Introduction

Tobacco use is considered to be one of the main preventable cause of death, and it is implicated as an important factor contributing to morbidity and mortality all over the world. Currently, the World Health Organization (WHO) attributes 4 million deaths a year to tobacco use and this figure is expected to rise about 8.4 million by the year 2020. It is estimated that 70% of these deaths will occur in developing countries. In many countries, studies have revealed that most people start using tobacco in their teens with the median age of smoking being less than 15 years. Recent trends even indicate an earlier age of initiation among children and adolescents and thus contributing to an increasing smoking prevalence for this vulnerable group. If these patterns continue, tobacco will result in the death of 250 million children and adolescent alive today, many of whom live in the developing countries.

The WHO, United Nations Children Fund (UNICEF), and the Office on Smoking and Health (OSH), Centers for Disease Control and Prevention (CDC) established international programs and initiatives in order to combat tobacco use. Despite these efforts, tobacco companies still control markets and youths are their main target. Therefore, primary intervention strategies should be directed toward children and young people.

Tobacco use in Oman

Most Omanis have always considered tobacco use as an evil. Leading religious leaders have issued rulings (fatwas) forbidding smoking and considered it “haram” and waste of financial resources. Nonetheless, with more openness of the country on world markets, smoking became widely spread in Oman especially among school children and youth.

Tobacco control program is one of the Ministry of Health’s (MOH) priorities in Oman. A National multi-sectoral committee was established in 1994 and re-formulated in 1997, by a Ministerial Decree, under the chairmanship of the Undersecretary of Health Affairs and its executive office being the Department of Non-communicable Diseases.

The National Committee has been instrumental laying the foundation for tobacco control in Oman with the following being some of its main achievements:

- Obtaining a total smoking ban in all Governmental offices and buildings through the Ministers Cabinet, including all health and educational institutions
- Banning smoking in public transportation
- Banning tobacco advertisement in TV and Radio media
- Banning sponsorship of all sports and art and cultural events
- Prohibition of sales to minors below (18 years) and single sticks

- Periodic increase of taxes on imported tobacco
- Not providing soft loans and technical support to any tobacco farmer (though tobacco cultivation is extremely limited in Oman)
- Directing the research activities in the country
- Regularly monitoring the activities of the tobacco companies locally and internationally
- Active participation the WHO Framework Convention on Tobacco Control (FCTC)

Many epidemiological studies have been conducted on smoking prevalence in Oman. The Oman Family Health Survey (OFHS) has reveled that over 15% of male adults and 1.5% of females aged 15 years and more were regular smoker of tobacco. This is expected to be an underestimate of the actual prevalence as the methodology of the OFHS involved proxy reporting by parents of many survey participants.

A school based survey, conducted in 1994 among youth aged 12-18 years, showed that at least 5% of boys and 1% of girls were current smokers (see table 1).

Table 1: prevalence of current and ex-smokers among the three school stages in Oman, 1994.

	Primary (12+ yrs)	*Preparatory (15+yrs)*	*Secondary (18+ yrs)*
Current smoker	2.4	4.8	3.6
Ever smokers	7.3	12.0	12.8

A more recent Adolescent Health Survey conducted in 2001 among students aged 15-19 years, showed an increase of smoking prevalence among both genders to 8% among boys and 7.3% among girls.

In addition to cigarette smoking, there is an alarming growth in the number of young males and female who are using other types of tobacco especially water-pipes and chewing tobacco though magnitude of this problem has not been fully established yet.

Objectives of Global Youth Tobacco Survey

The Global Youth Tobacco Survey (GYTS) is a school based tobacco survey which focuses on adolescents' age 13–15 years. It is designed to gather information about smoking prevalence, knowledge, attitudes and behaviors related to tobacco use, media and advertising in addition to prevention activities in schools' curriculum. It also provides information on where tobacco products are obtained and used by this group of youth.

The GYTS also addresses the following issues, which could be used to monitor the FCTC implementation:

1. Determine the level of tobacco use.
2. Estimate the age of initiation of cigarettes use.
3. Estimate the levels of susceptibility to become a cigarette smoker.
4. Estimate the exposure to tobacco advertising.
5. Identify key intervening variables such as attitudes and beliefs norms with regard to tobacco use among people, which can be used in prevention programs.
6. Assess the extent to which major prevention programs are reaching school-based populations and establish the subjective opinions of these populations regarding such intervention.

Methods

The GYTS in Oman is a cross-sectional school based survey, which employed a two-stage cluster sampling design to produce a nationally representative sample of students in grades 8-10 in governmental schools. The final sample selected is a "self-weighting" sample meaning that each student has an equal probability or chance to be selected to perform the survey.

Study design and sampling

Stage 1: Selection of schools

A list of governmental schools eligible to participate in the survey was collected in coordination with Ministry of Education (MOE). Private schools were excluded because of the small number of students' population in these schools and the need of further precautions and permission to conduct the survey.

The list of eligible schools was forwarded to CDC to draw the sample. The sample was selected with a probability proportional to enrollment size. This meant that large schools (with more students) were more likely to be selected than small ones. A total of 50 schools were selected with no replacement or substitution allowed for schools that did not agree to participate. Due to the low students' population in some regions, only nine out of eleven educational regions were included in the sample (table 2).

Table 2: The Nine Regions Involved in the Oman GYTS, 2003.

Regions Surveyed
1. Muscat
2. Dakhliyah
3. North Batinah
4. South Batinah
5. North Sharqiyah
6. South Sharqiyah
7. North Dhahirah
8. South Dhahirah
9. Dhofar