

Report of Global Youth Tobacco Survey

Egypt – 2001

By

Dr. Nevein Moneir Dous
The National Comprehensive
Tobacco Control Program

Ministry of Health and Population
Egypt

Introduction:

Tobacco use is considered to be the chief preventable cause of death all over the world. WHO is concerned about the number of the smokers as it increases rapidly. WHO attributes 4 million deaths a year to tobacco. A figure expected to be doubled by 2020. By that date, 70 % of these deaths will be in developing countries.

Despite widespread knowledge of the harm caused by smoking, only modest success has been achieved in global tobacco control initiatives. Data revealed that in many countries, the median age of smoking was under the age of 15. 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. These deaths will occur from a smoking related cause and half of them will be in the middle age. Therefore, adolescents and school-aged children should be a primary focus for intervention strategies. Carefully designed strategies should provide a clear picture of the risk factor behaviors of young and school – aged children which then can be used to set up more effective and comprehensive tobacco control policies.

General characteristics of EGYPT and Tobacco use in EGYPT:

The total population in EGYPT is 65.851(2000) with adults above 15 years old is 42.803.

Tobacco cultivation is prohibited in Egypt. However, it is estimated that there are 39 billion cigarette manufactured in Egypt per year (about 0.7 % of the world trade). And 17.000 persons are employed full- time in the tobacco industry.

Egyptians smoke 60 billion cigarettes yearly which rose to 85 billion during the year 2000. The number of smokers is increasing and it is estimated that roughly 13 million(48%) of Egyptian adults smoke, of this number 500.000 are under 15 years of age (3.84 %) and 73.000 are under 10 years of age(0.57%).

A study conducted in 1998 about smoking prevalence among adolescents indicated that 6% are smokers and the prevalence was doubled (15.4%) among working adolescent boys who are not in school, compared to 7.6% among non-working adolescent boys.

The direct annual economic costs of smoking are L.E 3 billion (USD 880 million). The household income spent on cigarettes is 3.4 % to 5%.

In addition to cigarettes smoking, there is an alarming growth in the number of young males and females who are using shi-sha or water-pipes. In the past, it was a common practice among adultmen who smoked in cafes and at their

homes. Nowadays, there are a growing number of shi-sha places catering to the young.

Smoking prevalence (national-survey of Tobacco, MOH. 1998).

Age (Years)	Sex	** EMTCP	* ACS
Adults	Males	35.0	43.6
	Females	1.6	4.8
Youth (15-19)	Males	15.0	13.2
	Females	2.0	3.3
Mean age for start	15 years old		

* ACS(American Cancer Society 2000): Tobacco control country Profile, Date of data , 1997(adults)& 1998 (Youth 14-18 ys).

** EMTCP: Eastern Mediterranean Tobacco control profile (current survey 2002)

Based upon a review of lung cancer rates for 196 countries listed in “ Tobacco Control country Profiles” American cancer society Inc. 1998 and consultation from the office on smoking and health at the USA Centers for Disease Control (CDC) and in consideration of the increased tobacco consumption in Egypt since the 1970's.

The following assumptions can be made:

- 1) lung cancer rates increase about 30 years after an increase in tobacco use. Therefore, it is reasonable to expect an increase in lung cancer death rates over the next 10 years. Even with a dramatic decrease in tobacco use, lung cancer deaths would only gradually drop over the next decade .However, deaths from heart disease due to smoking would begin to decrease fairly rapidly over the next decade because the relative risk for heart disease among former smokers drops much faster than the relative risk of lung cancer.
- 2) The percent of deaths from other diseases that are due to tobacco use may be less than for lung cancer and heart diseases. Therefore, a decrease in tobacco use may not decrease the deaths from these diseases as much as for heart diseases and eventually for lung cancer.

Despite all this information on adult smoking behavior, there is a dearth of knowledge on the smoking behaviour of adolescents in Egypt .And like the developing countries, there is a need for good , scientific sound data about

tobacco use patterns. However. In the era of globalizatization, youth and adolescents are adopting behavior patterns that are comparable from country to country. Tobacco companies are taking advantage of this situation . They are advertising tobacco products using mass media techniques tragating “ The youth of the world”.

In response to the need for smoking control, the following laws/ activators are in effect:

- 1- law No. 52/1981 for prevention of smoking & reduction of tar to 20 mg/cig. This law also forbids smoking in public places & transpertation. In 1997 the tar was lowered by ministerial decree to 15 mg/cig with periodic sampling to assure conformity .
- 2- low No 137/1981 for the punishment of smokers in work places.
- 3- Law No 4/ 1994 for the prevention of smoking in closed public with a fine of 10-50 L.E for smoking in public transpiration.
- 4- A ministerial decree 344/1997 was issued to assemble a steering committee for the National Program for smoking control, which included representatives form ministries of Health. Information, Education , Social labor, Awqaf (Religious leaders), Touism , Interior Affairs & Enviromental Affairs, besieds the High Assembly of Youth & Sports.
- 5- A national compaign to prohibit the sale of ciggeretes to young adults & children was carried out during Feb:1999.

*A smoking control working group developed a Draft plan in 1999 & Final plan in 2000, Healthy Egyptian 2010 objectives are ..

- 1- Decrease deaths from smoking.
- 2- Decrease prevalence of ciggeretes & shisha –smoking.
- 3- Delayed initiation of smoking.
- 4- Decreased exposure to second hand smoke.
- 5- Less tar content in ciggeretes.
- 6- Smoke free and designated smoking places in public places.
- 7- Tobacco free environments.
- 8- Prevention curriculum in schools.
- 9- Enforcement of the current laws which prohibit all forms of tobacco product advertising .

10-Increase in the cost of tobacco products.

Who Resolution.

Between 1970 and 1995, WHO adopted 14 resolutions on the need for both national & international tobacco control policies.

4 of the 14 resolutions are relevant to the UNF- project GYTS, Member states were encouraged to implement comprehensive tobacco control strategies that contain the following:

- 1- Measures to ensure that non-smokers receive effective protection to which they are entitled from involuntary exposure of tobacco smoke.
- 2- Measures to promote abstinence from the use of tobacco so as to protect children & young people from becoming addicted.
- 3- The establishment of programmes of education & public information on tobacco & health issues , including smoking cessation programmes, with active involvement of the health professionals & media.
- 4- Monitoring of trends in smoking & other forms of tobacco use , tobacco-related diseases & effectiveness of national smoking control programmes or action.

Background to the GYTS:

The tobacco free initiative (IFI/WHO) was recently been awarded by the United Nations Foundations for International Partnerships (UNFIP) what is probably the largest single tobacco prevention grant to initiate a joint project with UNICEF, titled a "Building alliances & taking action to create a generation of tobacco free children & youth".

The aim of the project is to pool together the evidence, technical support, and strategic alliances necessary to positively address the negative impact of tobacco and to encourage and support children & adolescents in leading healthy & active lives free of tobacco.

In response to lack of data especially on youth tobacco use in countries like Egypt, The WHO, in 1998, in collaboration with the CDC, initiated a global surveillance project of tobacco use among young people that would allow for cross country comparisons.

The project GYTS, uses a common methodology & protocol for collecting data on tobacco use among young people aged 13 to 15 years across all countries. GYTS was intended to enhance the capacity of countries to monitor tobacco use among youth, and to guide the implementation & evaluation of tobacco prevention & control programmes & policies.

The GYTS is a school-based survey of students aged 13 to 15 years and is designed to gather information about smoking prevalence, knowledge and attitudes and behaviors related to tobacco use ,media & advertising , young people's access to tobacco products, prevention curriculum in schools, exposure to environmental tobacco smoke & tobacco cessation.

The information obtained from the survey may be used in decision-making and develop strategies to prevent & control tobacco use among young people.

The GYTS provides information on where tobacco product are obtained & used, information related to the effectiveness of enforcement measures.

School surveys are useful tools in gathering data as they are relatively inexpensive & easy to administer , tend to report reliable results & refusal are significantly lower than in household surveys.

The most common research approach for this specific population has been the self-administered questionnaire. Therefore,all the above, reasonably justify why a –school-based survey has proved to be must appropriate, hense selected for the UN porject on youth & tobacco.

Objectives of the GYTS:

- 1- To document & monitor the pevelance to tobacco-use including ciggeretes smoking & current use of smokless tobacco, cigars or pipes.
- 2- To obtain an improved understanding of and to assess learners' attitudes, Knowledge and behaviors related to tobacco use and its health impact, advertising, young people's access and school curriculum.
- 3- To provide information to guide programming and advocacy work addressing youth tobacco use.

Content of the GYTS:

The GYTS address the following issues :

- 1- Determine the level of tobacco use.
- 2- Estimate the age of initiation of ciggeretes use.
- 3- Estimate the levels of succeptibility to because ciggeretes smoker.
- 4- Exposure to tobacco advertising.
- 5- Identify key intervening variables such as attitudes and beliefs on behavioral horms with regard to tobacco use among young people which can be used in prevention programmes.

- 6- Assess the extent to which major prevent programmes are reaching school-based population & establish the subjective opinions of these populations regarding such inter ventions.

Methods

The 2001 GYTS in Egypt is a cross-sectional school-based survey which employed a two stage cluster sampling design to produce notionally representative sample of students in grades 7-10 aging 13-15 years old.

Study design & sampling:

Stage 1 , selection of schools :

Since the target population for GYTS is youth aged 13-15 years, a list of schools eligible to participate in the survey was collected in co-ordination with the Ministry of Education (MOE).

The sampling frame consisted of all regular public schools containing any of grades 7-10. The list of (governmental) public schools included the primary , prepratory and secondary school. Only general and technical (economic, agricultural, industrial ,sports) schools are involved. Private schools were excluded because of further precautions and permission to do the survey with notification & consent from every student & his parents.

The list of schools and the number of students enrolled in every school was reviewed and arranged then the sample was selected with a probability proportional to enrollment size. This meant that large schools were more likely to be selected than small schools. The outcomes of this selection process gave 50 schools with an expected survey population of 3500, with no replacement or substitution allowed for schools that did not agree to participate.

Stage 2. Selection of classes& students:

The 2nd stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All classes in the selected schools were included in the sampling frame. All student in the selected classes were eligible to participate in the survey. So in each school , depending on the number of classes listed, one or two or three of those classes were selected and in each class selected, every student present was interviewed.

A weighting factor was applied to each student record to adjust for non response and for the varying probabilities of selection SUDAAN and Epi Info were used to compute 95% confidence intervals for the estimates, for the 2001 GYTS in Egypt.

The questionnaire:

The Egyptian version of the questionnaire consisted of 63 questions. The questionnaire was a self-administered type which consisted of a “core” component and an “optional” component.

The core questions allow for comparison between countries & regions, and the optional questions allow for specific issues pertaining to individual countries.

A group of experts on tobacco addiction from the 1st group of countries selected to undertake GYTS, and staff members of WHO/TFI and UNICEF, wrote the “core” part of GYTS. In addition, Egypt selected questions (optional) according to the situation in Egypt and modified some of the questions because of the culture and religious tendency in the country.

These additional questions were put together by a team of researchers from WHO, Ministry of Health, Ministry of Education, UNICEF and NGOs in the country.

All the questions were multiple-choice and apart from the questions that asked about background information such as age, gender and class level. The other questions solicited information on the use of tobacco (prevalence, access, brand of cigarettes and other tobacco products), knowledge and attitudes towards smoking, environmental tobacco smoke, cessation, media and advertising, school curriculum and community responses to smoking.

It was necessary to translate the questionnaire, the school and parent notification, instructions for the survey administrators and students to the Arabic language by experts in translation in co-ordination with the MOE and members of WHO.

In order to ensure face validity, the questionnaire was pre-tested in Arabic (pilot) on focus group and modified according to the results before it was administered to schools.

Date Collection:

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary procedures.

Before data collection could take place, the project was discussed in detail with the Director of primary health care and preventive medicine and the Director of central Directory of the protective medicine and health promotion in the ministry of health and Director of Researches in the ministry of Education.

A training workshop for research administrators in Egypt was held in Cairo from Sept 26 to 27, 2001. The basic aim of the training workshop was the standardization of the research methodology.

At the training workshop, with the use of the GYTS 2001 handbook, the core and optional questions to be included in the final questionnaire were reviewed, item by item. Tasks were identified and discussed, GYTS survey design & procedures, as well as the list of sample selection & the final sample size. The training dealt with the purpose of GYTS, confidentiality, scheduling survey administration, documenting school & class participation, presenting and administering the GYTS to the students and materials needed for survey administration.

The survey administration were selected mainly from NGDs and social workers staff of the schools selected and students of social faculty. They were assigned to specific schools and were responsible for the delivery and collection of all survey documentation forms, Answer sheets, Header sheets, and Questionnaire. All the necessary materials and copies of papers, envelops pens & pencils were offered to the survey administrators according to their duties and needs.

In coordination with MOE, Permission to enter the schools & run the survey procedures was done and offered to all the survey administrators to be attached with the letters to each school.

Schools visits were undertaken , in order to:

- Obtain permission from Headmasters to conduct the survey.
- Obtain number of eligible classes for each school for the new academic year in order to facilitate sampling of the classes.
- Make logistical arrangements for survey administration with each school to put a plan and detect the date to run the survey in school according to the educational schedule.

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

Two forms were provided for each school.

The school level form & the class-room level form.

These two forms provided the necessary identification information and were the primary data management forms.

The school level form contained the coordinating agency, the school name, the sample size and the school ID (This was applied by the OSH/CDC). The grades taught and the grades surveyed in the school, as well as the total number of eligible classes, were filled by the survey administrator. A list of random numbers was supplied by OSH/CDC and appeared just above the class tracking

information. The survey administrator was expected to fill in the class tracking information. This contained a grid that was used to catalogue the completion status of each selected class.

The class-room level form also showed the coordination Agency, the school name, the sample, the school ID and the class ID. This information was previously entered by the OSH/CDC. Only one copy of the class-room level form was provided by OSH/CDC. Additional copies were provided and each class participating in the selected school was given one. The survey administrators entered the number of students who were enrolled in the classes and the number of students who actually participated in the survey. All students in the selected classes were eligible for participation.

The Answer sheets and the Header sheets were also provided by OSH/CDC. One Answer sheet and a pencil(2b) were given to each student.

Students were not required to write their names on the answer sheet, or provide any other kind of identification information.

This answer sheet on which students were asked to record their responses was machine- readable. A Header sheet was completed for each participating class in each school and showed the school ID (from the school level form) and class ID (from the classroom level form).

Instructions were provided to the survey administrators for procedures to be followed prior to, during and after the survey, in the classroom. Before the start of survey, a script of instruction for students was read.

Each of the survey Administrators was assigned to certain schools and each had the responsibility to collect the enrolment data of all the classes in forms II, III, IV, in each school and transmit such information to the research coordinator by hand so as to confirm the selection of the correct class or classes to be interviewed. The administration of the questionnaire, documentation of the class and school participation, and the security of the answer sheets were the assigned responsibility of the survey Administrators. The research coordinator undertakes the responsibility of the final editing after translation to English language, and package of the answer sheets, the Header sheets, the classroom level forms and the school-level forms. This was done simply to establish quality data management throughout the data gathering process.

Analysis:

For the Analysis, a weighting factor was applied to each student record to adjust for non-response and the varying probabilities of selection. The programs SUDAAN and Epi Info were used to compute rates and 95% confidence intervals for the estimates. A weight was associated with each questionnaire to reflect the

likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation is given by.

$$W = W1 * W2 * F1 * F2 * F3 * F4.$$

Where:

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 non-response adjustment factor calculated by school size category (Small, Medium, Large).

F2= a classroom-level non-response factor calculated for each school.

F3 = a student – level non-response adjustment factor calculated by class.

F4 = a post stratification adjustment factor calculated by gender and grade.

Results

A total of 3792 students participated in the Egypt GYTS. The school response rate was 100% (A sample of 50 schools) were surveyed), the student response rate was 96.3% and the overall response rate was 96.3%.

For the pupose of analysis, three main categories of students were identified in the survey.

- Never smokers are these students who have not admitted to, or, have never tried or experiment with cigarette smoking even one or two puhhs.
- Ever smokers are all these students who have admitted to have ever tried or experimented with cigarette smoking even one or two puffs. There were 13.8 % of students who are identified with this category.
- Current smokers are those students who have smoked on one or more days during the 30 days before the survey. There were 20 % of students in this category.

Table1: percent of students who use tobacco, Egypt GYTS, 2001

Category	Ever smoked Cigarettes Even One Two Puffs	Current Use			Never smokers – Susceptible to Initiating smoking
		Any Tobacco Product	Cigarettes	Other tobacco Products	
Total	13.8 (±2.7)	19.6 (± 3.6)	4.1 (±1.1)	17.5 (±3.7)	N/A
Sex					
Male	16.2 (±2.9)	22.8 (±4.5)	4.4 (±1.3)	20.5 (±4.7)	N/A
Female	10.7 (±3.8)	15.8 (±4.3)	3.4 (±1.6)	14.3 (±4.4)	N/A

N/A – question not asked

Rationale:

In many countries, people begin smoking at younger and younger ages, with the median age of initiation under 15 years in many countries. 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. 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. Half of persistent smokers who start smoking in adolescence will die from their use of tobacco. The questions in this section measure smoking experimentation, current smoking patterns, age of initiation, and other tobacco use

- About one in seven of all students have ever smoked cigarettes, with no significant difference between boys and girls.
- One in five students currently use any tobacco product. 4% currently smoking cigarettes and 17.5% use other tobacco products.
- There is no significant difference between boys and girls who currently smoke.

Table 2: school curriculum, Egypt GYTS, 2001

Category	Percent taught of dangers of smoking	Percent discussed reasons why people age smoke
Total	46.5(±3.8)	34.9(±3.8)
Sex		
Male	48.4(±4.3)	37.2(±4.4)
Female	43.5(±7.1)	31.3(±5.7)

Rational:

These questions measure student perception of tobacco use prevention education. Schools are an ideal setting in which to provide tobacco use prevention education. School-based tobacco prevention education programs that focus on skills training have proven effective in reducing the onset of smoking. School _based health programs should enable and encourage children and adolescents who have not experimented with tobacco to continue to abstain from any use. For young persons who have experimented with tobacco use, or who are regular tobacco users, school tobacco prevention education programs may enable them to immediately stop all use.

- About half of the students were taught in their school about the dangers of smoking during the past academic year.
- More than one third of the students discussed reasons why people their age start smoking.
- There is no significant difference by gender.

Table 3: Cessation Egypt GYTS, 2001:

Category	Current smoker	
	Percent desire to stop	Percent tried to stop year
Total	61.9(\pm 17.9)	63.5(\pm 13.9)
Sex		
Male	76.0(\pm 10.4)	67.7(12.0)
Female	*	*

*N<35 students

Rationale:

Many smokers, including youth, are addicted to nicotine and need assistance in quitting. To comprehensively address use among youth, the focus must be on both prevention and cessation.

Recently in tobacco control, there has been an increased demand for cessation programs for youth. A primary reason for this increased demand is a recognition in the community that many youth who are regular tobacco users are interested in quitting and that they frequently try to quit but most are unsuccessful. To monitor the potential impact of tobacco control policies and diversion and cessation programs it is important to measure cessation among youth.

- About sex in ten current smokers reported that they desire to stop smoking and /or they tried to stop smoking during the past year (but failed).
- There were no significant differences by gender.

Table 4: Environmental Tobacco Smoke, Egypt GYTS, 2001:

Category	Exposed to smoke from others in their home		Exposed to smoke from others in public places		Percent think smoking should be banned from public places		Definitely think smoke from others is harmful to them	
	Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current smokers
Total	26.2(±2.4)	54.3(±12.4)	36.3(±5.0)	73.0(±7.8)	88.7(±2.9)	68.1(±13.9)	77.9(±4.1)	63.6(±14.1)
Sex								
Male	27.3(±3.7)	59.7(±8.4)	41.0(±4.6)	79.6(±8.2)	87.3(±2.5)	68.2(±9.0)	79.5(±4.5)	66.9(±11.4)
Female	25.8(±3.6)	*	32.3(±8.9)	*	90.9(±4.0)	*	77.3(±6.2)	*

*N< 35 cases in denominator

Rationale:

These questions measure 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. Although there have been few studies on the economic costs of ETS, those which have examined this issue have found annual costs ranging from \$200 million to \$8 billion. Thus, the current literature indicates that the detrimental economic and health impact of ETS is very large and in need of further study.

- About one third of never smokers and above the half of the currently smokers were exposed to smoking from others in their homes. Three-fourths of the current smokers were exposed to smoking in public places.
- Eight in ten of never smokers and seven in ten of current smokers think smoking should be banned from public places with significantly different percentage.
- About two thirds of both never or current smokers think smoke from others is harmful to them.

Table 5: knowledge and attitudes, Egypt GYTS, 2001

Category	Think boys who smoke have more friends		Think girls who smoke have more friends		Think smoking makes boys look more attractive		Think smoking makes girls look more attractive	
	Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current smokers
Total	24.0 (±4.0)	43.3 (±13.7)	18.4 (±3.4)	32.0 (±12.8)	25.0 (±4.9)	23.4 (±8.5)	20.1 (±2.3)	25.6 (±11.5)
Sex								
Male	25.5 (±2.7)	38.4 (±10.0)	18.3 (±2.4)	28.0 (±10.8)	25.3 (±3.5)	28.1 (±8.5)	19.1 (±2.3)	28.3 (±8.6)
Female	22.8 (±6.8)	*	18.2 (±5.7)	*	23.6 (±9.0)	*	19.6 (±6.1)	*

*N <35 cases in the denominator

Rational:

These questions measure general knowledge, attitudes, and intentions which have been linked in research studies with risk of smoking onset and transitions toward more regular smoking. Several concepts are specifically addressed including susceptibility to smoking which is a measure of how firm a never smoking youth is regarding their intention to remain a non-smoker. Parental involvement, attitudes toward the social benefits of smoking, Knowledge and attitudes toward risks of tobacco use, and potential peer pressure and to use tobacco are concepts also specifically addressed.

The acquisition of such information could help monitor the broader or more general impact of media counter-advertising and de-glamorization campaigns, school curriculum, and youth empowerment efforts. Moreover, increases in positive attitudes toward tobacco use and decreases agreement with statements about the risks of tobacco use have been related to increases in youth tobacco use rates. Questions regarding susceptibility predict the risk of future smoking experimentation, as do those about the number of friends who smoke, and attitudes and knowledge about tobacco.

- Less than one third of never smokers and only four in ten current smokers think boys who smoke have more friends, with significant difference between them.
- About one in five of never smokers and one third of current smokers think girls who smoke have more friends.

- About one in four of never smokers and /or current smokers think smoking makes boys look more attractive, with no significant difference between boys and girls.
- One in five of never smokers and one in four of current smokers think smoking makes girls look more attractive.

Table 6: media and advertising Egypt GYTS, 2001

Category	Percent saw anti-smoking media messages	Percent saw pro-Tobacco messages in newspapers and magazines		Percent who had object with cigarette brand on it		Percent offered “free “ Cigarettes by a Tobacco Company	
		Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current smokers
Total	N/A	71.6 (±3.2)	75.5 (±7.4)	18.0 (±3.5)	25.8 (±7.2)	20.4 (±3.1)	60.5 (±12.9)
Sex							
Male	N/A	69.6 (±3.6)	71.0 (±9.3)	20.0 (±2.8)	22.4 (±7.2)	24.9 (±3.0)	75.1 (±9.7)
Female	N/A	73.0 (±5.7)	80.6 (±14.2) *	16.0 (±5.0)	27.4 (±14.7) *	15.6 (±3.9)	56.6 (±28.4) *

*N<35 cases in the denominator

N/A = question not asked

Rationale:

These questions measure the exposure of young people to pro-tobacco use messages in the mass media. Children buy the most heavily advertised brands and are three times more affected by advertising than are adults. The average youth already has been exposed to billions of dollars in imagery advertising and promotions creating a “friendly familiarity” for tobacco products, an environment in which smoking is seen as glamorous, social and normative. Young people are able to recall virtually no anti-smoking messages on television or in the movies. Yet they are able to recall specific movies that portray smoking and are able to identify actors and actresses who smoke in their entertainment roles.

- More than seven in ten of both never smokers and current smokers saw pro-tobacco messages in the past 30 days. There was no statistical difference in media exposure by gender.
- Two in ten of never smokers and about one in four of current smokers had object with a cigarette brand logo on it.
- One in four never smokers were offered free cigarettes

Table 7: access and Availability, Egypt GYTS, 2001

category	Percent Current Smokers who Usually smoke at Home	Percent Current Smokers who Purchased Cigarettes in a Store	Percent Current Smokers Who Bought Cigarettes in a Store Who Were Not Refused Because of their age
Total	18.0 (±12.1)	42.1 (±11.2)	93.0 (±7.5)
Sex			
Male	8.6 (±5.0)	34.5 (±8.3)	84.8 (±15.4)
Female	*	*	*

* N < 35 cases in the denominator

- About two in ten of current smokers usually smoke at home.
- Four in ten current smokers purchase their cigarettes in a store, and nine in ten of them were not refused purchase because of their age.

Discussion

The GYTS is a school- based survey, conducted among school children aging 13 – 15 years old. It presents a clear picture of the magnitude of the problem of tobacco use among the youth and provide base – line data on tobacco use since no reliable data on the current situation exists.

Prevalence

The smoking prevalence rate among young people in many countries around the world where GYTS was implemented, shows that tobacco use ranges from 10% low to a high of 33%, and in Egypt, more than one in seven of all students aged between 13 – 15 years currently smoke.

Cessation

It is widely known that tobacco is the most important preventable cause of premature deaths in many countries.

Studies have shown the strong relationship between smoking prevalence and lung cancer patterns. Because smoking is the major cause of lung cancer and lung cancer commonly takes 20 or more years to develop, smoking prevalence is an important predictor of future lung cancer patterns. Likewise, today's lung cancer patterns are a good indicator of the smoking prevalence of previous decades. Further more the younger a person is when they

take up smoking, the greater their chances of contracting cancer later in life. Given the above – mentioned trends in smoking prevalence, it can safely be assumed that a majority of the youth that are current smokers will develop lung cancer before they reach the age of 35. Besides lung cancer, there are other diseases that studies have shown to be caused by smoking, which include heart diseases, strokes and a range of respiratory diseases.

The current trend predicts an increase in tobacco use among young people. Starting to smoke at an early age portends a lifetime addiction and premature death from tobacco – related illnesses. More so, young people who start smoking early in life will often find it difficult to quit smoking.

More than six in ten currently smokers students reported that they desire to stop smoking and /or they tried to stop smoking during the past year but failed. Young people frequently experiment with new and sometimes risky behaviors. However they often don't take into serious consideration the long-term consequences of such behaviors. For youth, the risks of tobacco use are perceived to be remote and are out weighted by what they see as the immediate benefits. They tend to underestimate the addictiveness of nicotine and the difficulties associated with quitting, believing it is easier for young people to quit than adults.

It must be remembered that smokers including youth, are addicted to nicotine and need assistance in quitting. So any program that focuses on tobacco use among youth must address both prevention and cessation.

One other important feature that emerged from the survey is the high use of other tobacco products and this shows the easy access to these products the youth have with more and more females smoking just as much as males.

Information on students' knowledge and attitudes towards is wide-ranging since it focuses on parental involvement, potential peer pressure to use tobacco, attitudes towards the social benefits of smoking as well as the knowledge and attitude towards risks of tobacco use and the susceptibility of never smokers regarding their intention to remain non-smokers.

For example, more than one forth of never smokers expose to smoke from their parents or brothers in their homes. While above half of the currently smokers student. are exposed.

Media

The acquisition of such information could help monitor the broader or more general impact of media counter- advertising and deglomORIZATION campaigns, school curriculum, and youth empowerment efforts. On the other hand, increases in positive attitudes towards tobacco use and decreased agreement with statements about the risks of tobacco use have been related to increases in youth tobacco use rated. Youth are made to believe that smoking is cool, fun, glamorous, modern and western and watching their role models either parents, teachers or community leaders...etc smoke further encourages them to smoke too.

Efforts being made at sending anti-smoking messages to youth are being diluted by these positive images of smoking.

The use of media for providing information reaches a bigger audience but is non-interactive. An intensive mass media campaigns can produce significant results in helping to postpone or prevent smoking onset in adolescents, but there must be comprehensive education efforts, combined with media, school-based, and community-based activities.

The survey explored other interactive communication methods, discussions in a classroom environment. Students were asked if they were told or had discussed in class, the effects of smoking as well as why young people of their ages smoked. About half the students had discussed the harmful effects of smoking in class and even less had discussed the reasons why young people smoked (34.9%) these are very small percentages, considering the magnitude of the problem, the young ages these students start smoking, the harmful effects and the opportunity the school environment presents for campaigning against smoking.

Laws

In Egypt, we have a law, which prohibits the sale of tobacco products to persons below the age of 18.

All students interviewed in this survey were below the age of 18 and of the current smokers, almost all of them (93%) obtained cigarettes from a store and were not refused because of their age. This shows the gap between the law and the practice.

Legislation on tobacco control is necessary but if it is not enforced it is useless. Enforcement of tobacco control policies enhances their efficacy by sending a message to the public that the community leadership believes the policies are important.

Most of the shopkeepers are aware of the age restriction but due to need for increased sales, they do not adhere to the requirement. Because of lack of enforcement of this law, the practice is further worsened because the shopkeepers know that nobody will prosecute them. Parents or adults, on the other hand, are not helping in this case. Some parents are known to send their under aged children to buy cigarettes on their behalf. The other complication to this scenario is the influx of street vendors in shopping centers and in supermarkets. Whenever strict control policies are enforced to prevent minors from accessing commercial sources of tobacco, young people tend to turn to social sources, e.g. older friends and family members, of tobacco products. Therefore, it is critical that minors' access restrictions be combined with a comprehensive tobacco control program that reduce the availability of social sources and limits the appeal of tobacco products.

ETS

Effort is being made to ban smoking in public places but at an individual level. Some service providers have banned smoking or have a smoking and a no-smoking zone in their premises. These efforts to protect non-smokers are not being

supported at the policy level, in order to effectively protect non-smokers from the passive smoking. Most of the places frequented by youth interviewed in the survey do not have anti-smoking rules within their premises, as shown by the large percentages of youth who said they were around others who smoked in the previous week, some being exposed to ETS on a daily basis. Besides the obvious discomfort of being around someone who smokes, the harmful effects of passive smoking are obvious to youth. About seven to eight in ten students are aware of the dangers of smoke from other people's cigarettes with about the same high percentages in favour of banning smoking in public places either smokers or non-smokers students.

The researches have been undertaken worldwide to reveal the evidence on the health effects of passive smoking. These reviews have concluded that passive smoking increases the chances of contracting or aggravating a range of illnesses including.

- Cardiovascular disease
- Lung cancer
- Asthma (particularly in children) either exacerbation and induction
- Acute irritation of the respiratory tract
- Bronchitis, pneumonia and other chest illnesses in children

Although there have been few studies on the economic costs of ETS, those which have examined this issue have found annual costs very high. Obviously, this would have severe impact on both the economic and the health status of the country.

Conclusions

The percentage of young people between the ages of 13-15 years old who currently use any tobacco product is high (19.6%), with 17.5% currently use other tobacco products and 4.1% currently smoking cigarettes with the onset of cigarette smoking being as young as age 10, with some even as young as age 7. One other salient feature that emerged from this survey is the high use of other tobacco products among youth. The percentage of students who ever smoked cigarettes, even one or two puffs, is 13.8%.

ETS is very high, over half of current smokers students and about one third of never smokers students expose to smoke in their homes from their parents or brothers or relatives. About 3 in 4 current smokers students are around others who smoke in places outside their homes. 88.7% of never smokers students and 68.1% of current smokers think smoking should be banned from public places and nearly the same percentage (77.9% of never smokers and 63.6% of current smokers students) think smoke from others is harmful to them.

The time is ripe for appropriate legislature to be introduced to create a tobacco-free environment in which children would be able to enjoy a healthy lifestyle. These positive aspects revealed from the survey attract our attention to work on increasing the students' awareness and offer them help to live their lives safely.

Cigarettes in Egypt are widely available and accessible. Almost half of the youth smokers can buy their cigarettes in the stores and half of them bought their cigarettes without any prohibition of sale.

More than six in ten currently smokers want to stop smoking. They tried unsuccessfully to stop over the past year. They however, still believe quitting is within their control saying they will be able to stop whenever they want to.

They tend to underestimate the addictiveness of nicotine and the difficulties associated with quitting believing it is easier for young people to quit than adults.

There is lack of access to smoking cessation programmes among those who are already smoking

The majority of young people (about three fourths, either currently smokers or never smokers) saw advertisement for cigarettes on billboards, in newspapers and magazines and brand names at sport event or on television.

Youth are made to believe that smoking is “cool”,

Fun, glamorous, modern and western and watching their role models smoke further encourages them to smoke too.

Some even had an object with a cigarettes brand logo on it, about one fourth of young people either never smokers or currently smokers. About two thirds of currently smokers students were offered free cigarettes by a tobacco company in different occasions. The influence of advertising by the tobacco industry is pronounced and until legislation provides support for total ban on advertisement, children and adolescents will continue to be influenced by these pro-smoking messages in the media.

Less than half of the students were taught in class during the past year about the dangers of smoking, the reasons why people their age smoke and the effects of tobacco.

Recommendations

Either we consider smoking prevalence in Egypt is low or high, for children and adolescents, any figure above zero should be a cause for grave concern. It is necessary to implement a surveillance system that would enhance and strengthen the present database on tobacco use, for it can offer a useful tool for supporting medium-term and long-term programmers and advocacy actions for youth-oriented tobacco control.

From this survey, the increased use of cigarettes and other tobacco products by young people has been shown and many recommendations especially specific intervention programs can be drawn.

**The goals of tobacco control include:*

- Ensuring that children grow up in an environment free of inducements to smoke.
- That adults, children and adolescents who want to quit smoking are given the support to do so .
- And that non-smokers are protected from the harmful effects of involuntary exposure to tobacco smoke.

According to the 1999 World Bank report, "curbing the Epidemic: Governments and the Economics of tobacco control" the most effective ways to achieve the goals of tobacco control are:

- Comprehensive policy initiatives particularly tobacco tax increases.
- Bans on tobacco promotion.
- And creation of smoke-free spaces.

The following recommendations can be found useful within the Egypt context:

1. Enact legislations to restrict or ban smoking in public places such as restaurants, cinemas, supermarkets, public transport e.g. buses and underground and in work places enforcing the (Clean Air Act). Restriction on smoking in public places and workplaces reduce both overall smoking prevalence and consumption

- by smokers who continue to smoke. This action can have long-term effect on societal norms since young people who grow up around smoke-free spaces are more likely to see tobacco use as uncommon and socially unacceptable. For this reason, smoke-free spaces are a central social marketing tool for tobacco control.
2. Restrict the advertisement of cigarette smoking on billboards, newspapers, radio and television, and at the same time increase public awareness campaign effects of smoking cigarettes as well as other tobacco use, on the mass media. Also, anti-smoking mass media campaigns and messages on televisions and radio to inform and change attitudes.
 3. Appeal to sporting clubs to refuse sponsorship from tobacco entrepreneurs and to avoid the use of cigarette advertisement in the promotion of their respective sport.
 4. Enact and enforce legislations that prevent minors from purchasing cigarettes and other tobacco products by prosecuting those who sell tobacco products to minors.
 5. Formulate public policies and enact legislations that regulate tax increases for tobacco products as well as point of sale and distribution. *Tobacco taxation*, the single most effective tobacco control measure is tax policy since there is a strong relationship between per capita consumption of tobacco products and real price. In developing countries, a 10% increase in the real price of tobacco products will result in a decline in per capita consumption of about 4%. Taxes are very effective among low-income groups and youth who have less disposable income and are much more price-sensitive than the general population.
 6. Involve the Ministries of Health, Education, Youth and Sports and Environmental affairs as well as NGOs and the National Maternal and Child Committee in the campaign to promote the cessation of cigarette smoking and use of other tobacco products especially among youth.
 7. Design and implement cessation programmes for schools and all youth-oriented or affiliated organizations cessation programmes in schools and it must be integrated in the school curriculum with direct support for smokers who want to quit smoking. That requires access to affordable behavioral and pharmaceutical treatments for tobacco addiction. School-based health programs should enable and encourage children and adolescents who have not experimented with tobacco to continue to abstain from any use.

8. For young persons who have experimented with tobacco use, or who are regular tobacco users, school health programs should enable and encourage them to immediately stop all use. For those young persons who are unable to stop using tobacco, school programs should help them seek additional assistance to successfully quit the use of tobacco.

Strategies effective in preventing tobacco use among youth in school health programs include:

1. develop and enforce a school policy on tobacco use:
 - i. an explanation of the rationale for preventing tobacco use.
 - ii. prohibition against tobacco use by students, school staff, parents and visitors and in school vehicles.
 - iii. prohibition against tobacco advertising in school buildings and in school activities and publications.
 - iv. access to programs to help quit tobacco use.
2. address psychosocial factors related to tobacco use among children and adolescents:
 - i. immediate and long-term undesirable physiologic, cosmetic and social consequences of tobacco use.
 - ii. decrease the social acceptability of tobacco use, highlight existing anti tobacco norms and help students understand that most adolescents don't smoke.
3. help students understand why some adolescents smoke and help them develop other positive means to attain their goals.
4. recognize social influences that promote tobacco use and help students to refuse tobacco-promotion messages from media, adults and peers.
5. provide tobacco-use prevention education in schools.
6. provide program-specific training for teachers.

7. involve parents or families in support of school-based programs to prevent tobacco use.
8. assess the tobacco-use prevention program at regular intervals.
9. awareness campaigns on the dangers of cigarette smoking and other tobacco products need to be intensified on the World-No-tobacco Day and on a regular basis all over the year.

Offering consumer information and public education and preparing communication and counseling campaigns on health effects of tobacco must be done in all settings, schools, workplace and community centers and must be accessible for everyone who want to know about smoking effects.

Because four out of every five persons who use tobacco begin before they reach adulthood, tobacco prevention activities should focus on school _ age children and adolescents. Evidence suggests that school health programs can be an effective means of preventing tobacco use among youth. School _ based programs to prevent tobacco use can make a substantial contribution to the health of the next generation. Tobacco use term refers to the use of any nicotine _ containing tobacco product. These products often contain additional substances that cause cancer in animals and humans e.g. Benzo pyrene, vinyl, chloride, polonium 210.

Several strategies can be employed, and these include publicizing the finding of new researches and health messages on tobacco packages.

Regular evaluation of The Comprehensive National. Tobacco Control Programs to assess the development and modify the process to meet the newly developed problems.

Executive Summary

The Global Youth and Tobacco Survey (GYTS) was developed by WHO and CDC to track tobacco use among youth in countries across the world.

It is a school-based survey designed to use a two-stage cluster sample to produce representative data on smoking among school age children 13_15 years old.

Data collected include the prevalence of cigarette smoking and other tobacco products use, access, environmental tobacco smoke exposure, cessation, media and advertising and the school curriculums.

This survey was implemented in Egypt in October and November 2001. All the 50 sampled schools participated in the survey. A total of 3792 students responded to the questionnaires. All the public (governmental) schools containing students, ages 13_15 years, were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample.

A weighting factor has been used to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response.

Prevalence rate of ever smokers is 13.8% with 4.1% current cigarette smokers and 19.6% who currently use any tobacco product while 17.5% use other tobacco products.

About 24% of never smokers and 43.3% of currently smokers students think boys who smoke have more friends than non-smokers while about 18.4% of never smokers and 32% of currently smokers think girls who smoke have more friends than non-smokers. Only about fourth of the students think boys or girls

who smoke are attractive than non-smokers. Attitudes towards the acceptance of smoking do not vary by gender.

About 18% of currently smokers usually smoke at home and 42.1% of the currently smokers students purchase their cigarettes in a store and about (93%)who bought cigarettes in a store were not refused purchase because of their age.

Many students are exposed to tobacco smoke in their homes and in public places. About 88.7%of never smokers and 68.1% of current smokers think smoking should be banned from public places and 77.9% of never smokers and 63.6% of current smokers think smoke from others is harmful to them.

As much as 6 in 10 smokers want to stop smoking and have tried to stop during the past during the past year. About three fourths of students saw pro _ tobacco messages in newspapers and magazines. And about one fourth of them ever had objects with cigarette brand logos.

Less than half of the students were taught about dangers of smoking and why people their age smoke.

Tobacco control legislation is needed to ban smoking in public places. An effective school curriculum also necessary to enhance youth cessation programmed and tobacco use prevention.

References:

- 1- 2001 GYTS hand book.
- 2- 2002 GYTS Data management and analysis workshop Handbook.
- 3- Framework convention on Tobacco control 128th session of the Executive Committee PAHO/WHO, Washington, D.C. USA, 25-29 June 2001.
- 4- Guidelines for school health programs to prevent Tobacco use and Addiction. reprinted from Morbidity and Mortality weekly Report, feb25 vol.43 No. RR-2, PP.1-18, CDC, US department of Health and Human Services. Public Health Service.
- 5- Country profiles on Tobacco control in the Eastern Mediterranean Region, 2002, WHO, Regional office for the Eastern Mediterranean.
- 6- Healthy Egyptians 2010 Initiative, Ministry of Health and population Egypt.