The Libyan Arab Jamahiriya Global Health Professionals Student Survey (GHPSS) Report 2007.

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Introduction:

Tobacco use is one of the leading causes of many chronic disease and death in developed as well as in some developing countries. According to recent WHO estimates of the global burden of disease, tobacco use cigarettes and other types, results in nearly 5 million deaths (4 million males and 1 million females)

Projections in this context, indicating that if current trends continue, the number of deaths will increase to more than 10 million deaths annually by the year 2020.

The history of Tobacco control in Libya can be summarized as follows:

The General People Committee issued a Law NO 494 in 1989 prohibiting smoking in general public places, schools and transportation, and banning any kind of advertisement for tobacco whether in magazines, Radio, TV, or any other type of media.

Concerning the world health organization-Framework Convention of Tobacco Control(WHOFCTC) which was adopted by the 56th World Assembly in May 2003 and become international law in February 27, 2005, Libya signed the WHO FCTC in 19-6-2004.and ratified the WHO-FCTC on 7-6- 2005.

The WHO_FCTC is the world's first public health treaty on tobacco control.

Article 20 in the WHOFCTC is emphasizing the call for all countries, especially those who ratify the treaty, to develop, or establish and implement, and maintain effective tobacco control surveillance systems.

WHO, The US. Centers for Disease Control and prevention (CDC) and the Canadian public health Association developed Tobacco Surveillance System (GTSS) to assist WHO members

states in establishing continuous tobacco control surveillance and monitoring .The GTSS provides a flexible system that includes common data items but allows countries to include important unique information at their discretion . It also uses a common survey methodology, similar field procedures for data collection, and similar data management and processing techniques. The GTSS includes collection of data through three surveys: The Global Youth Tobacco Survey (GYTS) for youth (13to 15 year old), The Global School Personal Survey (GSPS), and the Global Health Professional Student Survey for Adults (GHPSS).

Many people, and regardless of their social classes look to the Health Professionals as a Role Model in The Context of Health and Disease. So health professionals definitely can serve as critical role in reducing tobacco use. The 5 A,s behavioral steps which doctors can used to help their patients to stop smoking are Address, Assess, Advice, Assist, and Arrange. So even brief and simple advice from health professionals can substantially increase smoking- cessation rates among patients.

Many countries now are collecting data from health professional students about their tobacco use and training as cessation counselors, but GHPSS in Libya is conducted for the first time – as it is proposed by WHO regional office.

The Global Health Professions Student Survey (GHPSS).

The WHO, with the cooperation with the U.S Centers for Disease Control and Prevention, and the Canadian Public Health Association developed the GHPSS and the interested countries in many different parts of he world implemented the Survey in four disciplines namely, Dental, Nursing, Pharmacy, and Medicine.

This report summarizes data from the (GHPSS) conducted in Libya among 3rd years medical students in three health professions disciplines namely Dentistry, Medicine, and Pharmacy in year 2006.

Method:

The GHPSS is a university- based survey of 3rd year students pursuing their degrees in dentistry, medicine, nursing, and pharmacy. In this report only 3 disciplines were included, medicine, dentistry, and pharmacy.

The main core elements, of the GHPSS include:

1- Demography - 2- prevalence of tobacco use - 3- knowledge and attitudes about tobacco use, 4- exposure to environmental tobacco smoke – 5- school curricula. In addition, 6- training received in counseling patients on smoking-cessation techniques.

The GHPSS has to some extent a standardized methodology for sample selection, data collection process, and uniform data-processing procedures.

The school response rates to the GHPSS in Libya were 80% for medical school, and 50% for each of dental and pharmacy schools.

The student response rates were more than 72% in all 3 schools of a total of 2126 students: Dental, 78,1% of 182 students, Medicine, 78.3% of 1780 students, and pharmacy, 38.3% of 164 students.

The GHPSS in all faculties was administered in the original English language form after making very light modification for some items, some words was translated to the students if they cannot understand.

EPI Info 2003 was used for the data analysis

SUDAAN (Release 7.5 Research Triangle Park, North. Carolina), a software package developed for statistical analysis of correlated data as used to compute standard errors of the estimates and to produce 95% confidence intervals, which are shown as lower and upper bounds. Statistical differences noted are at the P <. 05 level.

It should be mentioned that some individual items are not presented if there were fewer than 35 respondents in a cell, due to instability of estimates with small denominators.

RESULTS:

Prevalence:

Lifetime use

Percentage (95% CI)

Approximately 2 in 10 of dental students (24.1%), 7.6%, of pharmacy students, and 3 in 10 of medical students (31.9%) had ever smoked cigarettes (Table 1)

Among dental and medical students, males were significantly more likely than females to have ever smoked cigarettes.

Male medical students were significantly more likely than all students in the three disciplines (male and females) to have ever used tobacco products other than cigarettes (Table 1)

Table 1
Prevalence of Tobacco lifetime use among 3rd year Dental, pharmacy and medical students by discipline and gender.
Libya, GHPSS, 2006.

1 creentage (75)	(C1)	
Discipline	Cigarettes	Other tobacco products
& Gender		
Dental		
Male	56.9(44.2-68.8)	13.2 (6.5- 24.9)
Female	12.8(8.2-19.5)	13.4 (8.8-19.8)
Total	24.1(18.7-30.4)	12.9(9.0-18.2)
Pharmacy		
Male	25.7 (14.3-41.9)*	8.2 (2.5-23.8)*
Female	4.3(2.3 - 8.2)	5.7(3.3 - 9.6)
Total	7.6(4.8 - 11.8)	6.0(3.6-9.7)

Medical		
Male	54.8 (52.7 – 56.9)	26.7(24.9 – 28.5)
Female	15.0(13.8-16.4)	12.5 (11.4 -13.6)
Total	31.9(30.6 - 33.1)	18.6 (17.6 - 19.6)

^{*&}lt;35 cases in the denominator

Current Cigarette Use:

Current cigarette smoking ranged from 1.2% for pharmacy students, to 2.6% for dental students and 10.8% for medical students (Table 2)

Among dental and medical students males were significantly more likely than females to currently smoke cigarettes.

Current use of other tobacco products other than cigarettes ranged from 0.4% for pharmacy students, to 5.8% for dental students and 11.8% for medical students. (Table2) Male medical and dental students had the highest rate to use other tobacco products (19.1% &16.2% respectively). In other words male medical and dental students were significantly unlikely than female students to use other tobacco products.

Table 2Prevalence of current tobacco use among 3rd year dental, pharmacy, and medical students by gender- Libya GHPSS, 2006.

	Current Use % (95 % CI	
Discipline &	Cigarettes	Other Tobacco products
Gender		
Dental		
Total	2.6(1.2-5.5)	5.8 (3.4 – 9.8)
Male	7.7(3.2-17.3)	16.2 (8.8-27.9)
Female	0.8 (.01 - 4.3)	2.2 (0.8-5.9)

Pharmacy		
Total	1.2(0.4- 4.1)	0.4(0.1 - 2.0)
Male	7.7 (2.3-22.8)*	0.0*
Female	0.0	0.5 (0.1- 2.0)
Medical		
Total	10.8 (10.0 -11.6)	11.8(11.0-12.6)
Male	22.4(20.7-24.2)	19.1(17.6-20.7)
Female	2.3(1.9-2.9)	6.7(5.9-7.6)

Abbreviation : CI, confidence interval *< 35 cases in the denominator.

Prevalence of Tobacco use on school property.

Concerning the prevalence of tobacco use on school property among Ever smokers, during the past year, it has been found that 42.6% of medical students smoked cigarettes on school premises property during the past year. (Table 3) Also, it was found that 33.6% of medical students smoked cigarettes in school buildings during the past year.

Table 3
Prevalence of Tobacco use on school property among Ever Smokers, 3rd year dental, pharmacy, and medical students by gender.

Libya GHPSS, 2006.

Ever cigarette smokers				
Discipline	Smoked on school	Smoked in school		
& Gender	premises/property	buildings during the		

	During the past year	past year	
Dental			
Total	53.1(34.5-70.8)*	33.0(18.4-51.8)*	
Male	58.5(37.7-76.8)*	43.8(24.6-65.0)*	
Female	26.3(4.4-73.2)*	0.0*	
Pharmacy			
Total	0.0*	0.0*	
Male	0.0*	0.0*	
Female	0.0*	0.0*	
Medical			
Total	42.6(39.5-45.8)	33.6(30.8-36.5)	
Male	46.1(42.5-49.8)	36.4(33.1-39.8)	
Female	34.6(28.1-41.6)	26.9(21.3-33.2)	

Exposure to Second Smoke

Almost half of medical students (48.1%), 37.3% of dental student and 23.4% pharmacy student reported that they were exposed to second hand smoke (S H S) from others in their home during the past week, and 45.1% of dental student, 64.7% of pharmacy student and 62.1% of medical student were exposed to S H S from others in public place during the past week (Table 4)

In dental and medical disciplines males were more likely than females to be exposed to second hand smoke, both at home and in public places where as females in pharmacy student were more likely to be exposed to S H S again, both at home and in public .(Table 4)

Table 4

Prevalence of Exposure to Secondhand Smoke in the Past Week among Third-year Dental, Medical and Pharmacy Students.

LIBYA GHPSS, 2006

Exposure to smoke at home during the past			Exposure to smoke in public places during the		
week			past week		
Total	Never	Current	Total	Never	Current Cigarette

		Cigarette	Cigarette		Cigarette	Smokers
		Smokers	Smokers		Smokers	
	ETS-HOME	ETS-NS	ETS-NS	ETS-CS	ETS-CS	ETS-CS
	% (CI)	HOME	HOME	OTHER	OTHER	OTHERPL ACES
		% (CI)	% (CI)	PL ACES	PL ACES	% (CI)
				% (CI)	% (CI)	
Dental Stu	idents					
Total	37.3 (31.0-	295 (22.8-	79.5 (35.1-	45.1 (38.6-	38.1 (30.8-	79.5 (35.1-96.5)*
	44.0)	37.3)	96.5)	51.9)	46.0)	
Women	25.8 (19.3-	23.9 (17.1-	100.0*	37.1(29.7-	34.1 (26.3-	100.0*
	22.6)	32.4)		45.1)	42.8)	
Men	64.6 (52.2-	50.8 (32.7-	47.1 (27.2-	60.8 (48.3-	44.8 (27.6-	74.1 (27.2-95.7)*
	75.3)	68.7)*	95.7)*	72.0)	63.3)*	
Pharmacy	students					
Total	23.4 (18.2-	24.8 (19.2-	0.0*	64.7 (58.3-	64.5 (57.8-	100.0*
	29.6)	31.4)		70.6)	70.7)	
Women	26.7 (20.6-	27.8 (21.4-	NA*	71.4 (64.5-	71.8 (64.6-	NA*
	22.8)	35.2)		77.4)	78.0)	
Men	7.7 (3.0-	6.9 (2.2-	0.0*	28.3 (16.4-	13.9 (5.3-	100.0*
	18.3)*	19.8)*		44.3)*	31.7)*	
Medical S	tudents					
Total	48.1 (46.8-	39.0 (37.4-	71.5 (67.7-	62.1 (60.8-	55.5 (53.9-	85.0 (81.9-87.7)
	49.4)	40.5)	75.0)	63.3)	57.7)	
Women	44.0 (42.3-	38.9 (37.1-	74.9 (64.2-	56.2 (54.5-	53.1 (51.2-	71.7 (60.2-80.9)*
	45.7)	40.8)	83.2)*	57.9)	55.0)	
Men	52.4 (50.4-	37.2 (34.3-	70.3 (66.1-	69.9 (68.0-	60.5 (57.4-	86.9 (83.6-89.6)
	54.4)	40.2)	74.1)	71.7)	63.4)	

^{• &}lt; 35 cases in the denominator

Knowledge and Attitude:

Knowledge and attitude toward banning smoking in restaurants, coffee shops and all enclosed public places and attitudes toward banning tobacco sale to adolescents and complete ban on advertising of tobacco products. Indicated the following:

93.7% of pharmacy students, 77.4% of medical students, and 67.1% of dental student reported that smoking should be banned in restaurants. Where as 94.1% of pharmacy students, 74.1% of medical students and 61.8% of dental students were in favor of banning smoking in coffee shop.

Among pharmacy students, data indicated that 93.7%, 94.1% and 93.3% of them were in favor banning smoking in Restaurants, coffee shops and all enclosed public places respectively.

Among medical students, 77.4%, 74,1% and 79.2% were in favor banning smoking in restaurants, coffee shops and all enclosed public places respectively, where as 67.1%,61.8%, and 69.2% of dental students were in favor banning smoking in the places mentioned before respectively (table 6).

Data indicated also that 92.0% of pharmacy students, 69.8% of medical students, and 52.6% of dental students believed that tobacco sales to adolescents should be banned, and 91.6% of pharmacy students ,77.7% of medical students and 70.2% of dental students think that there should be a complete ban on the advertising of tobacco products.(Table 5).

Table 5
Percentage of third year Dental.

	referringe of time year Bentan,					
	Percentage Ansv	wering "Yes" to "Sho	Percentage who	Percentage who		
	Banned in"			think tobacco	think there	
	Restaurants	Discos, Bars,	All Enclosed	sales to	should be a	
		Pubs	Public Placecs	adolescents	complete ban on	
				should be banned	the advertising of	
					tobacco products	
	TOT_CORE16 %	TOT_CORE17 %	TOT_CORE18 %	TOT_CORE14 %	TOT_CORE15 %	
	(CI)	(CI)	(CI)	(CI)	(CI)	
Dental Stu	dents					
Total	67.1(60.5-73.1)	61.8(55.2-68.0)	69.2(62.7-75.0)	52.6(45.9-59.3)	70.2(63.6-76.1)	
Women	64.9(54.9-72.1)	64.2(56.2-71.4)	73.6(66.0-80.0)	49.1(41.057.2)	70.1(62.1-77.0)	
Men	70.4(57.9-80.5)	55.7(43.2-67.6)	54.3(41.7-66.4)	60.1(47.2-71.6)	68.0(54.9-78.7)	
Pharmacy	Students					
Total	93.7(90.4-95.9)	94.1(90.8-96.2)	93.3(89.5-95.7)	92.0(88.1-94.7)	91.6(87.7-94.4)	
Women	94.8(91.2-97.0)	95.3(91.8-97.3)	95.3(91.4-97.4)	93.3(89.0-96.0)	92.8(88.4-95.6)	
Men	87.2(75.4-93.8)*	87.2(75.4-93.8)*	82.0(67.8-90.8)*	84.7(72.4-92.1)*	84.7(72.4-92.1)*	
Medical St	udents					
Total	77.4(76.3-78.4)	74.1(73.0-75.0)	79.2(78.1-80.2)	69.8(68.6-71.0)	77.7(76.6-78.7)	
Women	81.6(80.2-82.8)	80.9(79.5-82.1)	81.9(80.6-83.2)	69.3(67.7-70.8)	81.6(80.2-82.8)	
Men	72.9(71.1-74.7)	64.8(62.9-66.8)	76.2(74.3-77.9)	70.6(68.7-72.5)	73.2(71.3-75.0)	

^{*&}lt;35 cases in the denominator

Policy banning smoking in Buildings and clinics

Only 4.4 %, 10.5% and 16.4% of pharmacy, medical and dental students respectively reported that their schools have an official policy banning smoking in school building and clinics. (Table6) The data also indicate that 20.0%, 30.8% and 42.8% of pharmacy, dental and medical students respectively reported that their schools policy was enforced.

TABLE 6

Percent of colleges with policy Banning Smoking in Buildings and Clinics and those Enforce the Ban, 3rd year Dental, Medical, and Pharmacy Students, LIBYA GHPSS, 2006

	All Respondents				
	Percentage of	Of colleges that had an			
	colleges with	official policy banning			
	official policy	smoking in school			
	banning smoking	buildings and clinics,			
	in college	percentage that enforced			
	buildings and	it.			
	clinics				
	SCH_POLICY	SCH-POLICY-			
	(95%CI)	ENFORCE			
		(95%CI)			
Dental Students					
Total	16.4 (11.9-22.1)	30.8 (16.4-50.3)*			
Women	13.7 (8.9-20.3)	14.5 (4.1-39.8)*			

Men	17.0 (9.6-28.2)	59.9 (27.9-85.2)*				
Pharmacy Students						
Total	4.4 (2.4-8.0)	20.0 (3.9-60.9)*				
Women	4.8 (2.5-9.0)	25.0 (4.8-68.8)*				
Men	2.6 (0.5-12.2)*	0.0*				
Medical Students						
Total	10.5 (9.7-11.3)	42.8 (38.4-47.3)				
Women	10.0 (9.0-11.1)	46.2 (40.3-52.1)				
Men	11.6 (10.4-13.0)	38.0 (31.8-44.8)				

^{* &}lt; 35 cases in the denominator.

Health Professional as Role Models, and in Giving Advice on Smoking

More than 9 in 10 students in pharmacy school and more than 7 in 10 students in dental and medical schools believed that health professionals serve as a role models for their patients and the public (Table 7)

More than 9 in 10 students in pharmacy school, and more than 8 in 10 in dental school, and more than 7 in 10 in medical school believed that health professionals have a role in giving advice or information on smoking – cessation techniques (Table 7)

Table 7

Percentage of Third-Year Dental, Medical and Pharmacy Students Who Reported That Health Professionals Have a responsibility to Counsel Patients about smoking and cessation.

LIBYA GHPSS, 2006

	Percentage Answering "Yes"				
	Do health	Do health	Are health	Should health	
	professionals	professional have	professionals who	professionals get	
	serve as role	a role in giving	use other tobacco	specific training	
	models for their	advice or	products less		
	patients and the	information about	likely to advise		
	public?	smoking	patients to stop		
		cessation to	smoking?		
		patients?			
Dental Stud	ents				
Total	71.1 (64.6-76.7)	85.3 (80.1-89.3)	73.6 (67.3-79.0)	85.2 (79.8-89.3)	
Women	76.3 (68.9-82.4)	88.3 (82.5-92.4)	80.5 (73.4-86.1)	88.5 (82.4-92.6)	
Men	61.1 (48.2-72.6)	77.8 (65.6-86.6)	54.5 (42.0-66.6)	75.1 (62.6-84.5)	
Pharmacy S	tudents				
Total	92.9 (89.4-95.3)	96.1 (93.5-97.7)	79.2 (73.0-84.4)	92.4 (88.4-95.1)	
Women	92.9 (89.0-95.5)	96.7 (93.9-98.2)	80.0 (73.1-85.5)	93.3 (89.0-96.0)	
Men	92.3 (81.7-97.0)*	92.3 (81.7-97.0)*	73.5 (56.3-85.7)*	87.2 (73.0-94.5)*	
Medical Stu	idents				
Total	77.2 (76.1-78.2)	73.4 (72.2-74.5)	70.9 (69.7-72.1)	86.9 (86.0-87.7)	
Women	79.5 (78.2-80.9)	73.5 (72.0-75.0)	71.6 (70.1-73.1)	88.4 (87.3-89.5)	
Men	74.7 (72.9-76.4)	74.4 (72.6-76.1)	70.3 (68.4-76.0)	85.5 (84.0-86.9)	

^{* &}lt; 35 cases in the denominator

More than 7 in 10 students in dental, medical, and pharmacy schools believed that health professional who use other tobacco products are less likely to advise patients to stop smoking.

Cessation:

Concerning cessation techniques more than 8 in 10 students in dental and medical school and more than 9 in 10 students in pharmacy school believed that health professional should get specific training on cessation techniques.(Table7).

Curriculum and Training:

Less than 4 in 10 students in all three disciplines reported that they learned cessation approaches to use with patients.

Dental students (32.9%) were the most likely to have learned cessation approaches, and pharmacy students (13.3%) were the least likely. (Table 8)

Table 8

Percentage of Third-Year Dental, Pharmacy and Medical students who reported receiving training in college to support tobacco cessation, LIBYA GHPSS, 2006

	Learned cessation approaches to use with patients	Learned to provide education material to support cessation among patient who want to quit	Had heard about using antidepressants to support cessation
D (1) (1)			
Dental students			
Total	32.9 (26.8-39.6)	54.1 (47.2-60.7)	30.1 (24.2-63.7)
Women	35.4(28.0-43.6)	57.4 (49.3-65.1)	31.1 (24.1-39.1)
Men	24.4 (14.8-37.4)	47.8 (35.4-60.5)	27.4 (17.4-40.3)
Pharmacy Students			
Total	13.3 (9.7-17.9)	35.3 (29.2-42.6)	59.2 (52.4-65.7)
Women	9.1 (6.0-13.5)	34.3 (27.5-41.8)	62.5 (55.0-69.5)
Men	35.9 (23.2-50.9)*	41.0 (27.7-55.9)*	40.6 (26.7-56.2)*
Medical Students			
Total	23.4 (22.4-24.6)	50.1 (48.8-51.4)	50.9 (49.6-52.2)
Women	23.4 (21.9-24.9)	52.9 (51.2-54.5)	53.4 (51.7-55.1)
Men	23.2 (21.6-25.0)	46.4 (44.4-48.4)	47.2 (45.2-49.2)

^{* &}lt; 35 cases in the denominator.

Over 5 in 10 students in dental and medical schools, and only 0ver 3 in 10 students in pharmacy school learned to provide educational material to support cessation among patients who want to quit (Table 8).

Only 3 in 10 students in dental school and about 5 in 10 students in pharmacy and medical school had heard about antidepressant to support cessation (Table 8)