



*Drug Administration and Control Authority
(DACA) of Ethiopia*

*A Report On Global Youth Tobacco Survey
(GYTS) Conducted in Secondary Schools in
Addis Ababa-Ethiopia*

*Addis Ababa
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Table of contents

	<i>Pages</i>
Acknowledgement	ii
Chapter One	
1.1. Executive summary.....	1
1.2. Introduction.....	4
1.2.1. General Overview.....	4
1.2.2. Tobacco Economics.....	5
Chapter Two	
2.1. Tobacco production and Use Situation in Ethiopia.....	7
2.1.1. General Profile of Ethiopia.....	7
2.1.2. Tobacco Production and use in Ethiopia.....	8
2.2. Previous Efforts in Tobacco Control and Prevention.....	10
Chapter Three	
Overview and Analysis of GYTS.....	12
3.1. The Global Youth tobacco survey (GYTS).....	12
3.2. Methodology.....	13
3.3. Results.....	16
3.4. Discussion.....	19
Chapter Four	
4.1. Conclusions.....	23
4.2. Recommendations.....	24
<i>Annexes</i>	26
<i>References</i>	27

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Chapter One

1.1. Executive Summary

Tobacco contains nicotine, an organic alkaloid and powerful neurotoxin, which is responsible for the addictive nature of tobacco. Tobacco use continues to be the leading preventable cause of death and disability among adults in the world today. Tobacco use kills 4.9 million people each year worldwide that means in every 6.5 second one person dies of tobacco related diseases.

Objectives: GYTS enables examination of respondents smoking status, current tobacco use patterns, age of initiation, cessation efforts, availability of tobacco products, perceived social norms related to use of tobacco products, knowledge and impact of anti-tobacco efforts, social influences for tobacco-use, and the susceptibility of never smokers to initiate tobacco use as well as other country specific variables which are critical to the design of comprehensive youth focused tobacco control and prevention programs.

Methods: A two-stage cluster design was used to produce a representative sample of all students in grade 9-11 for Ethiopia-Addis Ababa, conducted in 2003. A questionnaire was self-administered to all participants on an anonymous and voluntary basis. A total 1,868 of the 2,279 sampled students completed usable questionnaire with student response rate 82.0% and school response rate 100%, hence the overall response rate was 82.0%.

Results:

- Overall, 10.1% of students (boys=15.2%, girls= 5.7%) have ever smoked cigarettes (8.8% at age 13 to 12.6% at age 16+)
- Nine percent students currently use any form of tobacco; 3% currently smoke cigarettes; 8% currently use some other form of tobacco.
- Among never smokers 13.6% (1 in 7) of them are likely to initiate smoking next year.

- Not less than twenty percent of both boys and girls associated smoking with a positive image (smokers more often than non-smokers) with boys higher than girls.
- Environmental tobacco smoke exposure is high, almost 2 in 10 students live in homes where others smoke in their presence; over 4 in 10 are exposed to smoke in public places: 1 in 10 have parents who smoke.
- Over 5 in 10 of students think smoke from others is harmful to them and almost all students think smoking in public places should be banned.
- Majority of the students who smoke, 89.9% have ever received help to stop smoking.
- Majority of the students, 7 in 10 students saw anti-smoking media messages in the past 30 days, over 5 in 10 students saw pro-cigarettes advertisements in the past 30 days.
- Approximately 40% of students recalled of a discussion on tobacco in class during the past year.

Conclusions:

These findings call for;

1. Strengthening and designing, school-based education programs and curriculum respectively to raise awareness on tobacco to achieve as low prevalence as possible among the youth in particular and the public in general
2. Designing and enforcing relevant regulations and/or legislation (e.g. on media and advertising, ban smoking in public places)
3. Establishing and designing effective cessation programmes.

It is expected that the results will increasingly stimulate action to control the epidemic by providing more reliable, locally relevant and comprehensive information on the health effects of tobacco.

School based surveys should be conducted at regular time intervals to monitor tobacco use/prevalence among youths to assess the impact of tobacco prevention and control programmes.

1.2. Introduction

1.2.1. General Overview

Tobacco, name for any plant of the genus *nicotiana* of the *solanaceae* family and for the product manufactured from the leaf and used in cigars and cigarettes, snuff and pipe and chewing tobacco. It is indigenous to north and South America, whose dried leaves are often smoked in the form of a cigar or cigarette, or in a smoking pipe, or in a water pipe or a hookah. Tobacco is also chewed, "dipped"(placed between the cheek and gum), and consumed as finely powdered snuff tobacco, which is sniffed in to the nose. (12)

The alkaloid nicotine is the most characteristic constituent of tobacco and is responsible for its addictive nature. The possible harmful effects of the nicotine, tarry compounds, carbon monoxide in tobacco smoke varies with the individual's tolerance. All means of consuming tobacco result in the absorption of nicotine in varying amounts into the user's blood stream, and over time the development of a tolerance and dependence. Absorption quantity, frequency, and speed seem to have a direct relationship with how strong a dependence and tolerance, if any, might be created. Major hazards of tobacco use, however, include carcinogenic compounds in tobacco and tobacco smoke. (12)

Globally tobacco use continues to be the leading preventable cause of death and disability (2). The World Health Organization (WHO) notes that the tobacco epidemic is still expanding, tobacco use kills 4.9 million people each year world wide with some one dies every 6.5 second, this figure is expected to rise to 10 million deaths a year by 2020, 70% will occur in developing countries and fifty percent of these deaths are occurring in middle age (35-69), robbing those killed of around 22 years of normal life expectancy (1,7).

The United States produced nearly 1.7 billion pounds of tobacco in 1997 (about one tenth of world production), of which about 30% was exported. China, India, Brazil, Turkey, Malawi, and Zimbabwe are the other chief producing countries, and Russia, Japan, and Germany are the major importers. (13)

As tobacco consumption decreases in developed countries, the trans-national tobacco companies are vigorously expanding their markets in developing countries. Aggressive marketing combined with changing social norms has resulted in increasing rates of tobacco consumption in developing countries. From 1974 - 1976, 49% of world's tobacco consumption was in developing countries; by 1984-1986 this rose to 61% and by the year 2000, developing countries accounted for 71% of global tobacco consumption (2).

Latest evidence showed that not only in developed but also in developing countries, about half of all persistent smokers are eventually killed by tobacco use, the tobacco epidemic has reached its peak in highly industrialized countries and is now escalating in less developed ones. Tobacco consumption in the developing world is rising by more than 2% every year, in developed nations; it is decreasing by 1 % every year (1).

Summary findings of 2003 tobacco control country profiles report showed that world wide, approximately 1.3 billion people currently smoke cigarettes or other tobacco products (approximately 1 billion men, 250 million women). This report also attempts to indicate that globally, the prevalence of tobacco use is substantially higher in men (47%) than in women (12%) but significantly increasing smoking rates among women were noted in Cambodia, Malaysia and Bangladesh (3).

1.2.2. Tobacco Economics

Tobacco use is more than a health hazard; it is a challenge for sustainable development with its multifaceted consequences on environment, trade, taxation,

social policy, direct and indirect health care costs and power/gender/labor relations. All of these dimensions equally apply to both the production and consumption of tobacco and its products. It is a well known fact that `at present, close to 70% of world's tobacco is grown in the developing world, yet tobacco farmers receive only a small percentage of the profits that tobacco production generates (2).

Tobacco depletes soil nutrients faster than most other crops and requires heavy use of fertilizers and pesticides. Curing tobacco consumes 7 million acres of forest annually; and it is a major occupational hazard, especially for women and children who do the menial work for example on plantations (2).

Tobacco will soon become the leading causes of death world wide, causing more deaths than HIV, tuberculosis, maternal mortality, automobile accidents, homicide and suicide combined. If current trends persist, about 650 million people alive today will eventually be killed by tobacco, half of them in productive middle age, each losing 20 to 25 years of life (4). Tobacco is estimated to cost the world some 200 billion dollars annually in increased health -care costs, a sum that could easily double the current health budget of all developing countries (5).

Summarizing the tobacco economics, poverty and tobacco have become a deadly circle, addiction drives the poor to spend money on tobacco that is desperately needed for food, shelter, health care and education besides tobacco increases the poverty of countries i.e. tobacco use causes countries to have higher health care costs, loss of productivity due to illness and early death, as well as deforestation and other environmental damage (7).

If measures are not taken to curtail tobacco production and use, these in the long run will deplete foreign reserves because of increasing importation of cigarettes and smuggling as well as incurring health care expenditures resulting from tobacco attributable diseases. There fore, so tobacco prevention and control should take its rightful place on the global and national human development agenda (2).

Chapter Two

2.1. Tobacco Production and Use Situation in Ethiopia

2.1.1. General Profile of Ethiopia

Ethiopia is found in the horn of Africa, one of the most populous country in Africa ranking third after Nigeria and Egypt. It is a multi-ethnic society with approximately 100 nations, nationalities and peoples with varieties of language dialectics and culture. The land area of Ethiopia is estimated about 1.1 million square meters and the current population is approximately 71.1 million, of which more than 84.2% live in rural areas. In terms of age structure, 44% are 0-14 years, 53% in 15-64 years range and 3% aged 65 and above. Birth and death rates were 40.4/1000 and 13.7/1000 populations' respectively. Life expectancy is 53.4 and 55.4 years for males and females respectively. (14)

Ethiopia is a Federal Democratic Republic composed of 9 national regional states and two administrative states. The national regional states as well as two city administrative councils are further divided in to five hundred eighty woredas and to around 15,000 kebeles (5000 urban and 10,000 rural). Addis Ababa is the capital city as well as political capital of the African Union and host many international organizations and diplomatic missions.

The Ethiopian health service delivery is structured in to 5 tires. The basic unit in the tier is health center with five-satellite health posts each serving 5000 people. Preventive health service is the main focus of the health posts and the health center serves as referral point. The next in the hierarchy are district and zonal hospitals, which over 250,000 and 1 million potential users respectively. At the top of the tier is a specialized hospital that provides specialized services to those referred from the lower level. An estimated 60 to 80 % percent of health problems

are due to infections and communicable diseases and nutritional problems. The public health care system is underdeveloped and only able to provide basic service to about 64% of the population. (14)

Regarding the educational statistics of the country (2004), in primary education (grade 1-8) the enrollment is 68.4% with female enrollment 59.1%, in secondary education (grade 9-10) the enrollment is 22.1% with female enrollment 15.9%. (14)

The country's economy is classified into three categories the agricultural sector dominated by peasant agriculture; the live stock sector is dominated by nomadic pastoralism and modern sector, which is in the process of coming in to its own. The economic growth rate was 11.6% in 2004. (14)

2.1.2. Tobacco Production and Use in Ethiopia

Literature Review

Rapid assessment of the situation (RAS) on drug and substance abuse in selected urban areas was carried out in Ethiopia in 1995 and its first category which, crossed a wide range of communities (street children, commercial sex workers, potential actual substance abusers illicit traffickers and general community residents) indicated the following findings (6):

- 16% of the respondents indicated that tobacco is the third most frequently abused drug/substance next to alcohol and khat (the locally chewed social drug) and they also reflected their opinion tobacco is relatively the least popular subject of discussion by people in their respective towns.
- Regarding the personal knowledge of respondents about habit-forming substances, they said that tobacco is the fourth most well known substance; they also indicated that formal channels are the major sources of information than the informal channels for addictive substances.

- 45% of the respondents showed that the age of initiation for addictive substances is at less than 15 years of age in connection to this 30% of the respondents indicated that tobacco is the second usual starter drug next to khat.
- 83% of the respondents are aware of the risks associated with taking addictive drugs including tobacco nevertheless 49% of the respondents smoke cigarettes.

Despite the fact that there is strong cultural opposition in many areas of Ethiopia, smoking prevalence is increasing, particularly among youth. A study in the early 1980s showed that smoking prevalence among 18-20 year olds was 38% for males and 3.4% among females (8). Another study in 1983 found that smoking rates were 28% among medical students; with prevalence increasing by age and the majority of smokers began smoking between the ages of 16 to 18 years (8).

Another study, "drug use among high school students in Addis Ababa and Butajira", showed that cigarette smoking is more prevalent in private schools (48%) than in governmental schools (5% and 6% in Addis Ababa and Butajira respectively) (9).

Regarding smoke-related disease in Ethiopia, cancer mortality report in 2000 indicated that trachea; lung, bronchus, lip, oral cavity and pharynx cancer accounts for most of tobacco related deaths. Trachea, lung and bronchus cancer together accounted for 5.9 death rates (number of deaths / world age-standardized mortality rate per 100,000 population) and lip, oral cavity and pharynx cancer together accounted for 20.1 death rates (number of deaths / world age-standardized mortality rate per 100,000 population) due to tobacco (11).

Tobacco Production, Consumption, Trade and Industry in Ethiopia

In 1990, 5,200 hectares were harvested for tobacco (0.03% of all arable land), an increase from 4,800 hectares in 1985. Besides in 1990, around 3,150 tones of un-manufactured tobacco were produced (0.1% of world total), while 2,300 million cigarettes were produced annually from 1990-92, and Ethiopian tobacco and Matches Corporation takes most of the market share (92%) in tobacco production. Ethiopia doesn't export any tobacco products, but imported 600 tones of un-manufactured tobacco and around 200 million cigarettes in 1990. The latter increased to about 330 million cigarettes in 1992. In 1990, Ethiopia spent US\$ 7.1 million importing tobacco (0.6% of all import costs), more than double the amount spent in 1985 (8).

On the other hand in 1988, 925 people were employed in tobacco manufacturing and regarding tobacco consumption in the early 1990s, it was estimated that average annual per capita adult consumption of cigarettes was around 90 (8).

2.2. Previous efforts in tobacco control and prevention

The health policy of Ethiopia emphasized the importance of prevention (drug demand reduction). Thus, the country has implemented a number of programs that enable to minimize the multidimensional consequences of drug abuse including tobacco, alcohol and other social drugs. To this end, Drug Administration and control Authority (DACA) of Ethiopia has been organizing trainings, workshops to house of people's representatives (Parliamentarians), health professionals, social workers, law enforcement officers, journalists, youth etc. for the last one decade.

In particular, the regular drug abuse prevention education/DAPE program that is currently being run in 103 secondary schools is found very effective. The best practice learnt out of this school-based program is taken as model of excellence to use for out of

school settings, to address the most risk groups of the society, the youth. Besides regular awareness programmes focusing on drugs and other substances like tobacco, khat, alcohol etc. are currently being run in 5 languages on radio and foundation has been laid to expand the program to reach to the wider community with the national television, more over, World-No-Tobacco Day have been celebrated for the past several years in the country using electronic and print medias.

Regarding tobacco control there are different measures taken by the government of Ethiopia for tobacco control include, among others, the broad casting proclamation 178/1999 prohibits advertising (pro- advertisements) of any tobacco products in either electronic or press media, billboards and other means (well fairly enforced), there is a regulation which ban tobacco smoking in public transports (fairly enforced) and restricted smoking in other public places e.g. in public gathering, schools, health institutions etc.(enforced), high taxes was put on cigarettes (150%, 12% and 50% for excise tax, sales tax and import duty respectively), there is provision on anti-smuggling of tobacco products (well fairly enforced) (11). Ethiopia has been actively involved in all meetings related to the framework convention on tobacco control and accordingly Ethiopia is signatory to this convention which was signed on February 25, 2004.

Chapter Three

Overview and Analysis of GYTS

3.1. The Global Youth Tobacco Survey (GYTS)

In most developing countries comprehensive tobacco prevention and information on young people is not available. To address this data gap the world health organization (WHO)- Tobacco free initiative and centers for disease control and prevention (CDC)-office on Smoking and health (OSH) have developed the global youth tobacco survey (GYTS) in consultation with a range of countries representing the six WHO regions, which forms an important part of a global tobacco surveillance system to track tobacco use among youth across countries using a common methodology and core questionnaire (10).

The Global Youth Tobacco Survey (GYTS) is a school-based tobacco survey, which focuses on adolescents of age 13-15 years. School surveys are useful tools in gathering data as they are relatively inexpensive and easy to administer, tend to report reliable results, and refusals are significantly lower than in house hold surveys. GYTS-Ethiopia provided valuable baseline data for planning of comprehensive tobacco control and prevention programs targeted at youth.

Purpose:

- The purpose of the global youth tobacco survey is, providing a standard research and measuring instrument and the methodology for gathering information with regard to smoking among young people and relevant issues which can be used for setting up programmes and making comparisons between countries
- Gathering up-to-date information with regard to the health problems amongst young people and adolescents related to smoking.

Objective:

- ❖ To document and monitor the prevalence of tobacco-use including: cigarette smoking, current use of smokeless tobacco and other tobacco products
- ❖ To understand and assess students' attitudes, knowledge and behaviors related to tobacco use and its health impact, including: cessation, environmental tobacco smoke (ETS), media and advertising, minors' access to tobacco products, and school curriculum.
- ❖ To provide information to guide programming and advocacy work addressing youth tobacco use.

The GYTS attempts to address the following issues

- ❖ Determine the level of tobacco use
- ❖ Estimate the age of initiation of cigarette use
- ❖ Estimate levels of susceptibility to become cigarette smokers
- ❖ Exposure to tobacco advertising
- ❖ Identify key intervening variables, such as attitudes and beliefs on behavioral norms with regard to tobacco use among youth, which can be used in prevention programmes.
- ❖ Assess the extent to which major prevention programmes are reaching school-based populations and establish the subjective opinions of those populations regarding such interventions.

3.2. Methodology

Sampling

The 2003 Ethiopia-Addis Ababa GYTS is a school based survey and the target population for the GYTS in many other countries is youth in grades associated with ages 13-15 years. But our assumption was students of this age are unlikely to start smoking, so we changed our target population to youth in grades associated with ages 15-19 years.

There fore students on grade 8th –12th including middle level technical and vocational school students were included in the sampling frame. The number of secondary schools and students participated in the survey represent 4.63% of all schools and 0.93 % of all students in Addis Ababa respectively.

A two-stage cluster sample design was used to produce a representative sample of students containing in grade 9 through 10. The first stage-sampling frame consisted of all schools containing grade 9, 10, and 11. Schools were selected with probability proportional to school enrollment size. The second sampling 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 students in the selected classes were eligible to participate in the survey.

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. A total of 1868 questionnaires were completed in 25 schools. The school response rate was 100%, and the student response rate was 82%. The overall response rate was 82% (Annex-1).

Questionnaire development

The questionnaire was a self-administered type of questionnaire, which consisted of a <core> component and an <optional> component. The 57 core questions have been used in all countries conducting the GYTS study, which allow for international comparison of results, and the 20 optional questions address specific issues in Ethiopia.

All the questions were multiple choices and the questionnaire was translated to the official language, Amharic. The questionnaire was pre-tested before it was administered to schools.

Data Collection

Global youth tobacco survey (GYTS) is a school-based survey, cooperation of the drug administration and control Authority and the ministry of education was necessary, and all 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 head as well.

The research coordinator was responsible for the overall management of the project, for the development of the final questionnaire, for making the initial contact with and securing participation of the schools selected, for identifying survey administrators and to train and assign them to schools selected. The purpose of the training was to ensure that all the survey administrators had the same information about GYTS and follow the same survey administration procedures. The training dealt with the purpose of GYTS, confidentiality, scheduling survey administration, documenting school and class participation, presenting and administering the GYTS to the students, and materials needed for survey administration.

Survey procedures were designed to protect the student's 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 data collection was done from April to May 2003. All selected sample schools have participated in the survey. The number of students participated differ from school to school but on the average 82% of the sample have participated in the survey.

3.3. Results

I. Prevalence

Almost one in ten (10.1%) of students have ever smoked cigarettes with male students (15.2%) significantly higher than female students (5.7%) (Table-1). Among ever smokers (who are not current smokers) almost 1 in 6 students indicated that they first tried smoking at less than 10 years of age. Overall, 8.9% of students have used any form of tobacco in the past 30 days and 2.9% of students smoked cigarettes during the past 30 days (i.e. current smokers). Current use of cigarettes is significantly higher among male students (4.4%) than female students (1%). Nearly 7.6% of students currently use some other form of tobacco product. Among never smokers almost one in seven students (13.6) indicated that they will likely initiate smoking in the next year.

Table 1: Percent of students who use tobacco

Category	Ever Smokers, who tried even one or two puffs	Ever Smokers who first tried smoking at less than 10 years of age	Current Use			Never Smokers Susceptible to Initiating Smoking
			Any Tobacco Product	Cigarettes	Other Tobacco Products	
Total	10.1 (±3.1)	17.5 (±3.9)	8.9 (±3.1)	2.9 (±0.8)	7.6(±2.7)	13.6 (±1.8)
Sex						
Male	15.2 (±5.5)	15.7(±4.2)	11.5 (±3.4)	4.4 (±1.6)	9.6(±3.3)	15.0 (±3.3)
Female	5.7 (±1.9)	24 (±20.1)	5.8 (±2.4)	1.0 (±0.9)	5.5(±2.4)	12.4 (±1.4)

II. School Curriculum

Half (51.7%) of students had been taught about the dangers of smoking in class during the past year (table-2). Approximately 21.9% of students had discussed in class the reasons why people of their age smoke during the past year and almost half (47.9%) of students had been taught in class about the effects of smoking during the past year.

Table 2: School Curriculum

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke	Percent taught effects of smoking
Total	51.7 (±5.1)	21.9 (±4.5)	47.9 (±6.8)
Sex			
Male	51.3 (±5.8)	23.9 (±6.1)	46.9 (±7.5)
Female	52.5 (±5.6)	20.0 (±4.1)	49.8 (±7.1)

III. Environmental Tobacco Smoke

Overall, 16.7% of students are likely to be exposed to tobacco smoke from others in their home in the past 7 days (table-3) and over 4 in 10 (44.6%) of students are likely to be exposed to tobacco smoke from others in public places in the past 7 days with male students (49.5%) significantly higher than female students (40.2%). Almost all students (96.2%) indicated that smoking should be banned from public places with female students (97.6%) significantly higher than male students (94.6%) and almost half (53.1%) of the students definitely think that smoke from others is harmful to them.

Table 3: Environmental Tobacco Smoke

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
Total	16.7 (±2.5)	44.6 (±2.3)	96.2 (±1.1)	53.1 (±4.9)
Sex				
Male	18.2 (±4.3)	49.5 (±4.0)	94.6 (±1.2)	53.3 (±5.3)
Female	14.3 (±2.4)	40.2 (±2.4)	97.6 (±0.9)	53.6 (±5.9)

IV. Knowledge and Attitudes Perceived towards Tobacco Use

Overall, 29.1% of students think that boys who smoke cigarettes have more friends and almost one-fourth (24.5%) of students think that girls who smoke cigarettes have more friends (table -4). Overall, 17.8% of students think that boys who smoke are more attractive and 14.1% of students think that girls who smoke are more attractive. Nearly 61.2% and 60.7% of never smokers and current smokers respectively indicated that they discussed the harmful effects of smoking with a family member. Approximately, 31.4% and 28.9% of never smokers and current smokers respectively indicated that they definitely think that once some one starts smoking it is difficult to quit. On the other hand nearly 89.6% and 58.4% of never smokers and current smokers respectively showed they definitely think that cigarette smoking is harmful to health.

Table 4: Knowledge and Attitudes

Category	Think boys who smoke have more friends	Think girls who smoke have more friends	Think boys who smoke are more attractive	Think girls who smoke are more attractive	Percent Discussed the harmful effects of smoking with a family member		Percent definitely think that once some one starts smoking it is difficult to quit		Percent who definitely think that cigarette smoking is harmful to your health	
					Never smokers	Current smokers	Never smokers	Current smokers	Never smokers	Current Smokers
Total	29.1 (±2.8)	24.5 (±1.9)	17.8 (±2.5)	14.1 (±2.8)	61.2(±3.3)	60.7(±13)	31.4(±2.6)	28.9(±16.2)	89.6(±3.2)	58.4(±13.4)
Sex										
Male	31.8 (±4.3)	23.5 (±3.5)	18.4 (±4.5)	15.1 (±4.2)	58(±5.2)	62.7(±19)	34.5(±4.8)	36.5(±18.4)	87.5(±4.5)	72.5(±10)
Female	26.7 (±2.3)	24.8 (±2.3)	17.0 (±2.4)	13.2 (±2.7)	63.7(±3.2)	64(±27.9)	28.9(±1.6)	22.7(±20.4)	91.8(±2.3)	28.7(±36)

V. Media and Advertising

Overall, 68.5% of students saw anti-smoking media messages (table-5) in the past 30 days. Almost half (52.3%) of students told that they saw pro-tobacco messages on billboards in the past 30 days. Over 4 in 10 (44.4%) of students showed that they saw pro tobacco messages in newspapers and magazines in the past 30 days. Nearly, 13.1% of students indicated that they had seen an object with a cigarette brand logo on it. Almost all students (98.4%) indicated that they saw anti-smoking messages at sporting and other events; on the other hand almost half of the students (47.8%) saw pro-tobacco messages at sporting and other events.

Table 5: Media and Advertising

Category	Percent Saw Anti-Smoking Media Messages	Percent who saw pro-tobacco messages on Billboards	Percent Who Saw Pro-Tobacco Messages in Newspapers and Magazines	Percent Who Had Object With a Cigarette Brand Logo On It	Percent who saw any anti-smoking messages at sporting and other events	Percent who saw any pro-tobacco messages at sporting and other events
Total	68.5 (±3.6)	52.3 (±2.8)	44.4 (±3.9)	13.1 (±2.9)	98.4 (±1)	47.8 (±3.6)
Sex						
Male	66.8 (±4.5)	55.5 (±3.9)	47.1 (±5.1)	15.2 (±4.9)	97.5 (±1.4)	49.6 (±5.1)
Female	69.4 (±3.5)	49.7 (±4.0)	41.5 (±5.1)	11.2 (±1.6)	99.3 (±0.6)	44.8 (±3.8)

VI. Access and Availability of Tobacco Products

Among current smokers almost one in seven (14.4%) of students indicated that they usually smoke at home (table-6). Overall, 37.6% of current smokers showed that they purchase cigarettes in a store that were not refused because of their age. Overall, 7.5%, 25.3% and 23.5% of the current smokers usually smoke at work (with boys significantly higher than girls), friends house and social events respectively.

Table 6: Access and Availability

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	Percent current smokers who usually smoke at work	Percent current smokers who usually smoke at friends house	Percent current smokers who usually smoke at social events
Total	14.4 (±12.8)	37.6 (±9.8)	77.9 (±20.4)*	7.5(±5.2)	25.3(±13)	23.5(±9.8)
Sex						
Male	10.0 (±10.7)	41.4 (±19.2)	75.1 (±29.6)*	6.6(±9.4)	29.5(±15)	24.4(±11.4)
Female	12.1 (±15.1)*	36.3 (±20.6)*	100 (±0.0)*	0(±0.0)	33.1(±37.3)	31.3(±39)

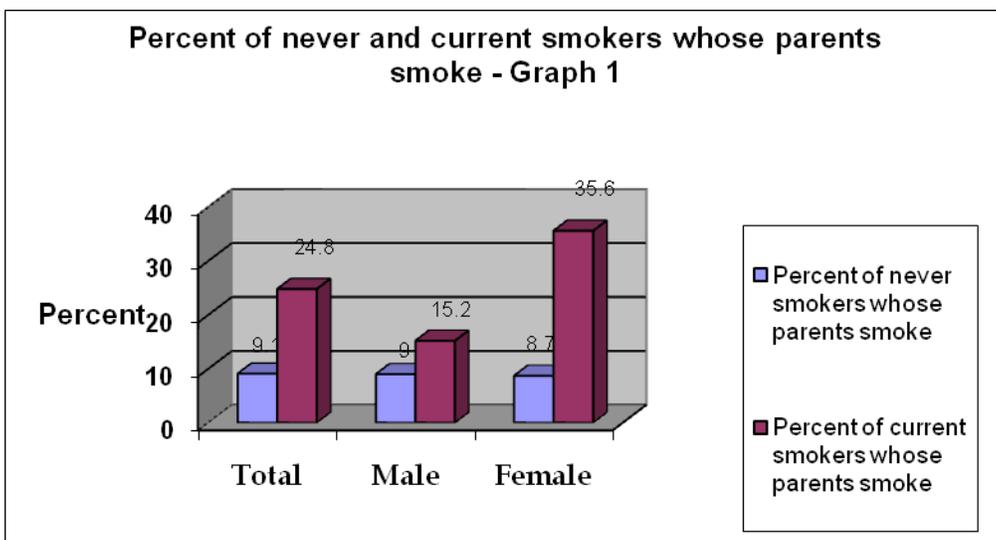
3.3. Discussion

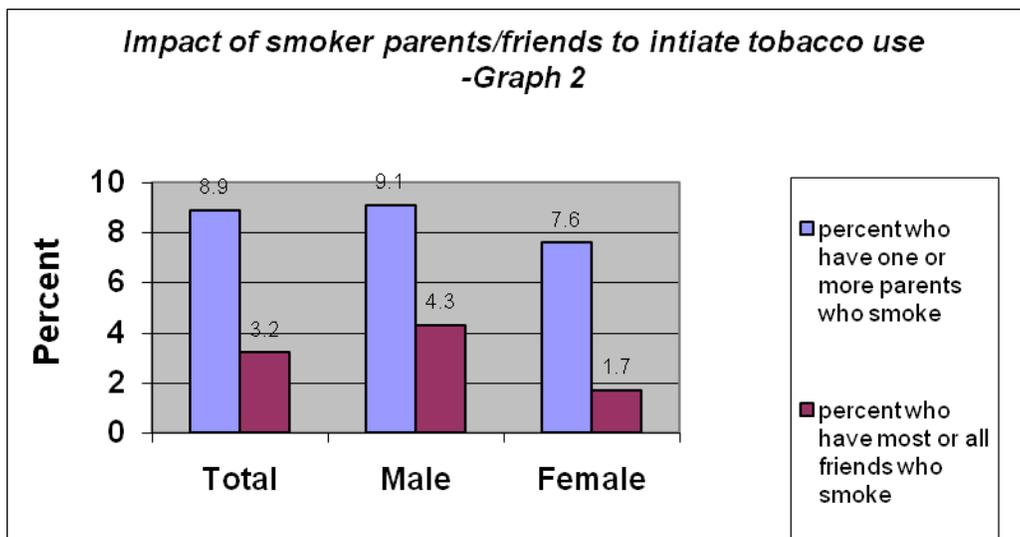
The study has established a base line data set on prevalence of tobacco use among 15-19 year old school students in Addis Ababa. Even though smoking rate is very low, where nearly one in ten youths is currently using tobacco products with the onset of cigarette smoking being less than age 10, the message is clear that, some of the youths who experimented smoking at a very young age (as much as less than 10 years of age), later developed this practice and couldn't stop. This is also supported by the difficulty some of the current smokers definitely think that once some one starts smoking it is difficult to quit, so we need an effective youth cessation program to help the youths who want to stop.

The data seems to show no difference between never and current smokers about the knowledge and attitudes perceived towards tobacco use, so the possibility of never smokers to initiate smoking is very high (13.6% of non-smokers are likely to initiate smoking), the data additionally shows not more than half of the students have been taught about the effects and dangers of smoking calls for strengthening health education on tobacco use. The misconception that smoking will make one more attractive and more popular shows the need for accurate information that is age and gender specific. However, they often don't take the long-term consequences of such behaviors, the risks of tobacco use are perceived to be remote and are outweighed by what they see as the immediate benefits and they tend to underestimate the addictiveness of nicotine. More interestingly most of the students underscored that smoking cigarettes is harmful to health, where nearly 89.6% and 58.4% of never smokers and current smokers respectively think that cigarette smoking is harmful to health. This also stresses the need to enhance health education on smoking and health.

Although there is a total ban on media and advertisements of tobacco products and sponsorships by tobacco industries to any sport or other events is prohibited. Positive images through pro-advertisements in movies, dramas, spots, and access to other television channels, a significant number of youths (52.3%) 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. This data shows that the national electronic or press media should involve not only in total ban of advertising but also in different awareness raising activities to combat tobacco use among the youth in particular and the public in general.

Almost half of the students discussed the dangers and effects of smoking in class during the past year, these shows the health hazards of smoking are not being adequately given with in the school environment, considering the magnitude of the problem, the harmful effects and the opportunity the school environment presents for campaigning against smoking. Now a days the school curriculum in Ethiopia has integrated the topics on tobacco and substance abuse starting from grade 4 in civic educations and biology in a scattered manner. Besides school-based intervention programs have been initiated a decade ago by setting drug free clubs, which is currently being run in 103 secondary schools as a part of substance abuse prevention in which tobacco is addressed as one of the addictive substances. On the other hand although around 60% of the students discussed the harmful effects of smoking with a family member, parents as the main custodians or duty bearers of young people aren't playing enough their role in educating their children on the dangers of smoking. The finding that one fourth of the current smokers reported that their parents smoked too reveals the need to involve parents in tobacco control programming. This has a great influence on children's behavior. More over never smokers whose parents smoke have high index of susceptibility to initiate tobacco use and if the children are already current smokers the likely hood of desire to stop smoking is very low (*graph 1 and 2*). On the other hand the extent of peer pressure on young people to begin cigarette is significant, on top of this the chance of being exposed by environmental smoke is high leading to addiction and smoking related consequences (*graph 2*).



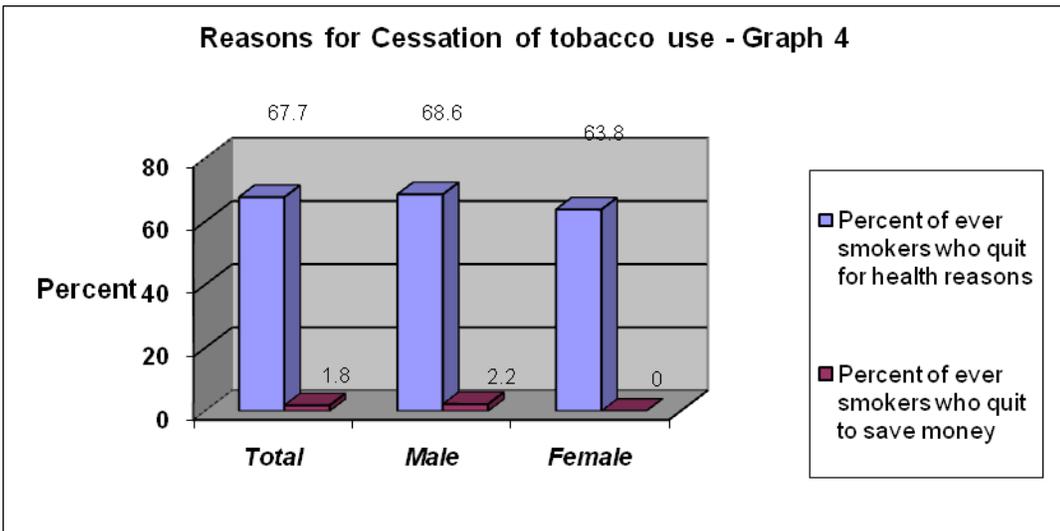
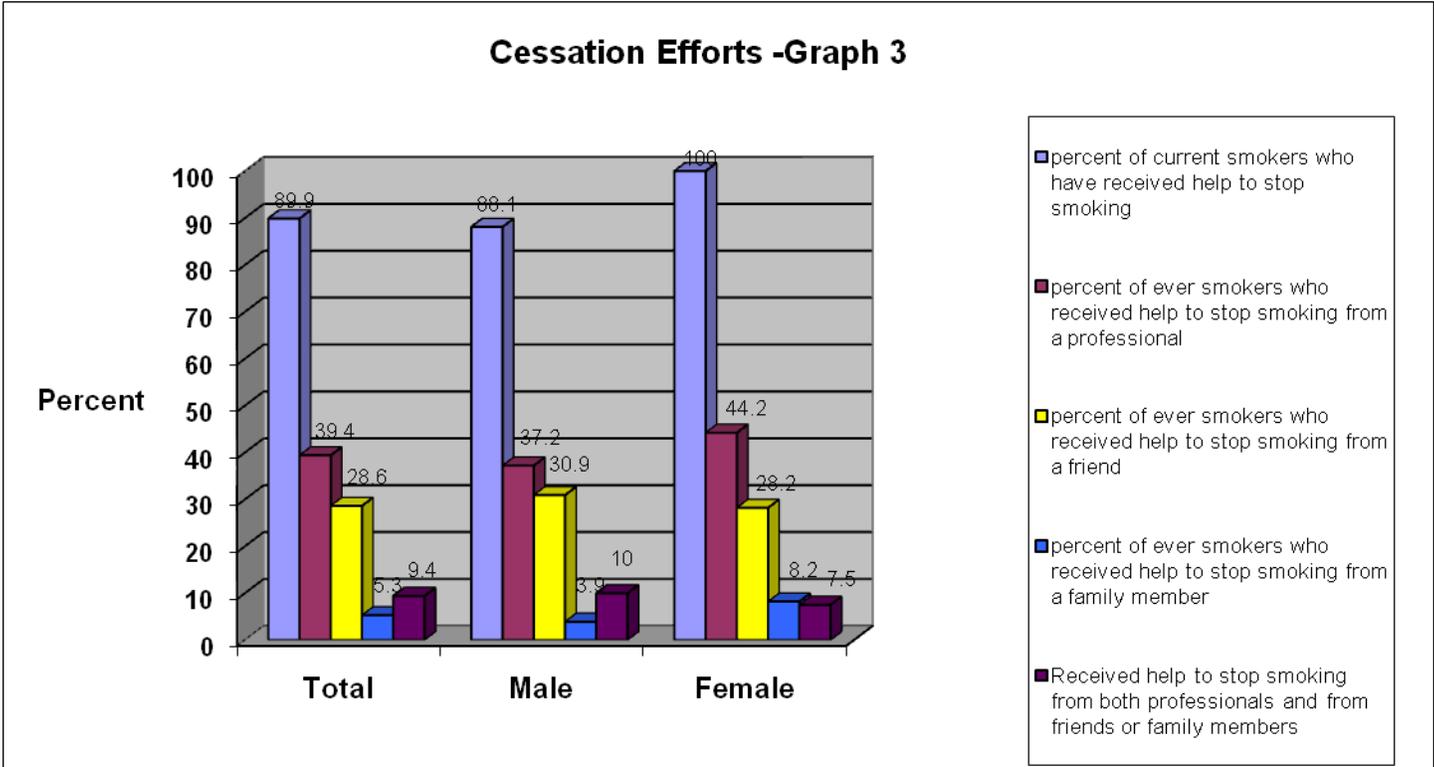


An interesting finding from this survey shows that exposure of young people to environmental tobacco smoke is unacceptably high, where over 4 in 10 are exposed to smoke in public places but on the other hand expressing their desire to stay away from that exposure is very high, where almost all students thought that smoking in public places should be banned. Some efforts are being made to ban smoking in public places at an individual level. Some service providers have banned smoking totally or have a smoking and non-smoking zone in their premises. These efforts to protect non-smokers aren't being supported at policy level, in order to effectively protect non-smokers from passive smoking. Another studies have concluded that passive smoking increases the chances of contracting or aggravating a range of illnesses including, cardiovascular diseases, lung cancer, asthma (particularly in children), acute irritation of the respiratory tract, bronchitis, pneumonia and other chest illnesses in children.

Since there is no law prohibiting sales of tobacco products to minors (to children less than 18 years of age), the level of underage sales of tobacco products is significantly higher, where nearly 40% of current smokers showed that they purchased cigarettes in a store that weren't refused because of their age. This data has a clear message that an easy access to tobacco products could lead to an increase in tobacco use among the youths; which in turn can increase the current smoking rate.

Although smoking prevalence is very low, the survey clearly indicated that most of the current smokers have the desire to stop smoking and most of them received help to stop smoking (*graph-3*) but GYTS doesn't

exactly assess whether the cessation program was effective or not. On the other hand most of the ever smokers who had the desire to stop received help from professionals than friends or family members (*graph-3*). Besides most of them quit smoking to improve their health rather than to save money (*graph-4*). This message clearly shows that effective cessation programs targeted at youths need to be implemented.



Chapter Four

Conclusions and Recommendations

Since the school based global youth tobacco survey is only done in the capital, Addis Ababa, it is important to note that the survey should be extended to other parts of the country to get a representative figure. From this survey the following conclusions and recommendations are drawn.

4.1. Conclusions

1. The prevalence rate is considered to be low but if the current trend is not arrested many of those youths who currently smoke would have to endure a life time of addiction and may die prematurely from tobacco-related diseases.
2. Disheartening is the realization that 17.5% children initiate cigarette smoking before the age of 10 years. This should be of great concern since the younger children start to smoke the more likely they would be come addicted. Addiction leads to heavy smoking and premature death from tobacco related illnesses.
3. The fact that half of the students had been taught in school about the dangers and effects of smoking, suggests that the need for a more active and determinant role of the formal education system, especially in affecting the higher grades in school, as this research point out. The present survey doesn't provide details about the content or quality of the curriculum; the number or duration of the lessons taught, this calls for more research to be done on this area.
4. Youth exposure to environmental tobacco smoke is high especially in public places nevertheless almost all youths think smoking in public places should be banned and half of them are aware of the harmful effects of environmental tobacco smoke, the data supports not only to enact legislation to ban smoking in public places but also community wide interventions are necessary to educate, encourage and support youths so that they can protect them selves from environmental tobacco smoke.

5. The fact that there is a significant level of underage sales of tobacco products tells that there is a need to enact legislation on banning of underage sales to reduce the smoking rate as low as possible.
6. Most of the students desire to stop smoking, but are experiencing difficulty in trying to quit and are displaying signs of addiction. For individual smokers, there are two main things to know about tobacco's risks. The bad news is that half of the persistent smokers are being killed by it, but the good news is that stopping smoking really works. If the smokers manage to stop before they have incurable cancer, or some other disease, they avoid most of their risk of death from tobacco. But unless lots of today's smokers do stop, there will be 100-million tobacco deaths worldwide over the next twenty years (2). The survey data supports the need for the development of both prevention and offering youth cessation programmes.

4.2. Recommendations

Even though the smoking prevalence in Ethiopia is relatively low, the government must design strategies and programs that focus on tobacco control and prevention to reduce the current status to a level that could be tolerated by the society as well as the government and at the same time to reduce their preventable risk factors for non-communicable diseases, which are the main causes of death and illness.

Hence the following recommendations are forwarded for action.

1. Enact legislations to restrict or ban smoking in public places such as, restaurants, and cinemas, play parks, supermarkets, public transport etc.
2. Due to the fact that children are likely to start smoking if they grow up in an environment where tobacco advertising is widely spread and the products are cheap and easily accessible, and where smoking is unrestricted in public places, the tobacco control policies need to take this into consideration and Restrict the flow of magazines, news papers with pro-tobacco messages entering in to the country, and at the same time increase public awareness campaign on the harmful effects of smoking cigarettes, as well as advocate other tobacco control and prevention programs as public health issue.
3. Enact and enforce legislations that prevent minors from purchasing cigarettes and other tobacco products by prosecuting those who sell tobacco products to minors

4. Formulate public policies and enact legislations that regulate tax increases for tobacco products as well as point of sale and distribution
5. Design and implement cessation programmes for schools and all youth-oriented or affiliated organizations.
6. Awareness campaigns on the dangers of cigarettes smoking and tobacco products need to be intensified. Most school based anti-smoking campaigns are done on the world -No-tobacco day but there is a need for regular education on the dangers of tobacco. Also, anti-smoking campaigns shouldn't just target people with access to television and radio, but should also be targeted for those with out access.
7. Educational programs and health promotion campaigns can serve as useful role into tobacco control, particularly in areas where the harms of tobacco use are not widely known, how ever, unless they are backed up by strong public policies, which help young people refrain from using tobacco, education programmes have only modest results. Such education programmes and health promotion campaigns should be placed in the overall context of strong and coherent tobacco control policies.
8. Since smoking is a risk factor for many of the life style diseases (non-communicable diseases) emphasis should be given to non-communicable diseases.
9. There are some protective factors with in the society e.g. tobacco smoking is seen as a sign of bad personality; there fore it is important to strengthen these protective factors.
10. There is a need to formulate a national action plan to combat tobacco use and address the tobacco control and prevention issue in a comprehensive and formal way.
11. Since GYTS is a continuous surveillance system, this survey should be conducted at regular time intervals to monitor the trends of tobacco use and impact of tobacco control and prevention policy.
12. Seek the World Health Organization-Tobacco Free Initiative (TFI) support in capacity building efforts to enable us design comprehensive tobacco control and prevention policy.

Annex-1

GYTS-ETHIOPIA-ADDIS ABABA participation for school in Addis Ababa (participation rates)

Ser.No	Name of school	School ID	Enrollment	No. of students in the selected section	No. of students participated in the survey	% Participation
1.	Wond Yirad	483	1478	88	87	98%
2.	Kelem Amba	193	113	72	69	96%
3.	Yenege Sew	245	140	68	63	93%
4.	Kechene D.Selam	422	384	75	70	93%
5.	Medhanealem	493	2223	84	73	93%
6.	Medhanalem	505	4203	83	66	80%
7.	Misrak	58	62	37	33	89%
8.	Ewket Minch	354	234	101	90	89%
9.	Nifas Silk	126	80	74	65	88%
10.	John F.Kennedy	380	276	88	73	83%
11.	Dil Ber	479	1431	69	55	80%
12.	Dej.Zeray Deres	324	204	132	105	80%
13.	Lem	490	2116	160	138	86%
14.	Ginbot 20	467	998	93	72	77%
15.	Kolfe preparatory	496	2562	87	62	71%
16.	Kolfe high school	503	3113	84	55	65%
17.	Yekatit 12	487	1762	89	59	66%
18.	Ethiopia Tikdem No. 1	460	819	96	63	65%
19.	Entoto Amba	438	466	133	116	87%
20.	Belay Zeleke	403	312	133	116	87%
21.	Ethiopia Andenet	289	170	105	98	93%
22.	Higher 23	473	1174	105	61	58%
23.	Shimles Habte	501	2793	85	73	86%
24.	Dagmawi Minlik	451	602	73	65	89%
25.	Minlik II	499	2621	65	39	60%

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