

# global health professions student survey

## Country reports

The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), Atlanta, developed the Global Health Professions Student Survey to track tobacco use among health professions students across countries using a common methodology and core questionnaire. Information from the Survey is compiled within the participating country by a Research Coordinator nominated by the Ministry of Health, and technically reviewed by WHO and CDC. The content has not otherwise been edited by WHO or CDC.

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**World Health  
Organization**

Regional Office for the Eastern Mediterranean



**CENTERS FOR DISEASE  
CONTROL AND PREVENTION**



# **Global Health Professional Students Survey Among Medical Students, Kuwait 2010**

## **KUWAIT (GHPSS) 2010**

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## **Introduction**

Tobacco use causes preventable morbidity and mortality.<sup>1-4</sup> A number of studies have found that health professionals can substantially increase smoking cessation rates among their patients by brief or simple counselling<sup>5-7</sup>. Intervention by a health professional to encourage smoking cessation is cost-effective compared to other cessation therapies: the cost of nicotine replacement therapy alone has been estimated to cost about twice as much as physician counseling per year of life saved<sup>8-9</sup>.

Despite the body of knowledge on health professionals' role in tobacco cessation, few recent studies have collected information on tobacco use and training to provide cessation counseling among health professional students. A review published in 2007 found 66 articles published between 1976 and 2006 that focused on smoking behavior among medical students.<sup>10</sup>

## **Tobacco use in Kuwait:**

Tobacco cultivation is prohibited in Kuwait. The national committee for tobacco control in Kuwait has been instructed with some achievement:

- Banning smoking in closed public places.
- Banning smoking in public transport.
- No sponsorship for any kind of sport or contents by tobacco companies.
- Prohibition of sales to minors below (18 years).
- Periodic increase of custom and additional fees on imported tobacco.

A study done in Kuwait<sup>11</sup> revealed that 70% of all male smokers had started smoking before they reached age 20 years.

Another study among medical students at Kuwait University showed that 33% of those who had ever used tobacco began at high school, and 50% began at medical school (12).

From the result of (2005 and 2009 GYTS data) in Kuwait, it is evident that the prevalence of ever smoked cigarette between 2005 and 2009 (27.6% and 28.8% respectively) is significantly elevated higher in both boys and girls. Further, the prevalence of girls who use other tobacco use (shisha) 8.9% is still significantly higher than girls who smoke cigarette (5.8%). This may be an indication that other tobacco use will soon be increasing among young girls and illustrating the need to encompass all types of tobacco use when

developing intervention strategies considering the misconception that water-pipe are harmless.(13)

### **Background of the Global Health Professionals Students Survey (GHPSS)**

The World Health Organization, CDC, and the Canadian Public Health Association, developed the GHPSS to collect data on tobacco use and cessation counseling among health professional students in all WHO member states.

GHPSS is a standardized school-based survey of third-year students pursuing advanced degrees in dentistry, medicine, nursing, or pharmacy. It is conducted in schools during regular class sessions. GHPSS follows an anonymous, self-administered format for data collection. GHPSS uses a core questionnaire on demographics, prevalence of cigarette smoking and other tobacco use, knowledge and attitudes about tobacco use, exposure to secondhand smoke, desire for smoking cessation, and training received regarding patient counseling on smoking cessation techniques. Questionnaires are translated into local languages as needed. GHPSS has a standardized methodology for selecting participating schools and classes and uniform data processing procedures.

### **Objectives of GHPSS**

The objectives of the GHPSS are to:

- (1) Collect baseline information on tobacco use.
- (2) Evaluate the existence, implementation and enforcement of Tobacco control policies in health professional schools.
- (3) (understand the knowledge and attitudes of health profession students towards tobacco control policies.
- (4) (Assess training and material requirements for implementing tobacco prevention and control interventions.

## **Methodology**

The Global Health Professionals Students Survey (GHPSS) is part of the Global Tobacco Surveillance System (GTSS), which collect data through three surveys.

GHPSS is a school based survey of third year student in the Faculty of medicine Kuwait University. GHPSS of the medical students consist of 47 core questions on demographics, prevalence of cigarettes smoking, and other tobacco use, knowledge and attitude about tobacco use, exposure to secondhand smoke, desire for smoking cessation and training received regarding patient counseling on smoking cessation technique. The methodology of GHPSS is uniform around the world, so the result could be compare each other accurately.

In Kuwait there is only one medical school and that is a part of Kuwait University. All third year students in medical school were targeted to participate in the survey. Data collection was conducted in each school during regular class session. The medical school system in Kuwait consists of seven years: two preparatory, two academic, and three clinical years. From the third to the seventh year, students physically attend the Faculty of Medicine on a permanent basis

## **Data Collection**

Data collection was coordinated by Ministry of Health (MOH) and Kuwait Faculty of Medicine. Before data collection, visits to Faculty of Medicine were undertaken in order to:

- Obtain permission from Dean of the faculty of Medicine to conduct the survey
- Make logistical arrangements for survey administration

Dean of the faculty of Medicine was briefed on the objectives of the survey, administration and the procedures that were to be employed to ensure anonymity & confidentiality for students.

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was administered in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer. The questionnaire contained 47 multiple-choice questions.

GHPSS follows a self-administered format for data collection. The questionnaire covers prevalence of cigarette smoking and use of other tobacco products, exposure to second hand smoke (SHS), desire to quit smoking and training received to provide patient counseling on cessation technique.

The GHPSS was conducted in faculty of medicine during regular lectures and class sessions. Students recorded answers to the GHPSS questionnaires on a scan-able answer sheet. Completed answer sheets were sent to the centers for Disease Control and Preventive (CDC) for processing.

### **Data analysis**

All GHPSS data of Kuwait were processed by CDC, which is the coordinating center for the Global Tobacco Surveillance System (GTSS). SUDAAN, software developed for analysis of survey data, and to calculate prevalence estimate and 95% confidence interval.<sup>14</sup> Statistical differences are noted at the  $P < 0.05$  level.

## **Results**

A total of 101 medical students in the third year participated in Kuwait Medical students GHPSS 2010. The school response rate was 100% and the student's response rate was 100%.

### **Prevalence of Tobacco**

(Table 1): Percent of students who use tobacco

	Total	Female	Male
-Ever smoked cigarettes	21.9%	14.9%	40.7%
-Current cigarettes smokers	5.3%	0	19.2%
-Ever used other tobacco product	35.8%	28%	57.7%
-Current use other tobacco products	11.5%	7.5%	22.2%
-Ever use any tobacco products	41.7%	34.3%	63%
-Current use any tobacco products	11.5%	7.5%	22.2%

(Table 1) shows that, one in every five students had ever smoked cigarettes (21.9%). Male are significantly more likely than female for both ever and current smokers of tobacco use. Only 5.3% of the students were current cigarettes smokers and more than one in ten currently use other tobacco products (11.5%). Males are significantly more likely than females (19.2% & 22.2% compared to 0 & 7.5% respectively). Current use any tobacco products were 11.5%. Male are significantly more likely than female for use of any tobacco products.



**Environmental exposure**

(Table: 2) Percent of students who exposed smoke at home, public places and supported banning smoking in public places

Factors influencing tobacco use	Total	Female	Male
-Had someone smoke cigarettes, shisha or other tobacco products in their presence and their home during the past year.	29.2%	23.9%	40.7%
- Who in the past 7 days had someone smoke cigarettes, shisha or other tobacco products in their presence other than in their home.	43.8%	34.3%	63%
-Who have an official policy banning smoking cigarettes, shisha or other tobacco products in school building and clinics.	68.8%	72.3%	65.4%
-Who have an official policy banning smoking cigarettes, shisha or other tobacco products in school building and clinics and the policy is enforced	88%	92.9%	62.5%

(Table 2) reveals that, almost three in ten students (29.2%) had some cigarettes, shisha or other tobacco products in presence and in their homes (exposed to second-hand smoke at home). Also more than four in ten students (43.8%) had been exposed to second-hand smoke in public places. Males are significantly more likely than females regarding to exposure to second-hand smoke at homes and in public places. The table shows that, 68.8% of the students have an official policy banning smoking cigarettes, shisha or other tobacco products in school buildings and clinics. Also 88% of the students reported that this policy was enforced.

**Table(3) Attitude of medical students**

	Total	Female	Male
-Who think tobacco sales to adolescent should be banned.	<b>94.7%</b>	<b>95.5%</b>	<b>96.2%</b>
-Percent who think there should be complete ban of advertising of tobacco products (cigarettes, shisha or other tobacco).	<b>93.8%</b>	<b>94%</b>	<b>96.3%</b>
-Who think smoking cigarettes, shisha or other tobacco products should be banned in restaurant.	<b>93.8%</b>	<b>95.5%</b>	<b>88.9%</b>
-Who think smoking cigarettes, shisha or other tobacco products should be banned in all enclosed public places.	<b>94.8%</b>	<b>94%</b>	<b>96.3%</b>

(Table 3) shows that over nine in every ten 94.7% of medical students thought that tobacco sale to adolescent should be banned, and also 93.8% of Kuwait medical students thought that should be a complete ban of advertising tobacco products.

They thought smoking, shisha or other tobacco products should be banned in all restaurants. 94.8% of medical students thought that smoking cigarettes, shisha as other tobacco products should be banned in all enclosed public places.

**Cessation among medical students:**

(Table: 4) Percent of current smokers who want to quit, tried to quit, and who received help to quit

	Total	Female	Male
-percent of current cigarettes smokers who want to quit now.	<b>66.7%</b>	<b>0</b>	<b>66.7%</b>
Percent of current cigarettes smokers who - have tried to stop smoking cigarettes.	<b>50%</b>	<b>0</b>	<b>50%</b>
-Percent who think health professional should get specific training on cessation technique.	<b>97.9%</b>	<b>100%</b>	<b>92.6%</b>
-Percent who think health professional service as role models for their patients and public.	<b>78.1%</b>	<b>79.1%</b>	<b>74.1%</b>
-Percent who think health professional should routinely advise their patients who use tobacco to quit using it.	<b>95.8%</b>	<b>95.5%</b>	<b>96.3%</b>
-Percent who think health professional have a role in giving advice or information about tobacco cessation to patient.	<b>95.8%</b>	<b>95.5%</b>	<b>96.3%</b>
-Percent who think a patient chance of quitting tobacco use is increased if a health professional advises him /her to quit.	<b>86.5%</b>	<b>85.1%</b>	<b>92.6%</b>

(Table 4) shows that almost seven of ten students want to quit smoking and 50% of student try to quit smoking. 97.9% of Kuwait medical students though health professional should get specific training on cessation technique. 78.1% of medical students though health professional service as: role models for their patient and public. 95.8% of medical students reported that, health professional should routinely advise their parents who use tobacco to quit using it. And they have a role in giving advice or information about tobacco

cessation to patient. 95.8% of medical students though health professional have a role in giving advice or information about tobacco cessation to patient

### **Curriculum of medical students**

**(Table 5): School Curriculum of the studied sample**

	Total	Female	Male
- Percent who discussed in class the reasons why people use tobacco in their (medical,) school training.	<b>79.2%</b>	<b>79.1%</b>	<b>81.5%</b>
- Who learned it is important to record tobacco use history as part of patient's general medical history in their school training.	<b>83.3%</b>	<b>79.1%</b>	<b>96.3%</b>
- Who have ever received any formal training in tobacco use cessation approaches to use with patient in their school training.	<b>42.7%</b>	<b>44.8%</b>	<b>40.7%</b>
- Percent who learned it is important to provide educational materials to support tobacco use cessation to patients who want to quit smoking in their school training.	<b>61.5%</b>	<b>61.2%</b>	<b>66.7%</b>
- Who have heard of nicotine replacement products for use in tobacco cessation programs.	<b>96.9%</b>	<b>95.5%</b>	<b>100%</b>
- Who have heard of using antidepressant in tobacco cessation programs	<b>42.1%</b>	<b>40.9%</b>	<b>44.4%</b>

(Table 5) reveals that, about eight in every ten (79.2%) medical students were discussed in class the reasons why people use tobacco in their (medical,) school training. While only 42.7% had received any formal training in tobacco use cessation approaches to use with patient in their school training. Also only six in ten (61.5%) who learned it is important to provide educational materials to support tobacco use cessation to patients who want to quit smoking in their school training. The majority of the students (96.9%) have heard of nicotine replacement products for use in tobacco cessation programs

## Smoking Initiation of medical students

**Table 6**

	Total	Female	Male
- Ever shisha users who first started to use shisha before the age of 10.	33.3%	25%	38.5%
- Ever smokers who first started to smoke cigarette daily before the age of 10.	31.6%	37.5%	27.3%
- Ever smokers who first started to smoke cigarette daily before the age of 16.	63.2%	62.5%	63.6%
-Ever smokers who smoked cigarette on school premises/property in the past year.	31.3%	0	45.5%
-Ever smokers who smoked cigarette in school building in the past year.	20%	0	27.3%

(Table 6) shows that, more than three in ten (33.3%) of the ever smokers students started to use shisha before the age of 10. And (31.6%) started to smoke cigarette daily before the age of 10. While 63.3% were started cigarettes smoking daily before the age 16. However 31.3% of ever smokers have been smoked on school premises/ property during the past year and 20% of ever smokers have been smoked in the school buildings during the past year. 20% of the students had smoked cigarettes in school building in the past year.

## **Discussion**

The tobacco control program should target cigarette smoking and use of other forms of tobacco among professional students because this behavior endangers their health and will reduce their ability to deliver effective anti-tobacco counseling when they start seeing patients.<sup>15-17</sup>

The **prevalence** of current smoking cigarettes students in Kuwait medical school (5.3%) is lower than 13-15 years of age students in Kuwait, as in found in GYTS 2009 in Kuwait, which gave the result of current cigarette smokers of (12.2%). This result also lower than prevalence of many countries, as in study in Saudi Arabia among medical students, reported that, prevalence of current smokers was 17.6%(28.9%of male ,4.3%of female)<sup>18</sup>

But if we see more in depth, it was showed that male students are smokers, which is quite one of five (table 1). An Alarming situation, since medical students are coming medical physicians, who suppose to be a kind of healthy life symbol status of Kuwait community.

Exposures to **second hand smoke** represent a high risk factor for smoking among medical students of Kuwait as the GHPSS in Kuwait showed that quite a number of medical students are a victim of **second hand smoke**, where, 29.2% of the students were exposed to smoke at home and 43.8% were exposed to smoke in public places (table 2). These finding consistent with Kuwait GYT's 2006.<sup>19</sup> which find that 49.8% of student's age (13-15) years of age were exposed to second hand smoke at home. This exposure directly impacts their health and can be reduced by expanding smoke free area and enforcing restrictions currently in place

Regarding to attitude of the students to **Smoking in public places**, our finding showed that almost all students (94.8) were supportive to tobacco control efforts (table 3), they reported that smoking should be banned in all enclosed public places. This finding brought an issue that No smoking in public places should implemented in Kuwait with strict law enforcement.

Regarding (**Cessation**), two third of current smoking male medical student were wanted to quit smoking and 50% of current smoking male medical student were tried to stop smoking. Health professional should be trained to provide effective, accurate and cessation advice to patients on all aspects of health .<sup>20</sup>

GHPSS data show that medical students in Kuwait recognize that, they are role models in society that they should receive training on counseling and treating patient.

In fact only 42.7% received **formal training** in smoking cessation approach during medical school. This percentage is higher than many countries, in Egypt 20.9%, in Lebanon 29.1%, in Saudi Arabia 6.7%, in Syria 29.3%, in India 22.3% in 2006 <sup>21</sup>. And this good finding is important because health professional should be able to provide patients with information about health consequences of smoking

A positive finding in Kuwait GHPSS data was the high percentage of medical students (97.9%) who think health professional should get specific **training on cessation technique**.

On the other hand, the need of smoking **cessation consultation** program /clinic is an integral part of tobacco control in Kuwait. This information brings us to conclusion that medical faculty of Kuwait university should develop a teaching module of smoking cessation consultation technique to be taught to their medical students in the near future as a part of their normal curricula. This is in line with WHO which encouraged health professionals to help their smoking patients to quit.<sup>21</sup>

## **Conclusion**

Health professional schools, should discourage tobacco use among health professional and work to design and implement program that train all health professional in effective cessation counseling techniques. and they should introduce tobacco complication and method of smoking cessation in curriculums of medical schools .

GHPSS results in Kuwait is helpful in evaluating the behavior and attitudes regarding tobacco among health professional students, and we can used these results to identify new program efforts that are needed to lead towards a more effective comprehensive tobacco control program.

If the goal of the tobacco control preprogram is to reduce substantially the use of tobacco products; then resources should be invested in improving the quality of education of health professionals.

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## **Introduction**

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Despite the body of knowledge on health professional's role in tobacco cessation, few recent studies have collected information on tobacco use and training to provide cessation counseling among health professional students. A review published in 2007 found 66 articles published between 1976 and 2006 that focused on smoking behavior among medical students.<sup>10</sup>

## **Tobacco use in Kuwait:**

Tobacco cultivation is prohibited in Kuwait. The national committee for tobacco control in Kuwait has been instructed with some achievement:

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A study done in Kuwait<sup>11</sup> revealed that 70% of all male smokers had started smoking before they reached age 20 years.

Another study among medical students at Kuwait University showed that 33% of those who had ever used tobacco began at high school, and 50% began at medical school (12)

From the result of (2005 and 2009 GYTS data) in Kuwait, it is evident that the prevalence of ever smoked cigarette between 2005 and

2009 (27.6% and 28.8% respectively) is significantly elevated higher in both boys and girls. Further, the prevalence of girls who use other tobacco use (shisha) 8.9% is still significantly higher than girls who smoke cigarette (5.8%). This may be an indication that other tobacco use will soon be increasing among young girls and illustrating the need to encompass all types of tobacco use when developing intervention strategies considering the misconception that water-pipe are harmless.(13)

### **Background of the Global Health Professionals Students Survey (GHPSS)**

The World Health Organization, CDC, and the Canadian Public Health Association, developed the GHPSS to collect data on tobacco use and cessation counseling among health professional students in all WHO member states.

GHPSS is a standardized school-based survey of third-year students pursuing advanced degrees in dentistry, medicine, nursing, or pharmacy. It is conducted in schools during regular class sessions. GHPSS follows an anonymous, self-administered format for data collection. GHPSS uses a core questionnaire on demographics, prevalence of cigarette smoking and other tobacco use, knowledge and attitudes about tobacco use, exposure to secondhand smoke, desire for smoking cessation, and training received regarding patient counseling on smoking cessation techniques. Questionnaires are translated into local languages as needed. GHPSS has a standardized methodology for selecting participating schools and classes and uniform data processing procedures.

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The objectives of the GHPSS are to:

- (1) Collect baseline information on tobacco use.
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- (3) (understand the knowledge and attitudes of health profession students towards tobacco control policies.
- (4) (Assess training and material requirements for implementing tobacco prevention and control interventions.

## **Methodology**

The Global Health Professionals Students Survey (GHPSS) is part of the Global Tobacco Surveillance System (GTSS), which collect data through three surveys.

GHPSS is a school based survey of third year student in the Faculty of nursing Public Authority for Appalled Education and Training. GHPSS of the nursing students consist of 47 core questions on demographics, prevalence of cigarettes smoking, and other tobacco use, knowledge and attitude about tobacco use, exposure to secondhand smoke, desire for smoking cessation and training received regarding patient counseling on smoking cessation technique. The methodology of GHPSS is uniform around the world, so the result could be compare each other accurately.

In Kuwait there is only one nursing school and that is a part of Public Authority for Appalled Education and Training. All third year students in nursing school were targeted to participate in the survey. Data collection was conducted in nursing school during regular class session. The nursing school system in Kuwait consists of four years:

## **Data Collection**

Ministry of Health (MOH) through GHPSS coordinator, and Kuwait Faculty of nursing coordinated data collection. Before data collection, visits to Faculty of nursing were undertaken in order to:

- Obtain permission from Dean of the faculty of nursing to conduct the survey
- Make logistical arrangements for survey administration

Dean of the faculty of nursing was briefed on the objectives of the survey, administration and the procedures that were to be employed to ensure anonymity & confidentiality for students.

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was administered in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer. The questionnaire contained 47 multiple-choice questions.

GHPSS follows a self-administered format for data collection. The questionnaire covers prevalence of cigarette smoking and use of other tobacco products, exposure to second hand smoke (SHS), desire to quit smoking and training received to provide patient counseling on cessation technique.

The GHPSS was conducted in faculty of nursing during regular lectures and class sessions. Students recorded answers to the GHPSS questionnaires on a scan able answer sheet. Completed answer Sheets, were sent to the centers for Disease Control and Preventive (CDC) for processing.

### **Data analysis**

All GHPSS data of Kuwait were processed by CDC, which is the coordinating center for the Global Tobacco Surveillance System (GTSS). SUDAAN, software developed for analysis of survey data, and to calculate prevalence estimate and 95% confidence interval.<sup>14</sup> Statistical difference are noted at the  $P < 0.05$  level

## **Results**

A total of 124 nursing students in the third year participated in Kuwait nursing students GHPSS 2010. The school response rate was 100% and the student's response rate was 100%.

### **Prevalence of Tobacco**

(Table 1): Percent of students who use tobacco

	<b>Total</b>	<b>Female</b>	<b>Male</b>
-Ever smoked cigarettes	43.0%	38.6%	71.4
-Current cigarettes smokers	9.1%	5.9%	28.6%
-WHO smoked shisha on one or two days of the past 30 days	7.3%	6.7%	14.3%
-Ever smoked shisha	31.7%	28.2%	50%
-Ever used other tobacco product	34.7%	31.7%	50%
-Current use other tobacco products	11.3%	8.7%	28.6%
-Ever use any tobacco products	50.8%	48.1%	71.4%
-Current use any tobacco products	15.3%	11.5%	35.7%

(Table 1) shows that, four in every ten students had ever smoked cigarettes (43% ). Male are significantly more likely than female for both ever and current smokers of tobacco use. Only 9.1% of the students were current cigarettes smokers, and three in ten nursing students were ever smoked shisha and other tobacco products (31.7% and 34.7% respectively). More than one in ten currently uses other tobacco products (11.3%). Males were significantly more likely than females (19.2% & 22.2% compared to 0 & 7.5% respectively). Current use any tobacco products were (15.3%). Male were significantly more likely than female for use of any tobacco products.



**ENVIROMENTAL EXPOSURE**

(Table: 2) Percent of students who exposed smoke at home, public places and supported banning smoking in public places

	<b>Total</b>	<b>Female</b>	<b>Male</b>
-Had someone smoke cigarettes, shisha or other tobacco products in their presence and their home.	<b>49.6%</b>	<b>45.5%</b>	<b>78.6%</b>
- Who in the past 7 days had someone smoke cigarettes, shisha or other tobacco products in their presence other than in their home.	<b>51.3%</b>	<b>46.5%</b>	<b>78.6%</b>
-Who have an official policy banning smoking cigarettes, shisha or other tobacco products in school building and clinics?	<b>43.1%</b>	<b>46.4%</b>	<b>23.1%</b>
-Who have an official policy banning smoking cigarettes, shisha or other tobacco products in school building and clinics and the policy is enforced	<b>85%</b>	<b>86.1%</b>	<b>50%</b>

(Table 2) reveals that, almost five in ten students (49.6%) had some cigarettes, shisha or other tobacco products in presence and in their homes (exposed to second-hand smoke at home). Also more than five in ten students (51.3%) had been exposed to second-hand smoke in public places. Males are significantly more likely than females regarding to exposure to second-hand smoke at homes and in public places. The table shows that, **only** four in ten (43.1%)% of the students have an official policy banning smoking cigarettes, shisha or other tobacco products in school buildings and clinics. While (85%) of the students reported that this policy was enforced.

**Table(3) Attitude of Nursing students**

	<b>Total</b>	<b>Female</b>	<b>Male</b>
- Who think tobacco sales to adolescent should be banned.	<b>86.4%</b>	<b>85.7%</b>	<b>85.7%</b>
-Percent who think there should be complete ban of advertising of tobacco products (cigarettes, shisha or other tobacco).	<b>89.9%</b>	<b>91.9%</b>	<b>71.4%</b>
- Who think smoking cigarettes, shisha or other tobacco products should be banned in restaurant.	<b>91.1%</b>	<b>89.4%</b>	<b>100%</b>
-who think smoking cigarettes, shisha or other tobacco products should be banned in all enclosed public places.	<b>96.7%</b>	<b>98%</b>	<b>85.7%</b>

(Table 3) shows that over nine in every ten (86.4% ) of nursing students thought that tobacco sale to adolescent should be banned, and also 89.9% of nursing students thought that should be a complete ban of advertising tobacco products.

They thought,(91.1%) smoking, shisha or other tobacco products should be banned in all restaurants. 96.7% of medical students thought that smoking cigarettes, shisha as other tobacco products should be banned in all enclosed public places.

**Table(4 Cessation among nursing students:)**

	<b>Total</b>	<b>Female</b>	<b>Male</b>
- Percent of current cigarettes smokers who want to quit now.	<b>50.0%</b>	<b>33.3%</b>	<b>100</b>
- - Percent of current cigarettes smokers, who have tried to stop smoking cigarettes.	<b>28.6%</b>	<b>33.3%</b>	<b>33.3%</b>
-Percent who think health professional should get specific training on cessation technique.	<b>94.3%</b>	<b>95%</b>	<b>92.9%</b>
- Percent who think health professional service as role models for their patients and public.	<b>87.0</b>	<b>87.5</b>	<b>76.9</b>
-Percent who think health professional should routinely advise their patients who use tobacco to quit using it.	<b>90.2</b>	<b>90.3</b>	<b>85.7</b>
-Percent who think health professional have a role in giving advice or information about tobacco cessation to patient.	<b>88.7</b>	<b>90.4</b>	<b>78.6</b>
-Percent who think a patient chance of quitting tobacco use is increased if a health professional advises him /her to quit.	<b>82.8</b>	<b>79.6</b>	<b>100</b>

(Table 4) shows that half of the students want to quit smoking but only 28.6% who had tried to stop smoking. On the other hand (94.3%) of Kuwait nursing students though, health professional should get specific training on cessation technique. 87% of medical students though health professional service as role models for their patient and public. The majority (90.2%) and 88.7% of nursing students reported that, health professional should routinely advise their parents who use tobacco to quit using it and they have a role in giving advice or information about tobacco cessation to patient . (82.8%) of nursing students though health professional have a role in giving advice or information about tobacco cessation to patient.

**Curriculum of Nursing students****Table(5)**

	<b>Total</b>	<b>Female</b>	<b>Male</b>
- Percent who discussed in class the reasons why people use tobacco in their (medical,) school training.	<b>75.4%</b>	<b>79.2%</b>	<b>53.8%</b>
- Who learned it is important to record tobacco use history as part of patient's general medical history in their school training.	<b>69.7%</b>	<b>69.9%</b>	<b>71.4%</b>
- Who have ever received any formal training in tobacco use cessation approaches to use with patient in their school training.	<b>48%</b>	<b>46.2%</b>	<b>53.8%</b>
- Percent who learned it is important to provide educational materials to support tobacco use cessation to patients who want to quit smoking in their school training.	<b>50.8%</b>	<b>52%</b>	<b>46.2%</b>
- Who have heard of nicotine replacement products for use in tobacco cessation programs.	<b>79.7%</b>	<b>83.7%</b>	<b>50%</b>

(Table 5) reveals that, about eight in every ten (75.4%) nursing students were discussed in class the reasons why people use tobacco in their (medical,) school training. While only (48%) had received any formal training in tobacco use cessation approaches to use with patient in their school training. Also only five in ten (50.8%) who learned it is important to provide educational materials to support tobacco use cessation to patients who want to quit smoking in their school training. Almost eight in ten of the students (79.7%) have heard of nicotine replacement products for use in tobacco cessation programs

## Smoking Initiation of nursing students

**Table (6)**

	<b>Total</b>	<b>Female</b>	<b>Male</b>
- Ever shisha users who first started to use shisha before the age of 10.	<b>5.1%</b>	<b>3.4%</b>	<b>14.3%</b>
- Ever smokers who first started to smoke cigarette daily before the age of 10.	<b>15.2%</b>	<b>14.7%</b>	<b>20%</b>
-Ever smokers who first started to smoke cigarette daily before the age of 16.	<b>34.8%</b>	<b>26.5</b>	<b>70%</b>
-Ever smokers who smoked cigarette on school premises/property in the past year.	<b>8.3%</b>	<b>0</b>	<b>50%</b>
-Ever smokers who smoked cigarette in school building in the past year.	<b>12.5%</b>	<b>0</b>	<b>60%</b>

(Table 6) shows that, (15.2%) started to smoke cigarette daily before the age of 10. While one third of nursing students (34.8%) were started cigarettes smoking daily before the age 16 and male were significantly higher than female. However (8.3%) of ever smokers have been smoked on school premises/ property during the past year and 12.5 % of ever smokers have been smoked in the school buildings during the past year all of them were male.

## Discussion

The tobacco control program should target cigarette smoking and use of other forms of tobacco among professional students because this behavior endangers their health and will reduce their ability to deliver effective anti-tobacco counseling when they start seeing patients.<sup>15-17</sup>

The GHPSS data provides data on several indicators (surveillance and monitoring, prevalence, exposure to second hand smoke, health professional school based tobacco control.

The **prevalence** of current smoking cigarettes students in Kuwait nursing school (9.1%) is lower than 13-15 years of age students in Kuwait, as in found in GYTS 2009 in Kuwait, which gave the result of current cigarette smokers of ( 12.2% ), and higher than medical student in Kuwait 2010 (5.3%). This result also is lower than prevalence of many countries

Exposures to **second hand smoke** represent a high risk factor for smoking among nursing students of Kuwait as the GHPSS in Kuwait showed that quite a large number of nursing students are a victim of second hand smoke, where, half of the students were exposed to smoke at home and 51.3% were exposed to smoke in public places (table 2). This finding consistent with Kuwait GYT's 2006.<sup>18</sup> which find that 49.8% of student's age (13-15) years of age were exposed to second hand smoke at home. This exposure directly impacts their health and can be reduced by expanding smoke free area and enforcing restrictions currently in place .professional training should include courses detailing the harmful effect of tobacco use and exposure to second hand smoke.

The results of this survey showed good attitude of the nursing students regarding to **Smoking in public places**, our finding showed that almost all students (96.7) were supportive to tobacco control efforts (table 3), they reported that smoking should be banned in all enclosed public places. This finding brought an issue that No smoking in public places should really implemented in Kuwait with strict law enforcement.

One good finding in our survey that half of nursing students want to quit smoking (**Cessation**), and nearly one third of current smoking nursing student were tried to stop smoking. Health professional should

be trained to provide effective, accurate and cessation advice to patients on all aspects of health .<sup>19</sup>

GHPSS data show that nursing students in Kuwait recognize that, they are role models in society that they should receive training on counseling and treating patient.

Our finding showed that only 48% received **formal training** in smoking cessation approach during nursing school. This percentage is higher than many countries, in Egypt 20.9%, in Lebanon 29.1%, in Saudi Arabia 6.7%, in Syria 29.3%, in India 22.3% in 2006 <sup>20</sup>. And this good finding is important because health professional should be able to provide patients with information about health consequences of smoking

A positive finding in Kuwait GHPSS (nursing students) data was the high percentage of medical students (87.5%) who think health professional should get specific **training on cessation technique**.

On the other hand, the need of smoking **cessation consultation** program /clinic is an integral part of tobacco control in Kuwait. This information brings us to conclusion that nursing faculty of Kuwait should develop a teaching module of smoking cessation consultation technique to be taught to their nursing students in the near future as a part of their normal curricula. This is in line with WHO which encouraged health professionals to help their smoking patients to quit.<sup>21</sup>

## **Conclusion**

Health professional schools, should discourage tobacco use among health professional and work to design and implement program that train all health professional in effective cessation counseling techniques. And they should introduce tobacco complication and method of smoking cessation in curriculums of nursing schools.

GHPSS results in Kuwait is helpful in evaluating the behavior and attitudes regarding tobacco among health professional students, and we can use these results to identify new program efforts that are needed to lead towards a more effective comprehensive tobacco control program.

If the goal of the tobacco control preprogram is to reduce substantially the use of tobacco products; then resources should be invested in improving the quality of education of health professionals.

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