

global youth tobacco survey

Country reports

The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), Atlanta, developed the Global Youth Tobacco Survey to track tobacco use among youth 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



KUWAIT GYTS 2009

REPORT ON THE RESULTS OF THE GLOBAL YOUTH TOBACCO SURVEY (GYTS) 2009.

KUWAIT 2009

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Report of GYTS Kuwait 2009

Introduction

Tobacco use is one of the chief preventable causes of death in the world. The World Health Organization (WHO) attributes some 4 million deaths a year to tobacco, a figure expected to rise to 8.4 million deaths a year by 2020**(1)**. By that time, 70 % of those deaths will occur in developing countries **(2&3)**. Most people begin using tobacco before the age of 18. Recent trends indicate rising smoking prevalence rates among children and adolescents and earlier age of initiation. If these patterns continue, tobacco use will result in the deaths of 250 million children and adolescents alive today, many of them in developing countries.

In recent years, WHO, UNICEF, Ministers of the Environment, Ministers Responsible for Youth and many national health agencies have called for concerted action against tobacco use by young people. Yet, comprehensive tobacco prevention and control information on young people is not available for most developing countries. To address this data gap, the Tobacco Free Initiative (TFI), World Health Organization (WHO) and the Office on Smoking and Health (OSH), Centers for Disease Control and Prevention (CDC) have developed the Global Youth Tobacco Survey, in consultation with a range of countries representing the six WHO regions, which forms an important part of a global tobacco surveillance system.

Tobacco use in Kuwait

Tobacco use in Kuwait is a growing problem among students in spite of Tobacco cultivation is prohibited

A study done in Kuwait (4) 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(5)

In 2006, 25.9% of the student aged (13-15years) in Kuwait had ever smoked cigarettes compared to (20.8%) in United Arab Emirates, (11.5%) in Oman.

Current user any tobacco product were (14.5 %), boys (17.4%) were significantly more likely than girls (12.7%)(6)

From the year 2001 and 2006 GYTS data of Kuwait, it is evident that the prevalence of ever smoked cigarette between 2001 and 2006 is significantly higher in both boys and girls. Further the prevalence of girls who use other tobacco products (shisha) is still significantly higher than girls who smoke cigarette (6).

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 (21 years).
- Implementation of health education national campaigns for tobacco control.
- Periodic increase of customs by 100% on all kinds of imported tobacco.

World health organization framework convention on tobacco control

The WHO FCTC is the world's first public health treaty on tobacco control. The WHO FCTC encourages countries to develop and implement action plans to include public policies, such as bans on direct and indirect tobacco advertising, tobacco tax and price increases, promoting smoke free public places and workplaces, and placing health warning labels on tobacco packaging. The WHO FCTC also calls on countries to establish surveillance programs of the magnitude, patterns, determinants, and consequences of tobacco consumption and exposure to tobacco smoke (7)

Objectives of GYTS:

1. To document and monitor the prevalence of tobacco use including cigarettes smoking and current use of smokers tobacco, cigars or pipes.
2. To obtain an improved understanding of and to assess learners' attitudes, knowledge and behavior related to tobacco use and its health impact including cessation, environmental tobacco smoke (ETS), media and advertising, young people access and school curriculum.
3. To provide, information to guide programming and advocacy work addressing youth tobacco use.
4. To better understand and assess student attitudes, knowledge, including cessation, environmental tobacco smokers (ETS), media advertising, minors' access, and school curriculum.

Objectives of Kuwait GYTS(2009):

- 1- Reduce current tobacco use in Kuwait by students in Grades 8-10 from 29% in 2006 to 25% in 2010.

2- Reduce current cigarette use in Kuwait by students in Grades 8-10 from 16.2% in (2006) to 12% in year (2010).

3- Increase tobacco use cessation attempts in Kuwait in students in Grades 8-10 from 65% in 2001 to 70% in year (2010)

Methods

Sampling

The 2009 KUWAIT GYTS is a school-based survey, which employed a two-stage cluster sample design to produce a nationally representative sample of students in grades 8, 9 and 10. The first-stage sampling frame consisted of all regular schools containing any of grades 8, 9, and 10 Since the target population for GYTS is youth aged 13-15 years, a list of governmental schools eligible to participate in the survey was collected in co-ordination with ministry of education (MOE).

The list of eligible schools and the number of students were forwarded to CDC to draw the sample. The sample was selected with probability to enrollment size this meant that large schools were more likely to be selected than the small one. A total of 50 schools were selected from 263 schools all over the 6 governorates of Kuwait Alassema, Hawalli, Alfarwania, Algahraa, Alahmadi and Mubark Alkabeer

Schools were selected with probability proportional to school

enrollment size. 50 schools were selected.

School level-

the first stage sampling frame consisted of all schools containing grade 8-10. school were selected with probability proportional to school enrolment size.

CLASS level-

the second sampling stage consisted of systemic equal probability sampling (with random start) of class form each school that participated in the survey. All classes in the selected school were included in the sampling frame. All students in the selected classes were eligible to participate in the survey

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The overall response rates:

- **School response** rate was 100% (50 of the 50 sampled schools participated).
- **Class response rate was 100% of the 147** sampled classes participated).

- **Student response** rate was 91.5% where 3,250 student of 3,553 students completed the self administrated questionnaire

Over all response rate was 91.5%

WEIGHTING:

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of no response. The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3 * f4$$

W1 = the inverse of the probability of selecting the school

W2 = the inverse of the probability of selecting the classroom within the school

f1 = a school-level no response adjustment factor calculated by school size category (small, medium, large).

f2= a class adjustment factor calculated by school

f3 = a student-level no response adjustment factor calculated by class

f4 = a post stratification adjustment factor calculated by gender and grade

USE OF THE WEIGHTED RESULTS:

The weighted results can be used to make important inferences concerning tobacco use risk behaviors of students in Kuwait in grades 8-10.

Data Collection

The fieldwork was done from FEBRUARY 2009 to MARCH 2009. A workshop was done for physicians and health inspectors before data collection

A trained physicians and health inspectors shared in the field study.

Because GYTS is a school-based survey, cooperation of the Ministry of Health and the Ministry of Education was necessary, especially the latter since government schools were under its immediate control. And even though all the selected schools were under the Ministry of Education and permission was granted by the Head Office to execute the survey, permission and cooperation had to be obtained from the Regional Education Officers and School Heads in the various regions of the country.

Data collection was coordinated by ministry of health(MOH) and ministry of education(MOE). Before data collection, visits to the schools were undertaken in order to:

- Obtain permission from headmasters of the target schools to conduct the surveys
- Obtain number of eligible classes for each school in order to facilitate sampling of classes
- Make logistical arrangements for survey administration
- Obtain information on best possible routes to access schools and also which schools fall on the same route or geographical area

Headmasters were briefed on the objectives of the survey, how the survey was to be administered and the procedures that were to be employed to ensure anonymity & confidentiality for students & school.

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 52 multiple-choice questions.

Data Analysis

Data of the survey was sent to CDC and analyzed. A weighting factor is applied to each student record to adjust for non-response (by school, class, and student) and variation in the probability of selection at the school, class, and student levels. A final adjustment sums the weights by grade and gender to the population of school children in the selected grades in each sample site.

SUDAAN, a software package for statistical analysis of correlated data, was used to compute standard errors of the estimates and produced 95% confidence intervals which are shown as lower and upper bounds (**8**). Statistical differences are noted at

the $p < 0.05$ level

The Results

A total of 2213 students aged 13 – 15 years participated in Kuwait GYTS(2009) and the school rate was 100% the class response rate was 100% , the student response rate was 91.5 %,and overall response rate was 91.5%

1- Prevalence of Tobacco Use

(Table 1): Percent of students who use tobacco, Kuwait GYTS, 2009

Category	Ever Smoked Cigarettes, Even One or Two Puffs	Current Use			Never Smokers Susceptible to Initiating Smoking within one year	Ever Smokers who initiated smoking before age 10
		Other Tobacco Product	Cigarettes smoking	Shisha smoking		
Total	27.6 (23.1 – 32.6)	11.8 (9.9 -14.1)	12.2 (9.5 -15.5)	11.8 (9.9-14.1)	26.2 (23.1- 29.7)	21.1 (17.5-25.1)
Sex						
Male	39.3 (33.9- 45.0)	15.1 (12.5-18.0)	20.3 (16.8 -24.4)	15.1 (11.5-18.0)	29.7 (24.0- 36.1)	19.2 (16.2- 22.6)
Female	18.3 (15.5 – 21.5)	8.9 (6.9 – 11.4)	5.8 (4.2 – 8.0)	8.9 (6.9-11.4)	24.2 (20.4 –28.4)	25.1 (17.8 – 34.1)

Table (1) show almost three in every ten student aged 13 – 15 years (27.6) of all students have ever smoked cigarettes. Male students (39.3%) were significantly more likely than female students (18.3%) who have had ever smoked cigarettes, even one or two puffs. (12.2%) of student aged 13 –15 years are currently cigarettes smokers, Boy students (20.3 %) were significantly more likely than female student (5.8%) to currently cigarettes smokers..11.8% of the students aged 13-15 years were smoked shisha, Male student

(15.1%) were significantly more likely than female student (8.9%) who have had smoked shisha.

Also(table 1) showed that, one quarter (26.2%) of all students aged 13 – 15 years(never smoker) indicate that they were likely to initiate smoking during next year.(21.1%)of the student aged 13 – 15 years who ever smoked where initiated smoking before age of 10 years .

2- School Curriculum

(Table 2): School Curriculum, Kuwait GYTS, 2009

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke
Total	60.4(56.6-64.0)	56.0(52.9-59.1)
Sex		
Male	58.7(52.5-64.6)	54.0(48.9-49.1)
Female	61.7(57.0-66.2)	57.8(52.80-62.6)

Table (2) shows that, six students every ten(60.4%) taught the dangers of smoking ,there was no statistical differences between boys and girls also same percentage discussed reasons why people their age smoke,

3- Cessation

(Table: 3) Percent of current smokers who want to quit, tried to quit, and who received help to quit, Kuwait GYTS 2009.

Category	Percent of current smokers who desire to stop smoking	Percent of current smokers who tried to stop smoking during the past year	Percent of current smokers who received help to stop smoking
Total	51.5(41.7-61.5)	57.8(47.5-67.5)	99.6(97.1-100)
Male	52.0(41.4-62.4)	58.8(49.2-67.8)	100.0
Female	47.7(30.5-65.5)	50.7(32.4-68.9)	98.6(90.2-99.8)

Table (3) shows that five in ten students aged 13-15 years old who currently smoke cigarettes started that , they currently desire to stop smoking (51.5%). Also, over five in ten students tried to stop smoking during the past year ,(57.8%). Nearly all of the current smoker's students who have received help to stop smoking (99.6%)

4- Environmental tobacco smoking

(Table: 4)Percent of students age 13–15 who exposed smoke at home, public places and supported banning smoking in public places ,Kuwait GYTS 2009.

Category	Percent exposed to smoke from other s at home	Percent exposed to smoke from other s at public places	Percent who think smoking should be banned in public places
Total	49.8(46.8-52.7)	53.3 (50.2-56.3)	81.0 (78.9- 82.9)
Sex			
Male	46.9(42.1 – 51.7)	54.3 (59.6- 59.0)	78.0(76.0- 79.9)
Female	52.0 (48.5 – 55.5)	52.4(48.8 – 55.9)	83.3 (80.1 – 86.0)

Table (4) shows that, half of the students (49.8%) exposed to smoking from others at home, and female were higher than male (52% and 46.9% respectively), while over five in ten (53.3%) of the student were exposed to smoke from others at public places. On the other hand the majority of the students (81%) thinking smoking should be banned in public places.

5- Knowledge and Attitudes

(Table: 4) Percent of students age 13–15 who were taught dangers of smoking discussed reasons why people their age use tobacco, taught effect of using tobacco, GYTS Kuwait 2009.

Category	Percent taught dangers of smoking tobacco	Percent discussed reasons why people their age use tobacco
Total	60.4(56.6-64.0)	56.6 (52.9-59.1)
Sex		
Male	58.7(52.5 – 64.6)	54.0 (48.9- 59.1)
Female	61.7 (57.0 – 66.2)	57.8(52.8 – 62.6)

Sex in ten of the students taught dangers of smoking tobacco (60.4%)and over half of the students (56.6%)discussed reasons why people their age use tobacco. There are no statistical differences between boys and girls in both groups.

6-Media and advertisement

(Table :6) Percent of students age 13–15 who saw advertisement for cigarettes on billboard newspapers or magazine ,and had an object with a cigarettes or tobacco logo on it ,Kuwait National GYTS 2009.

Category	Percent who saw advertisement for cigarettes on billboard in the past month	Percent who saw advertisement for cigarettes on newspapers or magazine in the past month	Percent who have an object with a cigarettes or tobacco logo on it	During the past month saw anti smoking media messages
Total	81.2(78.9-83.4)	75.7 (73.2-78.0)	16.8 (14.7- 19.2)	71.7(68.9-74.3)
Sex				
Male	77.4(74.1 – 80.3)	70.7 (68.0-73.3)	17.4(14.5- 20.8)	69.8(66.3-73.0)
Female	84.2 (81.8 – 86.3)	79.7(76.4 – 82.7)	16.3 (13.7 – 18.3)	73.3(69.6-76.7)

Table(6) demonstrates that (81.2%) of the students saw advertisement for cigarettes on billboard in the past month . also (75.7%)of the students saw advertisement for cigarettes on newspaper or magazine in the past month. On the other hand only (16.8%) of the students were had an object with a cigarettes or tobacco logo on It. Seven in ten students saw anti smoking media messages during the past month with no statistical differences between boys and girls.

7 Access and availability

(Table: 7) Percent of current cigarettes smokers who usually buy their tobacco in a store, and were not refused purchased because their age , and who have been offered free cigarettes by a tobacco company representative, Kuwait National GYTS 2009.

Category	current cigarettes smokers who usually buy their tobacco in a store	who usually buy their tobacco in a store and were not refused cigarettes purchased because their age	who have been offered free cigarettes by a tobacco company representative
Total	57.2(48.2-65.7)	84.1 (74.9-90.4)	13.3 (11.3- 15.6)
Sex			
Male	68.0(61.5 – 73.8)	85.0 (74.4 91.7)	13.8(11.6-16.3)
Female	28.4 (17.7 – 42.3)	*	12.7 (9.9 – 16.2)

• Cell size is less than 35

(Table 7) demonstrates that , (57.2%)of the current smoker students who usually buy their cigarettes in a store , while (84.1%) of them were usually buy their tobacco in a store and were not refused cigarettes purchased because their age , while only (13.3%) of current cigarettes smokers, were have been offered free cigarettes by a tobacco company representative

Discussion

The Global Youth Tobacco Survey is a school-based survey, conducted among school children. Even though the survey was undertaken among school students aged 13 - 15 year olds, it presents a clear picture of the magnitude of the problem of tobacco use among the youths. The survey in Kuwait was done in six regions, covering all governorate of Kuwait

It explored for the first time the behavior and the personal perspective of this group not only on cigarette smoking, but the consumption of other tobacco products like shisha . This information is vital for the development of scientific sound interventions.

Prevalence of tobacco use and cessation

In many countries, people begin smoking at younger and younger ages, with the median age of initiation under 15 years. Moreover, the prevalence of smoking is frequently very high among adolescents. It is widely known that tobacco is the most important preventable cause of premature death in many countries. Cigarette smoking is responsible for heart disease; cancers of the lung, larynx, mouth, esophagus, and bladder; stroke; and chronic obstructive pulmonary disease. Starting to smoke at younger ages increases the risk of death from a smoking-related cause, and lowers the age at which death is likely to occur. Young people who start smoking early in life will often find it difficult to quit smoking.

GYTS 2009 in Kuwait represents that, **Tobacco use** is quite high amongst the youths, where nearly three in every ten youths is ever smoked cigarettes (**27.6%**) and boys was higher than girls. This prevalence is lowered, compared to result of GYTS 2006(33%).

One other salient feature that emerged from this survey is the relatively high use (11.8%) of **other tobacco products** among this age, this evidence shows the easy access to these products the youths have. Current user other tobacco use mainly **shisha**, (**11.8%**) compared to (18.6%) in year 2006 and 20.4%in year 2001, which is good indicator for efforts done for lowering this prevalence. The question that was asked for the onset of cigarette smoking was 'How old were you when you first tried a cigarette', and of those that had smoked cigarettes in the past 30 days (current smokers), it was found that (**21%**) had initiated before the age of 10 years.

In GYTS 2009 (51.7%) of current smokers students in Kuwait reported that, they want to stop smoking, compared to 62% in year 2006

There could have been some breaks in the smoking but the message that is clear is, some of the youths who experimented with smoking at a very young age, later developed this practice and could not stop. This is also supported by the difficulties some of the current smokers expressed in quitting smoking, with over half of students in

Kuwait had tried to quit in the previous year with no success. The students however, still believe quitting was within their control.

Regarding to Exposure to **environmental tobacco smoke** (ETS). Since ETS is a significant risk factor for lung cancer, heart disease, asthma exacerbation and induction, respiratory infections, and adverse reproductive outcomes, it is important to assess exposure in youth. The questions in this section measure exposure during the past seven days and assess general knowledge or attitude about the harmful effects of ETS

Exposure to second hand smoke represent a high risk factor for smoking among students of Kuwait, as half of these students exposed to smoke from others both at home and public places, despite of the presence of legislation in Kuwait banning smoking in public places, the law has not been successfully implemented, as the same figure was found in GYTS2006

On the other hand, parents need awareness campaign about the dangerous of smoking habits at home and in presence of their sons and the harmful effect of smoking on themselves and other around them.

A positive finding in Kuwait GYTS 2009 data, was the high percentage of students who think smoking should banned from public places .

Numerous studies have shown that the combination of enforcing laws that restrict tobacco sales to minors and educating merchants can reduce illegal sales of tobacco to minors.

Regarding smoking cessation, half of the current smokers students (51.7%) want to stop smoking during the study but this percentage is lowered compared to the percentage of results of year 2006 which was (65.9%). On the other hand nearly all current smokers students received help to stop smoking compared to (81.9%) of them in year 2006. Cross sectional studies should be conducted regularly to estimate the other determinants that support smoking quitting among students that help smokers for non relapsing. These studies would provide base line data for implementing smoke-free policies that support cessation

An alarming indicator in GYTS 2009 In Kuwait the high percentage (57.2%) of students who usually buy their tobacco in a store compared to only (16.6%) in year 2006 also the high percentage (84.1%) of students who buy their cigarettes were not refused purchases because their age (79.2%) in year 2006). However, young people may turn to social sources (e.g., older friends and family members) of tobacco products as commercial sources are reduced. Therefore, it is critical that minor's access restrictions be combined with a comprehensive tobacco control program that reduces the availability of social sources and limits the appeal of tobacco products.

A positive finding in Kuwait GYTS data was the high percentage of students who want to ban smoking from public places

Overall GYTS 2009 revealed that (60%) of the students in Kuwait reported they had been taught dangers of smoking and effect of tobacco use compared to (53.7 %) of them were reported the same issues in year 2006.

Conclusion and Recommendation

The Global Youth Tobacco Survey should be repeated periodically and it should become an integral part of the surveillance system to monitor tobacco-use. It would also serve to evaluate the effectiveness of the WHO Framework Convention for Tobacco Control. In order to obtain a more comprehensive picture of tobacco-using behavior and related determinants among youth, this school-based survey needs to be expanded to adults give us full data for smoking in Kuwait

Tobacco use is one of the main health problems among students that cannot be ignored due to its increased use by youth and the long effects to their health.

From Kuwait GYTS 2009 result many recommendation can be drawn:

- The Kuwait GYTS 2009 has shown high prevalence of ever smoking among school students. There is an alarm increase in the number of young people who use other types of tobacco especially shisha. so ministry of education should integrated importance of health hazards of tobacco use(cigarettes and shisha) among the school curriculum.
 - The study focus on, the need for urgent intervention to control tobacco use through enforce comprehensive national tobacco control legislation.
 - Students in Kuwait can buy their cigarette from the stores without any prohibition of sale for their age. This need to enforce legislation for total pan of tobacco sale for less than 18 years.
 - An intensive mass media campaign can produce significant declines in both adult and youth smoking and demonstrate that comprehensive education efforts, combining media, school-based, and community-based activities can postpone or prevent smoking initiation in adolescents.-
 - Enforcement of legislations that prevent shisha smoking in closed areas as (restaurants and shopping centers ,etc)
- There is need to support research on health and economic effects of policies and programmes in Kuwait and on the strategies and activities of tobacco companies to better understand what responses are required to reduce tobacco use.

- Restrict the advertisement of cigarette smoking on billboards, newspapers, radio and television, and at the same time increase public awareness campaign on the harmful effects of smoking cigarettes, as well as other tobacco use, on the mass media.

- Design and implement cessation programmes for schools and all youth-oriented or. Cessation programmes in schools must be integrated in the school curriculum

- Cross sectional studies should be conducted regularly to estimate the other determinants that support smoking quitting among students that help smokers for non relapsing .These studies would provide base line data for implementing smoke-free policies that support cessation

References

- 1- **The World Health report 2002:** reducing risks, promoting health life. Geneva, World Health Organization, 2002
- 2- **Peto R, Lopez AD, Boreham J.** Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet* 1992; 339: 1268-78
- 3- **Peto R.** smoking and death : the past 40 years and the next 40 *BMJ* 1994; 309: 937-39
- 4- **Moody PM, Memon A, Sugathan TN, el-Gergas N, Al Bustan M.** Factors associated with the initiation of smoking by Kuwaiti males *J subst abuse* 1998; 10: 375-84
- 5- **Memon A, Moody PM, Sugathan TN, el-Gergas N, al Bustan M, al Shatti A, al-Jazzaf H.** Epidemiology of smoking among Kuwaitis adults: Prevalence, characteristics and attitude. *Bull World Health Organization* 2000; 78: 1306-15
- 6- **World Health Organization,** Middle-East and North Africa (MNA) Regional office. Tobacco in Middle-East and Northern Africa WHO, report 23; 2001
- 7- **World health Organization.** WHO framework Convention on Tobacco Control Geneva, Switzerland: World health organization; 2003. Available at: <http://www.who.int/tobacco/framework>. January 1, 2008

8- **Shah B V, Barnwell B G, Bieler G S.** Software for statistical analysis for correlated Data (SUDAAN):User,s manual. Release7.5, 1997{software documentation}. Triangle Park, NC: Research Triangle Institute; 1997