have smoking cessation clinics on campus and offer student nurses who are active smokers, help to cease smoking. Directions for future research should include cultural aspect of shisha smoking and genetic links of nicotine addiction.

Keywords: Nursing students' tobacco use, shisha smoking, tobacco quitting nursing interventions, Kuwait.

Review of Literature

In the search for a solution to the global epidemics of noncommunicable disease (NCDs), which is responsible for 63% of deaths globally, the United Nations (UN) General Assembly, Global forum on NCDs, suggested surveying the prevalence of tobacco use among nursing professionals and students by nursing and midwifery researchers. This should also include evaluating the best model programs to address tobacco—use and enhance nursing and midwifery capacity to address related NCDs (WHO, Human Resources for Health Observer, 2012).

At the 16th World conference on Tobacco or Health held in Abu Dhabi, 2015, there was a call for Framework Convention on Tobacco Control to reduce tobacco use prevalence by 30% by 2025 (World Conference on Tobacco and Health, 2015). Tobacco is the most commonly used addictive stimulants for recreational purposes worldwide.

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It is legal, readily available and affordable. Cigarette, cigar, pipe and shisha are the most common way of indulging in tobacco products in Kuwait, with more females (69%) smoking shisha compared to 57% males (Memon et al., 2000). A more recent study on the prevalence of tobacco use among industrial male workers in Kuwait reported a rate of 34.8% (Gaafar and Basiony, 2013). World Health Organization's (WHO) concern about the epidemic of youth's tobacco use introduced Global Youth Tobacco Survey (GYTS) to monitor tobacco use among students aged 13-15 years residing in its regions including Kuwait. The 2001 GYTS for Kuwait reported that 28.8% have ever smoked cigarette, (37.6% males and 17.6% females). Current cigarette smokers were 14.9%, (21.1% males and 6.7% females). Percentage of students currently using tobacco products other than cigarette was 20.4%, (24.1% males and 15.3% females). The results also showed that although 63.9% of the smokers expressed the desire to quit smoking about 27.6% were unable to quit in a period of one year (WHO, CDC, 2010). Results published for GYTS for students of the same age group and same period in other Gulf Cooperation Council (GCC) members countries, were similar, however, shisha was more used than cigarette (Al-Mulla et al., 2008). A more recent survey of GYTS conducted in neighboring Iraq in 2012 for same age group yielded slightly lower results. Prevalence was 21.8% of Iraqi adolescents, 27.1 % males and 12.7% females. Cigarette was the main tobacco product smoked, followed by shisha and pipe (Hussain et al., 2013).

Tobacco experimentation at school age is likely to get youths addicted to nicotine early in life. It is believed that the younger the age of initiation into tobacco smoking, the more difficult it is for the individual to quit (Mc Gahee & Tingen, 2000). Ertas (2006) discussed the issue of parental tobacco use and attitude towards smoking. Parental tobacco use makes the products readily available in the homes and creates opportunity for experimentation by the adolescents. Peer pressure and mass media were also observed as important factors influencing smoking initiation and habits among youths (Ertas, 2006), According to Al-Naggar et al., (2011), shisha smoking appears to be getting more popular among youths in Kuwait, Syria, Egypt and Lebanon, because they erroneously believe that shisha is a safer substitute to cigarette smoking. Some researchers have reported that shisha is more dangerous than cigarette in terms of fatal health consequences and addiction (AkI et al., 2010; Al-Naggar et al., 2011; Aboazizi et al., 2014).

The importance of determining the prevalence of tobacco use among student nurses has been established globally over four decades ago and there is an abundance of research reports already published from different countries on it. Haughey et al., (1986) reported smoking prevalence rate of 30% for current smokers and 25% exsmokers among nursing students in 10 nursing schools in Buffalo, United States of America (USA). Smith's systemic review of tobacco smoking among nursing students from 1990 to 2005 yielded 35 studies reported in English language conducted from different parts of the world with smoking rate ranging from 1% in Uganda to 65% in Australia (Smith, 2007). Global Health Professions Student Survey from 39 countries and Gaza Strip between 2005 and 2009 on the prevalence of tobacco products use among health care professionals reported over 20% -40% of nursing students to be active smokers (Warren et al., 2009). In Spain, Fernandez et al., (2010) reported that the prevalence of self-declared smokers among nursing students was 28%. Patelarou et al., (2011) in Greece reported a prevalence of 33.1 % for current smokers. Öztörk et al., (2011) investigated tobacco use at a Turkish school of nursing and reported the prevalence to be 42.2% males and 14.2% females. Trotter, (2014) reported a rate of 11.2% for current smokers of cigarette amongst the nursing students at East Tennessee State University in the USA. Nursing students who smoke have tried to justify their habits by giving the following reasons: influence of smoking family members and friends, curiosity, anxiety and stress during examination periods, problems, pleasure, loneliness, weight control (Smith, 2007; Öztürk et., 2011).

Among the multiple roles and functions of nurses, counseling appears to be one of paramount importance. Counseling involves enabling especially healthy clients to recognize and cope with emotional and social challenges, helping them with normal adjustment difficulties by encouraging them to seek alternative behaviors and develop a sense of self control (Berman et al., 2008). Meta-analytic studies of nursing smoking interventions reported by Rice et al., in 2009 and 2013, reviewing forty two and forty-nine randomized trials of smoking cessation interventions by nurses and health visitors, defined nursing smoking intervention as the provision of advice, counseling and /or strategies to help smokers quit. Their reports were suggestive that there were reasonable evidence that smoking cessation counseling given by nurses were effective (Rice et al., 2009 & Rice et al., 2013).

Combining counseling with different Nicotine Replacement Therapy (NRT) reduces motivation to smoke and ease the transition from tobacco use to complete abstinence, by reducing nicotine withdrawal symptoms (Stead et al., 2008). NRT products: nicotine gum, transdermal patch, nasal spray, inhalator and sublingual tablets, have been recommended in clinical guidelines as first line treatment for smokers who need pharmacological assistance (Stead et al., 2008).

The dilemma for the nursing profession is therefore; will nursing professionals and students who smoke be in a position to provide smoking cessation counseling to their clients and will their clients take them seriously when they are advising them to stop smoking, yet they smell of stale tobacco smoke? Secondly, if nurses who smoke cannot effectively provide smoking cessation counseling to their clients because they are guilty of smoking, will this not be a type of negligence of nursing functions? There are reports that some businesses and hospitals are refusing to hire smokers. This has led to the arguments as to whether the policy against hiring smokers is ethical? Smokers in health care settings should not be tolerated because they are sources of third hand smoking as their bodies and clothes are often impregnated with tobacco smoke which patients at close proximity will inhale. Also, health care companies have a business to promote healthy behavior, so there is nothing unethical if they refuse to hire individuals who make personal choices which are contradictory to corporate values (Walton, 2013). The American Nurses Association position statement states "----patient education and preventive healthcare interventions to stop tobacco use should be part of nursing practice" (ANA, 1995).

Smith's (2007) meta-analysis reported three interventional studies conducted on nursing students who smoked tobacco in Denmark, Northern Ireland and Ireland. The Denmark study by Sejr and Osler, (2002) studied 200 first year nursing students for 7 weeks, and the interventional method was 8 lectures on the health consequences of smoking. No change was observed in the smoking rate. Hope et al., (1998) in Ireland had 169, first to third year nursing student for 3 years. His interventional strategy was a combination of passive interventions and stress discussion groups. There was no change in smoking outcome observed. The 3rd researchers, Rowe and Clark (1999) in Northern Ireland had 65, first to third year nursing students and their interventional method was one session of individualized counseling for one year. He had a success result of 25% quit rate by one year follow up. This gives credit to counseling as a relatively effective smoking cessation model.

The Registered Nurses' Association of Ontario (RNAO) in their education guide on tobacco use and associated health risks stated that nurses who are current smokers are potential barriers to tobacco cessation interventions (RNAO, 2010). The American Academy of Nursing, in its policy statement affirmed that tobacco use of nurses is a barrier to smoking cessation interventions, and nurses worldwide should serve as tobacco-free models (Sarna & Bialous, 2013). They also reiterated that "nursing curricula should include information about the health hazards of tobacco use, exposure to second hand smoke, prevention of tobacco use, tobacco control policies, and science-based strategies for tobacco dependence treatment, as well as clinical practice opportunities, to ensure that all nurses are competent in tobacco control and cessation interventions" (Sarna & Bialous, 2013). There was no study found on the prevalence of tobacco use among nursing students in Kuwait. The Nursing Global Health Professions Student Survey, 2005-2009 for Eastern Mediterranean region did not include any report from Kuwait although it included report from its neighboring country Iraq (Warren et al., 2009). In light of the above, the objectives of this study were: firstly, to determine the prevalence of tobacco products use among nursing students in college of nursing, Kuwait and secondly, to determine the best action to solve the challenges of continuous tobacco use by student nurses.

Theoretical Frame work

The theoretical framework underpinning this study was diffusion theory which addresses youth's behavior (West, 2006). The theory implies that addictive behaviors are socially controlled. People become addicted because they are imitating their peers or superiors within their social networks and environments.

Null Hypothesis

The awareness of adverse health hazards associated with tobacco use made no significant difference in the use of tobacco products among student nurses attending the college of nursing, Kuwait.

Methodology

Design

This was the first part of a multi-phase study. It was a cross sectional survey involving 253 students attending nursing college, Kuwait, from January to May 2014. Snowballing sampling technique was used to recruit participants. Twenty five faculty members were also interviewed.

The Research Setting

The study was conducted at the college of nursing (CON), Kuwait, Middle Eastern Mediterranean region. It offers both bachelor of nursing and associate degree of nursing programs in English language. According to Vidal et al., (2013), CON has the distinction of being the only educational facility in Kuwait offering nursing degrees using guidelines promulgated by National League for Nursing, the World Health Organization and International Council of Nurses.

The health hazards of smoking tobacco products are taught in pathophysiology, pharmacology, general chemistry, principles of nutrition, medical surgical nursing, advance medical surgical nursing, community health nursing, maternal and child health nursing and human growth and development. Effects of second hand smoke and quitting strategies including NRT are taught in community health nursing and human growth and development in both programs. In addition to the theoretical contents taught and examined in the classrooms, outreach services which include exhibitions and health teaching on dangers of tobacco products are conducted and students are evaluated at polyclinics, primary and secondary schools in Kuwait as part of community health nursing course in both programs. At all levels in both associate degree of nursing and bachelor's degree, the health assessment forms for clinical training contain questions asking if the client smokes cigarette, however, there are no specific questions on shisha and other types of tobacco products. Using the health assessment forms for each of their assigned clients during clinical experience, offers each student the opportunity to 'ask' about smoking habit, 'advice smokers to quit' and 'refer' (AAR) smoking clients that need assistance to smoking cessation clinics as proposed by Berndt et al., (2011), a modification of clinical practice guideline 5As (Ask, Advice to quit, Assist and Arrange quitting methodology proposed by Fiore et al., (2012). The college has a smoking ban policy in the college campus and while on clinical experience in all of its clinical settings.

Ethical Considerations

The study was approved by nursing departmental and college of nursing research committees. Informed consent was sought for and obtained from all the participants in writing. They were informed that participation was voluntary.

Instruments / Materials

Data was collected using fifty item self-administered, anonymous questionnaires in Arabic. The questionnaire was divided in 2 sections, forty seven (47) structured questions and three open ended questions. Content validity was done by four faculty members and some questions were modified based on their recommendations. Questionnaire was then pilot tested by 5 male and 10 female students. Questions that appeared ambiguous to some students were rephrased. Cronbach's alpha coefficient for the questionnaire was 0.804 for the first 28 variables and 0.805 for the remaining 22 variables. The results confirmed the validity of the constructs chosen and as well as confirming them suitable for the present research. Twenty five (25) faculty members completed the staff questionnaire followed by unstructured interview on how much hazards of smoking tobacco product is taught in their various courses as part of the college curriculum content.

The second phase of the study has been reported in a different paper. It involved 36 real active tobacco product users motivated to quit smoking after "tobaccofree" campus initiative was enforced. They had mandatory

weekly monitoring of biological health indicators and expiratory carbon monoxide levels for 10 weeks. The third phase is still on-going as a longitudinal study following-up the quitters for six to 12 months.

Data analysis

Commercial software Statistical package for Social Sciences (SPSS) version 22.0 for windows was used to analyze the structured questions. Both descriptive and inferential statistics were utilized.

Frequencies and percentages were used to measure the study variables. Inferential statistics was by using non-parametric tests: Pearson chi-square, Kruskal-Wallis and Mann-Whitney U tests. Thematic analysis was employed for the open ended questions.

Results

Cronbach's alpha coefficient for the questionnaire was 0.804.

Demographic characteristics

The sample consisted of 82 male students and 171 female students, from both Associate degree of Nursing and Bachelor degree of nursing programs. The mean age group was 19-20 years. Chart 1 and 2 showed that majority of the students (81.8% of female and 75.5% of male) have never smoked cigarette or shisha. However, 2.9% female and 3.7% male smoked only cigarette, 12.3% females and 4.9% male smoked only shisha, while majority of the smokers smoked both cigarette and shisha 10.5% females and 24.4% males.

Chart 1: Percentage of cigarette and shisha use among female participants

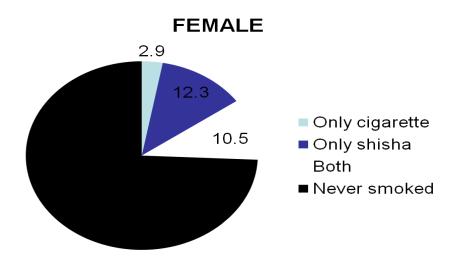
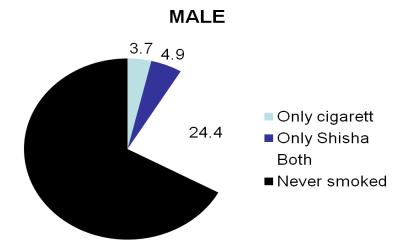


Chart 2: Percentage of cigarette and shisha use among male participants



In table 1, the number of cigarette and shisha smokers by nationalities, revealed that out of the 16 nationalities participating in this study, students from nine nationalities claimed they used tobacco products. The three nationalities with the largest users of tobacco products: shisha were Jordanians (61.3%), Palestinians (46.2%) and Syrians (36.7%). Because the participants were from many different nationalities, Kruskal-Wallis test was used to analyze if there was any significant differences in the distribution amongst nationalities. The results suggest that there is statistically significant difference amongst the underlying distributions of the "number of students currently using shisha" amongst the nationalities ($\chi^2 = 29.021$, df = 14, p = .010), and also, no of students who have ever used shisha" amongst the nationalities ($\chi^2 = 45.210$, df = 14, p = .010). However, the results suggest that there is no statistically significant difference amongst the underlying distributions of the "number of students engaged in cigarette smoking" amongst the nationalities ($\chi^2 = 10.101$, df = 14, p = .755).

Table 1: Prevalence of Tobacco Products use According to Demographic characteristics of Participants

Variables			Smoked Cigarette				Smoked Shisha			
	N	%	Yes	%	No	%	Yes	%	No	%
Sex: Male	82	32.4	22	26.8	60	73.2	23	28	59	72
Female	171	67.6	24	14	147	86	39	22.8	132	77.2
Total:	253	100	46	18.2	207	81.8	62	24.5	191	75.5
Nationality:										
Kuwaiti	30	12	5	16.7	25	83.3	3	10	27	90
Saudi	9	3.6	2	22.2	7	77.8	0	0	9	100
Bahrani	3	1.2	0	0	3	100	0	0	3	100
Omani	4	1.6	0	0	4	100	0	0	4	100
Syrian	55	21.7	14	25.5	41	74.5	20	36.7	35	63.3
Non-Kuwaiti	53	20.9	8	15.1	45	84.9	7	13.2	46	86.8
Jordanian	31	12.3	10	32.3	21	67.7	19	61.3	12	38.7
Somali	20	7.9	2	10	18	90	4	20	16	80
Palestinian	13	5.1	3	23.1	10	76.9	6	46.2	7	53.8
Egyptian	12	4.7	1	8.3	11	91.7	1	8.3	11	91.7
Lebanese	8	3.2	1	12.5	7	87.5	2	25	6	75
Yemini	4	1.6	0	0	4	100	0	0	4	100
Irani	6	2.4	0	0	6	100	0	0	6	100
Eritrean	2	8.0	0	0	2	100	0	0	2	100
Iraqi	2	8.0	0	0	2	100	0	0	2	100
Canadian	1	0.4	0	0	1	100	0	0	1	100
Total	253	100	46	18.2%	207	82%	62	24.5%	191	75.5%

Testing the null hypothesis:

Different types of analysis were used to test the null hypothesis: "The awareness of adverse health hazards associated with tobacco use made no significant difference in the use of tobacco products among student nurses attending the college of nursing Kuwait". The following results were obtained: When asked if they were aware of the health risks of smoking tobacco products, 93% of the female and 80.8% of the male students said: "yes". This confirms the findings from the faculty members who reported that dangers of smoking tobacco products are taught in pathophysiology, pharmacology, general chemistry, principles of nutrition, medical surgical nursing, advance medical surgical nursing, community health nursing, maternal and child health nursing and human growth and development. Also, at all levels in both associate degree of nursing and bachelor's degree of nursing programs, the health assessment

forms for clinical training contains questions asking if the client smokes cigarette, but, there are no specific questions on shisha and other types of tobacco products. Using the assessment forms give the students the opportunity to assess, advice and refer their clients who smoke tobacco products to smoking cessation clinics.

On the issue of knowledge of mental changes associated with tobacco use, the results suggest that there is statistically significant difference in the knowledge of the extent of mental changes in using cigarette & shisha between the males and the females (U = 3002.500, p = .001) & (U = 2689.500, p = .003) respectively, concluding that males are statistically significantly more knowledgeable than the females.

However, the results also suggest that there is no statistically significant difference in the underlying distributions of "Extent of physical damage in cigarette" between the males and the females (U = 3370.000, p = .126). And that there is no statistically significant difference in the underlying distributions of "Extent of physical damage in shisha" between the males and the females (U = 3362.000, p = .223). As shown in table 1, the prevalence of cigarette smoking was 18.2 %, (26.8% males and 14 % females). Similarly, shisha smoking was 24.5% (23% male and 39% female). Mann Whitney-U test indicated that there was a statistically significant difference in the underlying distributions of "number of students engaged in both cigarette and shisha usage" between males and females, the males being higher than females in both cigarette and shisha, respectively: (U = 4904.500, P = 0.000), (U = 4282.500, P = 0.002). The null hypothesis is therefore accepted.

Majority of the male (77%) and female (76%) cigarette smokers said they started smoking from secondary school. Similarly, 72 % of male and 51% of female shisha smokers said they started from secondary school. A Pearson chi-square was used to identify whether or not age group influenced the number of students who engaged in cigarette usage. Result of chi-squared showed statistically significant association between age group and number of students who engaged in cigarette use, (χ^2 =35.768, df = 20, p = 0.016). Students above 20 years old identified more students engaged in smoking cigarette than younger students aged 17-18 years.

When asked if anyone have offered them cigarettes, the results suggest that there is statistically significant difference between the males and the females (U = 1063.000, p = .044). It can be concluded that more males were offered cigarettes than females. However, the results for shisha suggest that there is no statistically significant difference in the underlying distributions of "Has anyone offered you shisha" between the males and the females (U = 1489.500, p = .865).

Kruskal-Wallis test results suggest that there is statistically significant difference amongst the underlying distributions of the "how easy /difficult it is to obtain shisha" amongst the nationalities ($\chi 2 = 32.769$, df = 14, p = .003). When asked if they have ever tried to quit smoking cigarette, 25% of males and 35% of females said they have never tried to quit. 67% males and 40% of females have tried more than once to quit. More females 46.9% have never tried to quit smoking shisha, while 37% of females have tried more than once to quit. Among the males shisha users 10.5% said they have never tried to quit, 31.5% tried quitting once and 57.8% have tried more than once to quit without success.

The results from Mann Whitney-U test suggests that there is statistically significant difference in the underlying distributions of "Have you ever tried to stop shisha" between the males and the females (U = 202.000, p = .032). It can be concluded that the underlying distributions of "Have you ever tried to stop shisha" for males are statistically significantly higher than the underlying distributions of "Have you ever tried to stop shisha" for females, However, there was no significant difference between males and females when asked if they have ever tried to stop smoking cigarette (U = 184.000, P = .142).

Analyzing the reasons why youths use tobacco products, the results suggest that there is statistically significant difference in the underlying distributions of "To help study and focus makes young people to practice" between the males and the females (U = 4450.500, p = .035), concluding that more males than females believe that tobacco products help them focus and study.

Thematic Analysis Findings

Multiple responses were given by the participants for the open ended questions. When asked the reasons given by other people for using tobacco products, 41.32% reported bad influence from friends. Stress accounted for 30.54%, lack of prevention from family/social support: 21.55%, pleasurable experience / habit: 16.17%, imitating family members and friends: 12%, Symbol of Masculinity: 10.19%, easily available: 9.58%, lack of awareness of the health risks: 8.98%, lack of religious faith: 2.99% and lack of enforcing college penalties policy for smoking: 1.2%.

Majority, 50.77% of the participants stated, imitating family and friends as their reason for using tobacco products. The other reasons were bad mood/ boredom: 29.23%, pleasurable experience / habit: 15.31% and financial problems: 6.15%.

Participants suggestions on the best strategies to stop or reduce tobacco products use among youths included the following: creating health awareness: 53.92% enforce existing regulations on smoking ban: 46.08%, creative utilization of spare time: 12.75% enforce religious and ethical values: 6.88%, treatment and follow up of nicotine addicts: 5.39% and encouraging family and social support: 4.89%. Only 3.92% suggested self-empowerment / will-power through developing self-understanding / awareness to reduce or stop using tobacco products.

Discussion

Prevalence of tobacco use among nursing students

The prevalence rate of 18.2% derived from this study is slightly higher than the rates for current youth smokers in Kuwait which was 14.9% (WHO, CDC, 2010), but lower than the industrial male workers' rate of 34.8% (Gaafar & Basiony, 2013). It can be seen as progression in smoking habit with age and work stress. However, it is lower when compared with rates reported in this decade for nursing students in Spain, Greece and Turkey (28%, 33.1% and Turkey 42.2 %,) respectively. An English idiom "Charity begins from home" needs to be applied to the nursing profession when searching for effective smoking prevention / cessation interventions. Nurses are the largest health care professionals and nurse educators cannot ignore the fact that student nurses (future professionals) have continued to indulge in using tobacco product despite many years of research confirming the dangers of tobacco use. There are numerous reports on the prevalence and unwillingness / unsuccessful quit attempts (Haughey et al., 1986; Smith et al., 2007; Fenandez et al., 2010; Öztürk et al., 2011). Nurses who smoke cannot be expected to provide effective nurse led smoking cessation interventions to their clients. The result of this study shows that the prevalence of cigarette and shisha use was 18.2% and 24.9% respectively. These figures are slightly lower than those reported by Fernandez et al., 2010; Patelarous et al., 2011.

Age of initiation of tobacco use

The mean age group of our subjects was between 19-20 years. Our study showed statistically significant association between age group and number of students who engaged in cigarette use, (χ^2 =35.768, df = 20, p = 0.016). Majority of the smokers: 77% male and 76% female cigarette smokers declared that they started smoking from secondary school, which meant that most of them were adolescent smokers and it is likely they were already nicotine addicts before joining the college of nursing. Similar results were reported by many researchers according to Öztürk et al., and their study also confirmed this phenomenon as they wrote "many factors affect the use of cigarette but one of the most important factors is the age of first smoking attempt. The earlier the age of first smoking attempt is, the more the smoking desire is and the more the risk of being addicted increases" (Öztürk et al., 2011). According to McGahee & Tingen, (2000), tobacco experimentation at school age is likely to get youths addicted to nicotine early in life. They also believed that the younger the age of initiation into smoking, the more difficult it is for the individual to quit. This may explain the reasons for some students' inability to give up their smoking habits.

Perceived ease of access to tobacco products

Kruskal-Wallis test results suggest that there is statistically significant difference amongst the underlying distributions of the "how easy /difficult it is to obtain shisha" amongst the nationalities ($\chi 2 = 32.769$, df = 14, p = .003). Also, 51% of the participants said, imitating family and friends were their reasons for using tobacco products. This finding is in agreement with Ertas, (2007) who reported that familial factors which includes parental tobacco use and attitude to smoking may encourage their youths to experiment. Peer pressure is another factor which affects youth culture and according to diffusion theory (West, 2006), youths are influenced by peer pressure, because they

want to belong to the gang. So if they have friends who smoke cigarette and shisha, they are most likely to indulge if offered. When asked if anyone have offered them cigarettes, the results suggest that there is statistically significant difference between the males and the females (U = 1063.000, p = .044). It can be concluded that more males were offered cigarettes than females.

Awareness of health risks of tobacco smoking

When asked if they were aware of the health risks of smoking tobacco products, 93% of the female and 80.8% of the male students said "yes". This confirms the findings from the faculty members who reported that dangers of smoking tobacco products are taught in pathophysiology, pharmacology, general chemistry, principles of nutrition, medical surgical nursing, advance medical surgical nursing, community health nursing, maternal and child health nursing and human growth and development.

Reasons for smoking tobacco products

Participants in this study rationalized like those in the literature reviewed. Majority, 50.77% of the participants stated, imitating family and friends as their reason for using tobacco products. Forty one percent reported bad influence from friends. Stress accounted for 30.54%, lack of prevention from family/social support: 21.55%, pleasurable experience / habit: 16.17%, imitating family and friends: 12% said it was a symbol of masculinity: 10.19%, easily available: 9.58%, lack of awareness of the health risks: 8.98%, lack of religious faith: 2.99% and lack of enforcing college penalties policy for smoking. The other reasons were bad mood/ boredom: 29.23%, pleasurable experience / habit: 15.31% and financial problems: 6.15%. Similarly, in the literature reviewed nursing students who smoke have tried to justify their habits by giving the following reasons: influence of smoking family members and friends, curiosity, anxiety and stress during examination periods, problems, pleasure, loneliness, weight control (Smith, 2007; Öztürk et., 2011). Nicotine addiction, like all other addictive behaviors are socially controlled because people especially adolescents try to imitate their peers or their superiors (West R, 2006).

Smoking cessation interventions

Rice et al., (2009 &2013) meta-analysis defined smoking cessation interventions by nurses as advice, counseling with or without other interventions such as nicotine replacement therapy (NRT) was reported to reduce motivation to smoke and ease the transition from tobacco use to complete abstinence, by reducing nicotine withdrawal symptoms (Stead et al., 2008). Meta-analysis by Smith et al., (2007) reported three types of smoking interventional methods targeting student nurses as: lectures on the health consequences of smoking, behavioral support by combining passive interventions, stress discussion groups and individualized counseling tailored to the smoker's needs. NRT can be purchased over the counter, therefore nurses can advise the use of NRT during counseling. Nurses can also provide written self-help materials, pamphlets and place educational posters at strategic places and on internet. There are other interventions which are beyond the scope of nurses and they include prescription drugs. Nurses can refer smokers who need this type of cessation intervention to appropriate physicians. Counseling and patient education are important functions of nursing (ANA, 1995; Berman et al., 2008), therefore individuals who are nicotine addicts and are unable to perform smoking cessation functions for their patients should be assigned to other nursing specialties that does not involve smoking cessation skills, while encouraging them to quit.

Quit rate

When our participants were asked if they have ever tried to quit smoking cigarette, 25% of males and 35% of females said they have never tried to quit. 67% males and 40% of females have tried more than once to quit. More females 46.9% have never tried to quit smoking shisha, while 37% of females have tried more than once to quit. Among the males shisha users 10.5% said they have never tried to quit, 31.5% tried quitting once and 57.8% have tried more than once to quit without success. If they have never tried to quit or have had unsuccessful quit attempts how can they counsel their clients to quit? According to McGahee & Tingen, (2000), Tobacco experimentation at school age is likely to get youths addicted to nicotine early in life and younger the age of initiation into smoking, the more difficult it is for the individual to quit. Majority of the self-confessed smokers in this study, started smoking in

secondary school. It therefore follows that quitting smoking may require very stringent actions to be taken. Smith's (2007) meta-analysis reported three interventional studies conducted on nursing students who smoked tobacco in Denmark, Northern Ireland and Ireland, where only one group reported a 25% quit rate by follow up. It appears that majority of student nurses who smoke are unwilling to give up their habits for the benefit of their profession and patients; rather their addiction become worse with examination stress and they become bad influences by initiating their friends into tobacco smoking, because they believe that tobacco smoking helps with focusing and study.

Limitations

Participants consisted of only volunteers and therefore the lack of randomization of subjects might introduce selection bias.

Conclusion

Our study revealed that despite adequate information and training on hazards of tobacco in CON Kuwait curriculum, the prevalence for cigarette and shisha was 18.2% and 24.5% respectively. Continued tobacco use was as a result initiation to tobacco use at early age by family and friends as a way of socializing. Most of the smokers in this study have not attempted to quit and some have tried unsuccessfully to quit.

Recommendations

All the students' health assessment forms should enquire about all the tobacco products use including shisha and cigar and not only cigarette. Hazards of tobacco products should be introduced early at primary school level. There is need for future research into the cultural aspects of shisha smoking in the Middle East as some of the participants believe that shisha smoking is a culturally accepted way of socializing. There is also a need for research into genetic link to addiction, as children of tobacco addicts grow up to be smokers. Addiction is a "hard nut to crack" Nursing institutions should have smoking cessation clinics on campus to offer counseling to students who smoke tobacco product and encourage them to quit.

References

- Aboazizi, E. & Eissenberg, T. (2014). Waterpipe tobacco smoking: what is the evidence that it supports nicotine/tobacco dependence? Tob. Control Published on line December 9, 2014. Downloaded from http://tobaccocontrol.bmj.com/ 21st January 2015.
- Akl, E. A., Gaddam, S., Gunukula, S. K., Honeine, R., Jaoude, P. A. & Irani, J. (2010). The Effects of Waterpipe tobacco smoking on Health Outcomes: A Systematic review. *International Journal of Epidemiology.* 39 (3), 834-857. doi: 10.1093/dyq002
- Al-Mulla, M., Abdou, A., Helmy, S., Al-Lawati, J., Al-Nasser, S., AbdelRahman, S., Al-Mutawa, A. et at., (2008). Prevalence of Tobacco Use Among Students aged 13-15 years in Health Ministers Council / Gulf Cooperation Council Members States 2001-2004. *Journal of School Health* **78**(6):337-43
- Al-Naggar, R. A. & Saghir, F. S. A. (2011). Water Pipe (Shisha) Smoking and Associated Factors Among Malaysian University Students. Asia Pacific J. Cancer Prev, **12**, 3041-3047
- American Nurses Association. (1995). Position Statement: Cessation of Tobacco Use. Indianapolis: American Nurses Association.
- Berman, A., Snyder, S. J., Kozier, B. & Erbs, G., (2008) Kozier & Erb's Fundamentals of Nursing: Concepts, Process and Practice. (8thed). New Jersey: Pearson Prentice Hall, (Chapter 1).
- Berndt, N.C., Bolman, C., de Vries, H., Segaar, D., van Boven, I. & Lechner, L (2011). Smoking Cessation Treatment Practices: Recommendations for Improved Adoption on Cardiology Wards. Journal of Cardiovascular Nursing, doi:10.1097/JCN.0b013e318231f424
- Ertas, N., (2007) Factors associated with stages of cigarette smoking among Turkish youth. The European journal of Public Health. 17 (2):155-161. Doi: 10.1093/eurpub/ck1095.
- Fernandez, D., Martin, V., Molina, A. J. & Luis, J. M. D. (2010). Smoking habits of students of nursing: A questionnaire survey (2004-2006). Nurse Education Today. 30 pg 480-484. doi: 10.1016/j.nedt.2009.10.012

Gaafar, M. A. & Basiony, L. A. (2013). Pattern of Smoking Habit and Quit Attempts among Industrial Workers in Kuwait. *Occupational Health Medicine & Health Affairs*. 1: 3. http://dx.doi.org/10.4172/2329-6879/1000115.

- Fiore, M.C., Goplerud, E., &Schroeder, S. A. (2012) The Joint commission's new tobacco-cessation measures—will hospitals do the right thing? New England Journal of Medicine, 366 (13),1172-1174.doi: 10.1056/NEJMp115176
- Human Resources for Health Observers (2012). Enhancing Nursing and Midwifery capacity to contribute to the prevention, treatment and management of noncommunicable diseases. *World Health Organization*. Issue No.12.
- Hussain, H. Y. & Abdul Satar, B. A. (2013) Prevalence and determinants of tobacco use among Iraqi adolescents: Iraq GYTS 2012. *Tobacco Induced Diseases* **11**:14. http://tobaccoinduceddiseases.com/content/11/1/14
- McGahee, T. W. & Tingen, M.S., (2000) The Effects of Smoking Prevention Curriculum on Fifth-grade children's Attitudes, Subjective Norms and Refusal Skills. Southern online journal of Nursing Research, Issue 2, Vol 1, .www.snrs.org
- Memon, A., Moody, P. M., Sughathan, T. N., El-Gergess, N., Al-Bustan, M., Al-Shitty, A. and Al-Jazza, H. (2000). Epidermiology of Smoking among Kuwaiti adults: prevalence, characteristics and attitude. *Bulletin of World Health Organization. Geneva Nov 2000.* **78**(11) http://dx.doi.org/10.1590/S0042-96862000001100005
- Öztürk, C., Bektaş, M., Yilmaz, E., Salman, F., Şahin, T., İlmek, M. & Göke, G. (2011) Smoking status of Turkish Nursing Students and Factors Affecting their behaviors. *Asian Pacific Journal of Cancer Prevention.* 12. 1687-1692.
- Patelarou, E., Vardavas, C. I., Ntzilepi, P., Warren C. W., Barbouni, A., Kremastinou, J., Connolly, G. N. & Behrakis, P. (2011). Nursing education and beliefs towards tobacco cessation and control: a cross-sectional national survey (GHPSS) among nursing students in Greece. BioMed Central. Tobacco Induced Diseases 2011, 9:4 http://www.tobaccoinduceddiseases.com/content/9/1/4
- Registered Nurses' Association of Ontario nurses (2010). Nursing Faculty Education Guide: Tobacco Use and Associated Health Risks: A Companion Teaching Guide for the RNAO Best Practice Guideline Integrating Smoking Cessation into Daily Nursing Practice, page 15.
- Rice, V. H. & Stead, L. F., (2009) Nursing interventions for smoking cessation. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.:CD001188. DOI: 10.1002/14651858.CD001188.pub3.
- Rice, V. H., Hartmann-Boyce, J. & Stead, L. F. (2013) Nursing Interventions for Smoking cessation. *Cochrane Database Systematic Reviews, Issue 1. Art. No: CD001188: doi: 10.1002/14658.CD001188.pub3.*
- Sarna, L., Bialous, S. and the Health Behavior Expert Panel (2013) Nursing Scholarship and Leadership in Tobacco Control. *American Academy of Nursing.*
- Smith, D. R. (2007) A systematic review of tobacco smoking among nursing students. Health Education in Practice. 7, 293-302.doi:10.1016/j.nepr.2006.09.003
- Stead, L. F., Perera, R., Bullen, C., Mant, D., Lancaster, T. (2008) Nicotine replacement therapy for smoking cessation, *Cochrane Database of Systemic Reviews 2008*, Issue 1. Art. No.:CD000146. DOI:10.1002/14651858.CD000146.pub3.
- Sychareun, V., Hansana, V., Choummanivong, M., Nathavong, S., Chaleunvong, K. & Durham, J. (2013). Cross sectional survey: Smoking among medical, pharmacy, dental and nursing students. University of Health Sciences, LaoPDR. *BMI Open Access*, 3(8), e003042.doi:10.1136/bmjopen-2013-003042
- Trotter, J. (2014). The Prevalence of Smoking in Nursing Students. Undergraduate Honors Theses. Paper 240. http://dc.etsu.edu/honors/240.
- Vidal, L., Ohaeri, B. M., John, P. & Delles.H. (2013). Virtual Reality and the Traditional Method for Plebotomy Training Among College of Nursing Students in Kuwait. Journal of Infusion Nursing Vol 36, (5) DOI: 10.1097/NAN.Ob013e318243172f
- Walton, A. (2013). Should companies have the right to refuse to hire smokers? Forbes. Information for World's Business Leaders-Forbes.com. Retrived 4th July 2015, from http://www.forbes.com/site/alicegwalton/2013/03/28/should-companies-have-the-right-to-refuse-to-hire-smokers/
- Warren, C. W., Sinha, D. N., Lee, J., Lea, V. & Jones, N. R. (2009). Tobacco use, Exposure to secondhand Smoke, and Training on cessation Counseling Among Nursing Students:Cross-country data from Global Health

Professions Student Survey (GHPSS) 2005-2009. *Int. J. Environ. Res. Public Health* 6: 2534-2549; doi:10.3390/ijerph6102534

West, R. (2006). Theory of Addiction. Blackwell publishing (pp 110) Oxford: Addiction Press.

World Conference on Tobacco and Health (2015). Tobacco and non-communicable diseases. *Conference proceedings. Abu Dhabi, United Arab Emirates, 17-21 March 2015.* WCTOH.org

World Health Organization (2010) Report on the Result of the Global Youth Tobacco Survey in Kuwait. Dr. El-Nasser .S.