

## **Introduction**

Tobacco use is one of the chief preventable causes of death in the world. There are over a billion smokers across the world. Smoking now causes million deaths a year worldwide and if trends continue, there will be 10 million deaths from smoking worldwide in about 30 years time. The spread of tobacco epidemic is a global problem with serious consequences for public health that calls for the participation of all countries in an effective, appropriate and comprehensive international response.

The concern is about the ongoing increase in smoking and other forms of tobacco consumption by children and adolescents. Approximately 80% of adults who started smoking before the age of 18. Every day, nearly 4000 young people under the age of 18 try their first cigarettes.

The international society, represented by TFI (tobacco free initiative), WHO (world health organization), CDC (center for disease control and prevention), has been developing international programs to control this epidemic, however, regardless of the worldwide movement against tobacco, tobacco companies still control the tobacco market.

### **Tobacco in Bahrain**

Tobacco is not grown in Bahrain. Although no tobacco is manufactured in Bahrain, there still exists an export/import trade in tobacco products.

In 1990, Bahrain imported 170 tones of unmanufactured tobacco. In 1993, export earnings from cigarettes totaled US\$ 2.5 millions, while cost of tobacco was US\$ 17.3 million.

#### ***Some studies done in Bahrain among youth:***

---In 1991 study done by Bahrain central statistics organization showed that the prevalence of smoking among males aged 12-14 was 23%, while it was 0.2 % among females of the same age.

---In 1997 study was done among secondary school students aged 13-20 showed a prevalence of 25.8% of males were smokers, with none of the females.

### **Anti-smoking in Bahrain**

The Bahrain anti smoking society was formed in 1979 and was reestablished in 1990.

In 1994 an amiri decree was issued which stated the following:

- No tobacco is cultivated in Bahrain.
- Banning smoking in closed public places.
- Banning smoking in public transport.
- No sponsorship for any kind of sports or contests by tobacco companies.
- No tobacco factories can be built, no machines for displaying cigarettes are allowed.
- Tobacco cannot be sold to those less than 18.
- The ministry of health and including other members from other ministries and NGOs should form an anti-smoking committee.
- Anti-smoking committee is responsible for:

- a. Identifying the upper limit for nicotine, tar, and other toxic substances in cigarettes.
  - b. Limit the advertisement, set the warning signs on the advertised material.
  - c. Conduct studies needed in the subject of tobacco.
- Ministry of health responsible to have the inspectors, which can issue tickets for the lawbreaker.

## **GYTS goals and objectives**

GYTS is a school- based tobacco specific survey, which focus on adolescent's age 13-15 years (grade 7-10). It assess students attitude, knowledge, and behavior related to tobacco use and exposure to environmental tobacco smoke, as well as youth exposure to prevention programs, and media messages aimed preventing and reducing youth tobacco use.

Also the GYTS provides information on where tobacco products are obtained and used, as well as the effectiveness of enforcement measures.

### ***The GYTS will address the following issues:***

- *Determining the level of tobacco use.*
- *Estimating the age of initiation of cigarette use.*
- *Estimating the level of susceptibility to become a cigarette smoker.*
- *Estimating the exposure to tobacco advertising.*
- *Identifying key intervening variable, such as attitude and beliefs on behavioral norms with regard to tobacco use among young people.*
- *Assessing the extent to which major prevention programs are reaching school-based populations and establish the subjective opinions of those populations regarding such intervention.*

## **Methodology**

### **Study design and sample**

Our sampling frame consists of all schools containing grades 7, 8 9, and 10. with grades 7, 8, 9 being intermediate, and 10 being 1<sup>st</sup> of the secondary. A two- stage cluster sample design was used to produce a representative sample of students in grade 7 through 10. Data about schools and the number of students were obtained from the ministry of education.

**School level** –the first stage-sampling frame consisted of all schools containing grades 7 through 10. Since many of the schools had zero enrollments for some of the grades, our sampling frame was broken in two as follows: 76% of the schools were intermediate, and 24% were secondary. Schools were selected with probability proportional to school enrollment size.

**Class level**- the second sampling stage consisted of systematic equal to probability sampling (with a random start) of classes from each school that participated in the survey. All classes in the selected intermediate schools were included in the sampling frame .in