REPORT ON GLOBAL YOUTH TOBACCO SURVEY (GYTS)

UGANDA

Prepared by: Lillian Mpabulungi
                 Parliamentary Research Service
                 Email: lmpab@parliament.go.ug

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List of Acronyms

Ads Advertisements
CDC Center for Disease Control
ETS Environmental Tobacco Smoke
GYTS Global Youth Tobacco Survey
TFI Tobacco Free Initiative
WHO World Health Organization

Operational Definitions

Adolescents are persons in the 10-19 years age group while youths are defined as those between 15-24 years (WHO 1989). The two groups overlap into one entity of '*young people*', covering the age range of 10-24 years. Uganda has under the draft adolescent health policy already adopted the same definition and classification of youth and young people. This study covers 13-15 age group.

Current Smokers means students are smoking cigarettes.

Never Smokers means students who have not or tried to smoke cigarettes.

Rest of Central Districts refers to schools selected in the study districts of Masaka, Kiboga, Luwero, Ssembabule, Mukono, Luwero and Rakai.

Tobacco products includes cigarettes, chewing tobacco, snuff, cigars, cigarillos, pipe.

Executive Summary

The GYTS is a school based tobacco specific survey, which focuses on adolescents aged 13-15 years. In 2002, Uganda conducted this survey in two regions. The objectives of the survey were: to document and monitor the prevalence of tobacco-use; assess students' attitudes, knowledge and behaviors related to tobacco use and environmental tobacco smoke (ETS) exposure, as well as youth exposure to prevention curriculum in school, community programs, and media messages aimed at preventing and reducing youth tobacco use. The other objective was to provide information to guide programming and advocacy work addressing youth tobacco use.

I would revise your Exec Summary based on what you point out in your Conclusions section…I think you have some very valuable points to add here from that section

The survey was carried out in four study districts: Arua, Kampala, Mpigi, Rest Central Districts (Kiboga, Luwero, Masaka, Mukono, Mubende, Rakai and Ssembabule) in July-August 2002.

Lillian – in the first paragraph you say 2 regions---now you say 4 districts…make this match: I think you have Northern Region – Arua. Then C entral Region – Kampala, Mpigi, and the Rest. Just make this real clear to the reader

A two-stage cluster sample design was used to obtain the sample of students from Senior One-Senior Three. A total 77of 85 secondary schools participated in the survey, with 22 schools in Arua, 19 in Kampala, 18 in Mpigi and Rest of Central Districts, respectively. Out of the 10,390 selected students from all the four study districts, 8,078 participated. The overall response rate ranged between 80.7% and 62.1%.

Key findings:

K The prevalence rate of ever smokers (even one or two puff) is 20.4% (overall mean), with 33.1% of the students who had ever smoked in Arua, 17.5% in Kampala, 18.2% in Mpigi and 12.6% in Rest of Cetral Districts.

K The overall mean of students who had initiated cigarette smoking before 10 years is 33.6%. Approximately, 10% never smokers are likely to initiate smoking in next year. Over 10% of the sample (mean 14.6%) had used tobacco products other than cigarettes like chewing tobacco, snuff and cigars.

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INTRODUCTION

Tobacco is one of the major sources of income to many countries with an annual turnover of almost US$ 400 billion. However, the globalization of its marketing, trade, research and industrial influence represents a major threat to public health worldwide including economic, political, environmental and social dangers.

Tobacco use is one of the leading causes of preventable death in world. The World Health Organization (2001) estimates that 11,000 people die daily due to a tobacco related disease. It is also estimated that 4 million deaths occur annually from tobacco-related illnesses, a figure expected to rise to 10 million by the year 2030. By that date, based on current smoking trends, tobacco is predicted to be the leading cause of disease burden in the world, causing about one in eight deaths. 70% of those deaths will occur in developing countries.

The sheer scale of tobacco's impact on global disease burden, and particularly what is likely to happen without appropriate intervention in developing countries, is often not fully appreciated. The extremely negative impact of tobacco on health now and in the future is the primary reason for giving explicit and strong support to tobacco control on a worldwide basis.

Many of tobacco's future victims are today's children because tobacco use is usually initiated in adolescence and continues through adulthood, sustained by addiction to the nicotine in tobacco. Murray et al (1996) indicate that if the current trends continue, 250 million children alive today will be killed by tobacco. 750 million children are exposed to second-hand smoke. Although it is evident that there are many tobacco related diseases and deaths, tobacco use among young people is increasing as the tobacco industry aggressively promotes its products through media and advertising to a new generation of potential smokers. Therefore, tobacco control is of paramount importance.

Tobacco-use in Uganda

Uganda is on the Eastern Coast of Africa with an area of approximately 236, 040 square kilometers and a population estimated at 23 million people (2002 Census results). The GDP is approximately $ 6.2 billion per year with per capita of about US$ 260. Between 1990-1999, Uganda's economy grew at an average of 7.1% per annum.

Tobacco farming was first introduced in Uganda by the British-American Tobacco (BAT) Limited in the early 1920's. Currently, it is the second largest cash crop grown in over 16 districts and a major source of revenue for 11 districts. Overall BAT contributes approximately 8% (about US$35 million) of the taxes collected per annum, and over 600,000 people derive a livelihood from the industry (Karugaba 2001).

Prevalence
Recent data on prevalence of tobacco-use in Uganda is limited. The Uganda Demographic Health Survey (2001) indicated that cigarette smoking prevalence amongst adults is at 25% for males and 3% for females. Kanyesigye et al (1997) noted that among the youth 19% of the secondary students and about 35% of the students in tertiary institutions including the medical school do smoke. This was attributed to a lot of tobacco products' advertisement in relation to style/fashion; and peer influence. With common advertisement slogans like: **Rex-the test of success; Safari-your best companion; Sportsman-Yee Ssebo; Embassy-smooth all the way.** Advertising increases consumption of tobacco products and this increases the death and disease burden.

Per capita consumption of cigarettes is approximately 150 units. However, with such level of consumption of cigarettes, the health risks seem to be underestimated by many especially within health warning on cigarette packets '*cigarettes smoking can be harmful to your health*' which many may not understand and/or pay attention to. A study carried at Mulago Hospital found that 75% of the patients of oral cancer had a history of smoking with a minimum number of years smoked ranging from 2-38 years (Bataringaya 2001). In addition, 45% of the patients had a history of smoking within the 10-19 year duration. Lukwiya (2000) reported that the mean initiation age for smoking was 13.4 years with a range from 6 to 22 years in Jinja district. Nambi et al (2001) in their study carried out in Arua, Kampala, Lira, Mbale, Mbarara and Masaka districts it was noted that initiation age of underage smokers was below 9 year.

Tobacco control measures
Regulations for tobacco control are mainly for promotion of tobacco growing through licensing of green leaf buyer (Tobacco control of marketing) Act 1966). Tobacco control measures in place include the mandatory health warning *'smoking can be harmful to your health'* appearing on cigarette adverts on the electronic media and billboards. In 1995, Government of Uganda restricted the advertisement of tobacco products: time of advertisement on Radio Uganda and Uganda Television. This restriction did not affect popular privately owned radio and

television stations. Although, BAT announced withdrawal from electronic media advertisement and pulled down its billboards, neon signs for restaurants, bars, shops, and road signs are still up and other ways of promoting tobacco products are used like street bash.

In addition, Uganda commemorates the World No- Tobacco Day and through Ministry of Health, various NGOs and individuals, public health campaigns on effects of tobacco use have intensified through media, both electronic and print. In schools, for example, smoking is prohibited and any student found is suspended or expelled. This is as a disciplinary measure rather than a health concern. However, there is need to gazette these control measures and protect the population especially the youths who are the window of hope.

International Response

World Health Organization Resolutions
World Health Organization between 1970-1995 adopted a number of resolutions on the need for both national and international tobacco control policies. Through the resolutions, member states were encouraged to implement comprehensive strategies with the following contents:
· Measures to ensure that non-smokers receive effective protection, to which they are entitled, from involuntary exposure to tobacco smoke.
· Measures to promote abstention from the use of tobacco so as to protect children and young people from becoming addicted.
· Establishment of educational and public information programs on tobacco and health issues, including smoking cessation programs, with active involvement of the health professionals and the media.
· Monitoring of trends in smoking and other forms of tobacco use, tobacco-related diseases, and effectiveness of national smoking control action.

United Nations Foundation Project
The Tobacco Free Initiative (TFI/WHO) recently received a tobacco prevention grant from United Nations Foundation for International Partnerships (UNFIP), to initiate a joint project with UNICEF titled ' Building alliances and taking action to create a generation of tobacco free children and youth.' The aim of the project is to collate evidence, provide technical support, and create strategic alliances necessary to address the negative impact of tobacco, encourage and support children and adolescents in leading healthy and active lives free of tobacco.

The project is conceived as a dynamic and interactive process. The activities and products of each phase will be used to inform and guide subsequent activities. The project consists of three overlapping phases.

Phase I: Focuses on harnessing the evidence from countries, some of which may participate in subsequent phases; undertaking new areas of research to support actions, and establishing a research-based evidence for developing future actions.

Phase II: Activating phase where Country Activating Groups (CAGs) with broad membership, will be formed in each of the participating countries as the coordinating and implementing mechanism to select and develop components of a comprehensive country-based approach in addressing tobacco-use among children and young people. Opportunities to promote exchange of experiences and issues will be developed and strengthened.

Phase III: Involves taking the project to scale, producing and disseminating resources; strengthening regional capacity to sustain activities; integrating the products and results of the project into ongoing tobacco control work at national, regional and global levels; transferring technology and experience between countries and regions; and strengthening cooperation and collaboration at all levels.

Phase 11, in 1998 WHO/CDC planned for the development and implementation of an initial baseline assessment of tobacco use among young people in each country using a school survey instrument- the Global Youth Tobacco Survey. Presently, several countries have either completed, in the field or planned to implement the GYTS. Among which include: Benin, Botswana, Burkina Faso, Cameroon, Chad, Gambia, Ghana, Kenya, Lesotho, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Poland, Russian Federation, Senegal, South Africa, Sri Lanka Swaziland, Ukraine, United States of America, Venezuela, Zambia and Zimbabwe.

The Global Youth Tobacco Survey (GYTS)

The GYTS is a school based tobacco specific survey, which focuses on adolescents aged 13-15 years. According to the Ugandan education structure[1], this age-group is at secondary education level i.e. Senior One-Senior Three students. It assesses students' attitudes, knowledge and behaviors related to tobacco use and environmental tobacco smoke (ETS) exposure, as well as youth exposure tobacco use to prevention curriculum in school, community programs, and media messages aimed at preventing and reducing youth tobacco use. The GYTS provides information on where tobacco products are obtained and used, and information related to the effectiveness of enforcement measures.

School surveys are a useful data collection technique as they are relatively cheap and easily administered with a self-administered questionnaire, tend to get reliable and accurate results, and non-response is lower compared to other settings where surveys are implemented. Hence, justification for conducting a global school-based survey under the UN project on Youth and Tobacco.

Objectives of the GYTS

1. To document and monitor the prevalence of tobacco-use including: cigarette smoking, and current use of tobacco, cigars or pipes;
2. To obtain an improved understanding of and to assess students' knowledge, attitudes, and behaviors related to tobacco-use and its health impact, including cessation, environmental tobacco smoke (ETS), media and advertising, young people's access, and school curriculum;
3. To provide information to guide programming and advocacy work addressing youth tobacco use.

Tasks of the GYTS

The GYTS attempts to address the following issues:
- Prevalence of tobacco use;
- Age of initiation of cigarette use;
- Levels of susceptibility to become smokers;
- Exposure to environmental tobacco smoke;
- Exposure to tobacco advertising;
- Identify key intervening variables, such as perceptions and attitudes towards tobacco-use, which can be used in prevention programs.

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[1]The education structure of Uganda at secondary school level is six years-Senior One to Senior Six for 13-18 age-group.

METHODOLOGY

Study Area

The GYTS was carried out in two regions of Uganda-Central and Northern regions purposively selected. In Central region the GYTS was carried in all the districts-but with more schools selected in Kampala district and Mpigi district because of having the highest number of secondary schools country wide, urban and location of the tobacco company, assuming high levels of consumption. Arua district-Northern region was selected because it is the main tobacco-growing district in the country.

Sample Design

The GYTS survey sample design was a two-stage cluster design. In the first stage of sampling, public and private secondary schools with Senior One-Three classes were selected randomly with a probability proportional to enrolment size. Schools with big enrolment size had a greater chance of being selected (See Appendix 1 list of selected schools). Enrollment data was obtained from Ministry of Education and Sports. A total of 85 secondary schools were selected, with twenty-five schools from Arua district and twenty schools from each of the three districts of Kampala, Mpigi and Rest of Central districts (Table 1).

Table 1: Study sample sizes among schools and students

Region/District	No. of schools in the sample	No. of students selected (Senior 1-3)
Northern/Arua	25	2,166
Central/Kampala	20	3,284
Central/Mpigi	20	2,505
Central/Rest of Central Districts	20	2,435
Total	**85**	**10,390**

The second stage consisted of systematic equal probability sampling. Classes (Senior One to Senior Three) were randomly selected from within the selected schools and all the students within the selected class were eligible to participate in the survey. The number of eligible classes/streams ranged from 3 to 15 in schools.

The questionnaire

A self–administered questionnaire was used for data collection. The Ugandan version consisted of 58 questions with core questions adopted from a questionnaire developed by WHO/TFI and UNICEF. Issues explored

included: prevalence of tobacco use, access and availability of tobacco products, perceptions and attitudes, cessation, media and advertising, environmental tobacco use, and school curriculum on tobacco related issues. Various consultative meetings were held with WHO, Ministry of Health, The Environmental Action Network (TEAN) and the Research Team to review the 'core' questionnaire. In addition, pre-testing of the questionnaire with students (Senior One-Senior Three) through self-administering of the questionnaire and group discussion was carried out to determine its relevance and applicability in relation to the Ugandan situation.

Data collection

A Research Team of thirty-five people (thirty Survey Administrators, four Supervisors and one Coordinator) was selected to implement the Global Youth Tobacco Survey (GYTS) in Uganda from July 15 to August 2, 2002. The team comprised of members from the Uganda Parliamentary Research Service and Ministry of Health. Prior fieldwork, logistical and administrative preparations were made as follows.
– Obtained information on school enrolment and geographical location of schools.
– Pre-visits to districts and school head-teachers to obtain permission conduct the survey and obtained lists of eligible classes for each schools.
– Obtained and reviewed /existing data on tobacco-related issues
– Held training workshops with supervisors and survey administrators in the two regions.

For purposes of data quality and management, Supervisors and Survey Administrators were provided with survey procedures and instructions. Answer sheets, header sheets, school and classroom-level forms used to capture information from students and enrolment data were edited at the end of each day of fieldwork. The district research teams also met regularly to discuss the day's activities and plan for the following day's work. The Research Coordinator collected all fieldwork data- the answer Sheets and enrolment data, did final editing, packaging and couriered it to CDC, United States of America.

Data Analysis

To analyze the survey data, Epi Info:C-Sample and SUDAAN, software packages for statistical analysis of correlated data, were used to compute prevalence rates and 95% confidence intervals for the estimates. Differences between prevalence estimates were considered

statistically significant if the 95% confidence intervals did not overlap. A weighting factor was applied to each student's 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 was 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 classroom within the school.

f1= a school-level non-response adjustment factor calculated by school size category (small, medium, large).

f2= a class adjustment factor calculated by school.

f3= a student-level non-response adjustment factor calculated by class.

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

FINDINGS
Results of GYTS

The results compare the extent of tobacco use among students aged 13-15 years across 4 study areas in Uganda (Arua, Kampala, Mpigi and Rest of Central districts). Gender specific data are not shown in the Tables and Graphs but reported about in the text. School and student response rates for the GYTS were high in all the four districts visited (Table 2). The school response rate ranged from 95% in Kampala to 88% in Arua. The student response rate ranged from 84.9% in Kampala to 70.5% in Arua. The overall response rate ranged between 80.7 % and 62.1%.

Table 2: Study sample sizes and response rates among schools and students

District	No. of schools in the sample	No. of schools that participated	Response rate by schools (%)	No. of students selected (S.1-3)	No. of students that participated	Response rate by students (%)	Response rate: overall (%)
Arua	25	22	88.0	2166	1528	70.5	62.1
Kampala	20	19	95.0	3284	2789	84.9	80.7
Mpigi	20	18	90.0	2505	1944	77.6	69.8
Rest of Central districts	20	18	90.0	2435	1817	74.6	67.2

Make all the graphs scale on the Y-axis to 100%. It is very important that the reader sees a consistent presentation.

Prevalence

Graph 1: Prevalence of tobacco use and products among students

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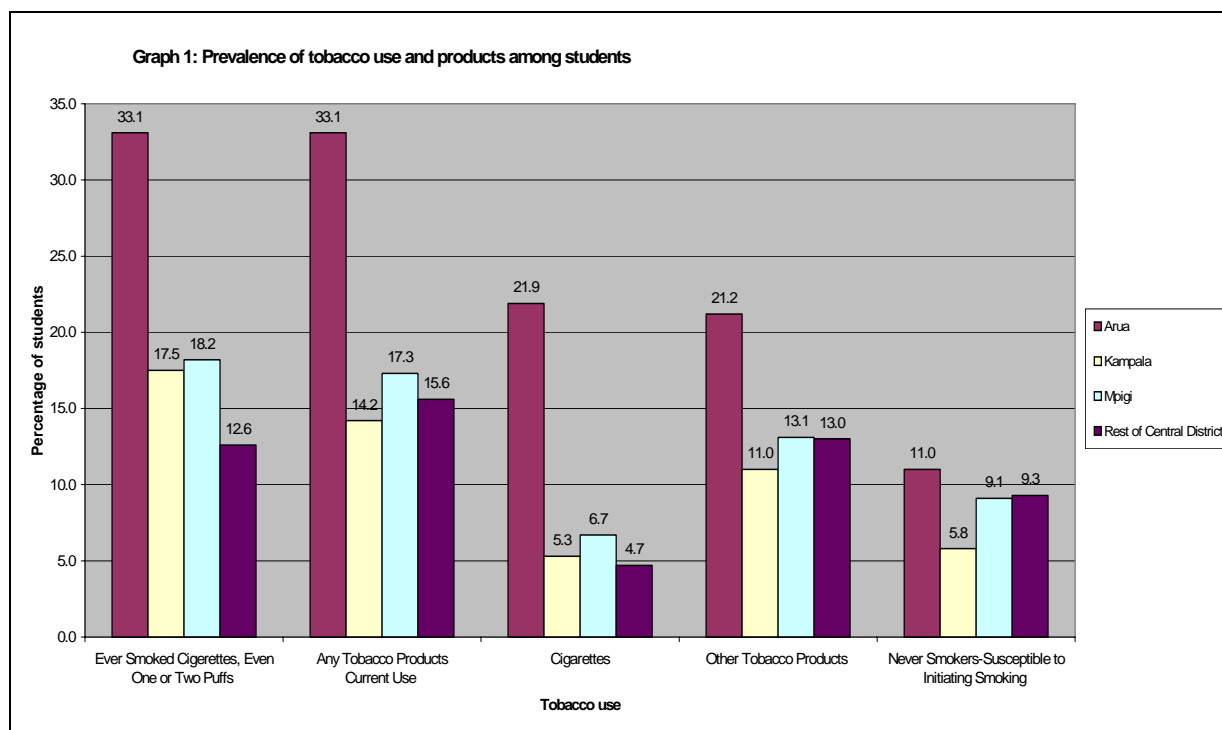
Lillian: the 4 surveys are independent. They should not be combined and producing a Mean gives the reader the idea that they do combine into some kind of meaningful measure. I think your presentation is very strong in highlighting the differences between the 4 sites....so I am striking through the Means. The highest prevalence rate of students who had ever smoked cigarettes was in Arua district (33.1%) and the lowest in Rest of Central districts (12.6%) (Graph 1). In Kampala district, 17.5% and Mpigi 18.2% of the students reported to have ever smoked. Boys were significantly more likely than girls to have ever smoked cigarettes in Arua and Kampala than in Mpigi and Rest of Central Districts.

Of the students who reported to have tried smoking, in Kampala 39.2% had initiated smoking before 10 years, Rest of Central District 37.9%, Mpigi 38.8% and Arua 18.4%. Girls were likely to have tried smoking before 10 years in Kampala and Mpigi than Rest of Central Districts and Arua.

Of the students who had never smokedcigarettes, almost one in ten were susceptible to initiate smoking during the next year, with 11.0% in Arua, 9.3% in Rest of Central Districts, 9.1% in Mpigi and 5.8% in Kampala (Graph 1). There were no significant differences in susceptibility by gender.

Current use of tobacco products

The mean of current use[2] of any tobacco product was 20.1%, with current cigarette smoking at 9.7% and current use of tobacco products other than cigarettes like chewing tobacco, snuff, cigars, cigarillos and pipe was at 14.6% (Graph 1). The highest rate for current use of any tobacco product was found in Arua (33.1%), and lowest in Kampala (14.2%). Boys in Mpigi were significantly more likely than girls to currently use any tobacco product.

Perceptions and attitudes

Data indicates that some students were receptive to boys and girls who smoke in terms of friendship and attraction as summarized in Graph 2. From the District data, it is evident that smoking has more influence on friendship compared to attractiveness. More students perceived boys who smoke to have more friends than girls. Fewer students thought smoking makes boys and girls more attractive.

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[2] Current use refers to students who had smoked cigarettes, used any or other forms of tobacco products on one or more days preceding the survey.

Put numbers on this graph as with Graph 1, etc. Also Y-axis scale to 100%

Graph 2: Perceptions and attitudes towards current smokers per district
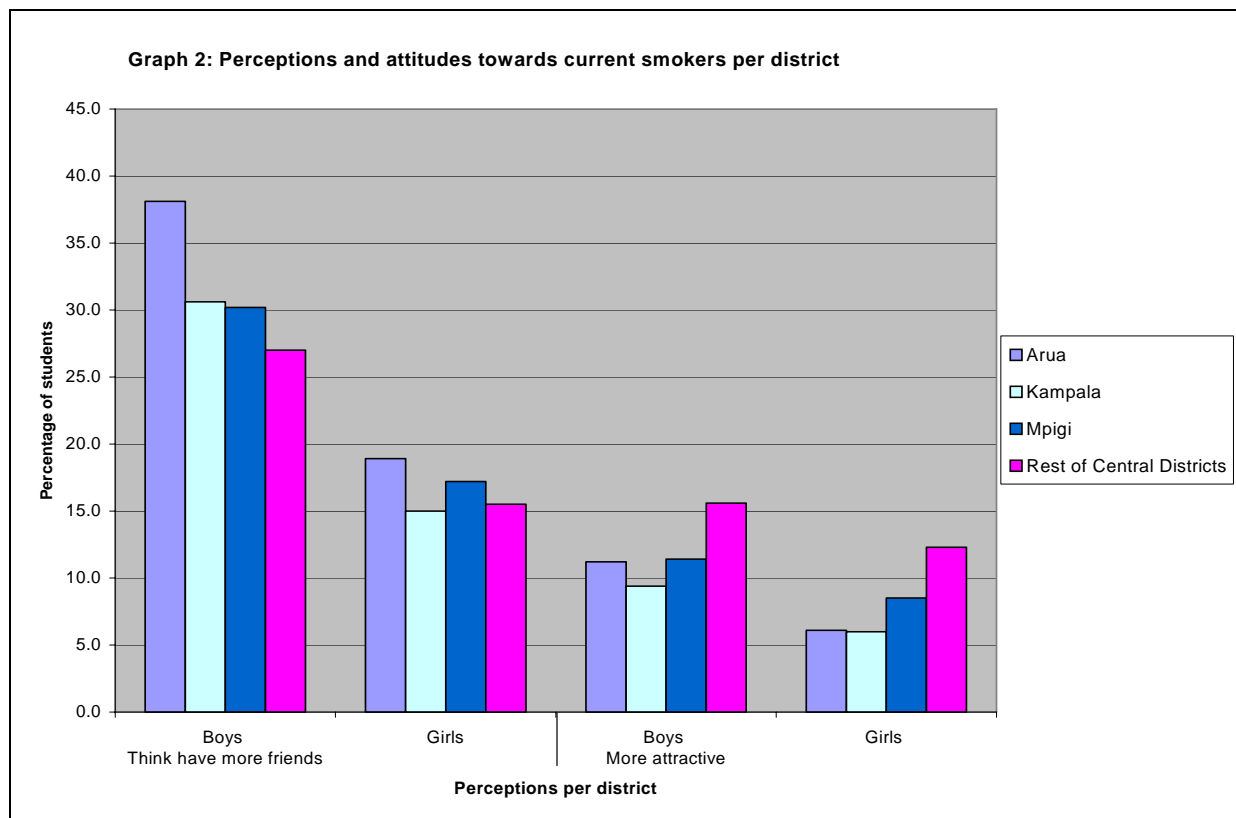
Findings further indicate that the majority of students regarded a man or woman who smokes as lacking confidence or stupid whereas some (over 10%) considered them as losers. A woman who smokes was considered to be either a *slut/prostitute* or *sexy/chic* whereas a man as *macho*. Very few students considered smokers as intelligent and successful.

The percentage of students who thought smoking makes one lose weight was high. In Arua 67.4%, Kampala 61.4%, Mpigi 60.6% and Rest of Central District 60.1% compared to less than 10% of the students who thought smoking leads to weight gain.

Access and availability

Students were asked questions regarding their access to cigarettes and the availability of cigarettes to them e.g. *where do you usually smoke from?* and *how did you usually get the cigarettes you smoked?* Places where students usually smoked varied from their homes, friend's house, public spaces, social events to work places, as shown below.

Scale to 100% on Y-axis

Graph 3: Students' common locations for smoking
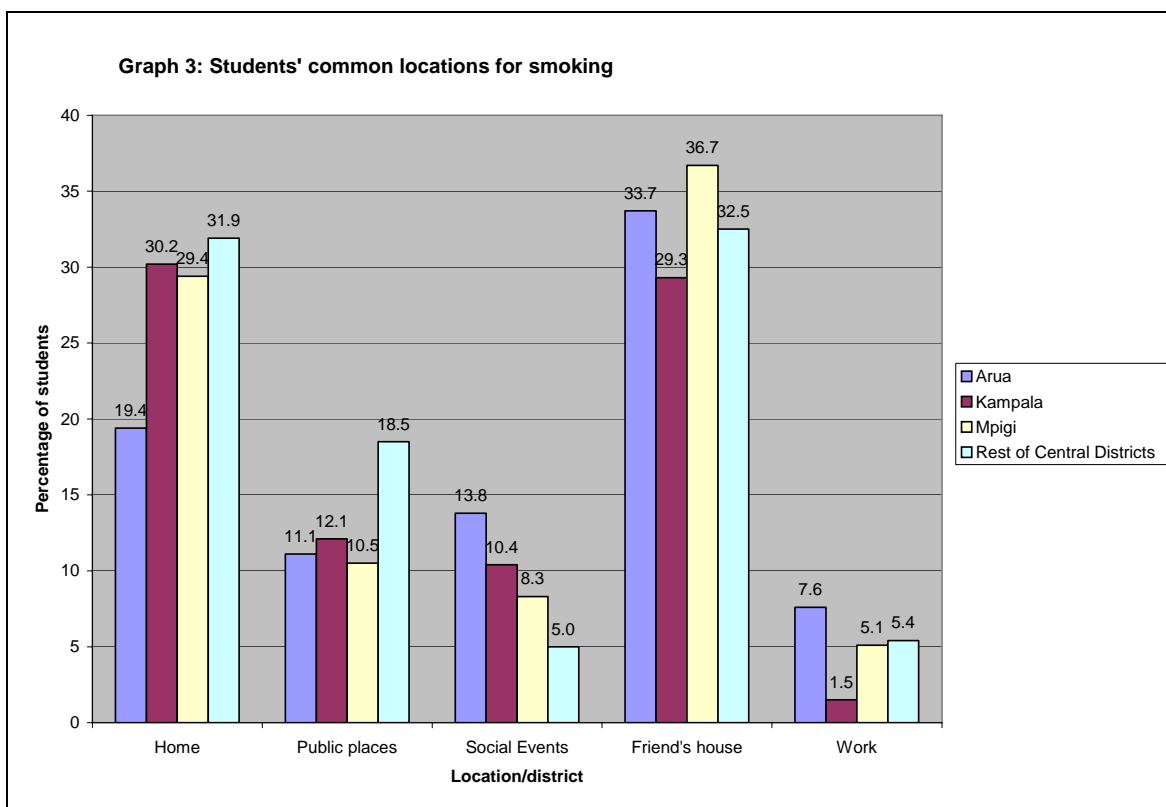
This is a real good paragraph and doesn't mention a Mean…so use this as the template for all of your results

Approximately, one-third (30.0%) of the current smokers in the districts of Rest of Central Districts, Kampala and Mpigi mentioned that their homes and friend's house were the most likely locations for smoking and only 19.4% in Arua (Graph 3). Other locations identified as likely places where students smoked included, public spaces (e.g. leisure parks, trading centers, street corners, markets, discos), social events or work places. However, data showed that nearly none of current smokers smoked at or within the school premises.

Table 3: Access and Availability

District	Percent Current Smokers who purchased Cigarettes in a store	Percent Current Smokers who Bought Cigarettes in a store who were not refused because of age
Arua	40.8 (+6.8)*	60.9 (+6.3)
Kampala	31.2 (+6.4)	68.3 (+11.8)
Mpigi	25.9 (+7.9)	47.4 (+21.1)
Rest of Central Districts	30.9 (+24.5)	68.0 (+21.6)

*Figures in parentheses are 95% confidence interval

Students in Arua (40.8%) were the most likely to purchase their cigarettes from a store, with 31.0% in Kampala and Rest of Central Districts, and the

least likely in Mpigi district (25.9%) (Table 3). Other channels through which students (during one month period) usually obtained cigarettes included borrowing them from someone else, stealing them, giving someone else money to buy them or an older person giving them the cigarettes.

In Arua, Rest of Central District and Kampala, six in ten (60.0%) students had no age hindrance while purchasing cigarettes compared to one in two in Mpigi district. A comparison across districts indicates no variations by gender in terms of who smokes at home or purchased cigarettes from a store.

Environmental Tobacco Smoke (ETS)

The overall environmental tobacco smoke situation in the four Districts was viewed in terms of the extent to which students are exposed to second-hand smoking in their surrounding and their attitudes towards ETS. Summarized findings are in Table 4.

Table 4: Environmental Tobacco Smoke exposure

District	Exposed to smoke from others in their homes		Exposed to smoke from others in public places		Percent in favor of banning smoking in 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
Arua	34.9 ($\pm$3.4)	79.4 ($\pm$6.6)	55.8 ($\pm$2.1)	93.5 ($\pm$2.9)	29.5 ($\pm$3.0)	37.9 ($\pm$4.0)	61.1 ($\pm$4.7)	48.9 ($\pm$9.3)
Kampala	15.9 ($\pm$1.4)	56.4 ($\pm$12.8)	44.8 ($\pm$6.2)	75.5 ($\pm$8.4)	64.9 ($\pm$5.7)	54.4 ($\pm$6.7)	84.2 ($\pm$5.5)	72.4 ($\pm$6.9)
Mpigi	14.9 ($\pm$1.9)	57.5 ($\pm$7.7)	38.2 ($\pm$2.8)	77.7 ($\pm$6.5)	59.5 ($\pm$6.3)	51.8 ($\pm$10.0)	70.7 ($\pm$6.0)	66.6 ($\pm$5.5)
Rest of Central Districts	12.6 ($\pm$3.2)	73.9 ($\pm$13.9)	30.9 ($\pm$5.8)	83.6 ($\pm$10.3)	52.2 ($\pm$5.1)	58.2 ($\pm$7.8)	62.0 ($\pm$3.9)	68.5 ($\pm$6.3)

*Figures in parentheses are 95% confidence interval

At district level, exposure to second-hand smoking among current smokers is significantly high, at home and in public places (Table 4). The highest rates were reported in Arua with 79.4% current smokers exposed to second-hand smoking at home and 93.5% in public places, and least rates in Kampala (56.4% and 75.5%). More students who had never smoked were exposed to second-hand in public places than at home.

Over six in ten students, both current smokers and never smokers definitely thought that smoke from others was harmful to them. Except in Arua, over one half of the students, both current and never smokers thought that smoking should be banned from public places such as hotels, taxis, schools, on playgrounds, markets and shops. Approximately, six in ten students never smokers in Kampala (64.9%), Mpigi (59.5%) and Rest of Central Districts (52.2%) were in favor of a ban on smoking in public places and only 29.5% in Arua (Table 4).

Cessation

Table 5: Cessation levels of students per district

District	Current Smokers	
	Percent desire to stop	Percent tried to stop
Arua	**80.7** (+3.1)	**71.8** (+5.3)
Kampala	**77.9** (+8.4)	**76.9** (+11.2)
Mpigi	**68.7** (+18.5)	**70.7** (+10.8)
Rest of Central Districts	**76.8** (+14.4)	**67.2** (+14.4)

*Figures in parentheses are 95% confidence interval

Overall, the majority of students currently smoking expressed a desire to stop smoking. In Arua, Kampala and Rest of Central Districts, over eight in ten current smokers desired to stop smoking and nearly seven in ten (68.7%) in Mpigi (Table 5).

Data further indicates that nearly seven in ten current smokers in all the Districts had tried to stop smoking in the past year preceding the survey. Kampala (76.9%) had the highest percentage of students who had tried to quit smoking during the past year, and Rest of central districts (67.2%) had the lowest. There was no significant difference by gender across districts.

Media and Advertising

Data collected from the four districts shows that students were exposed to both anti-smoking and pro-tobacco message from print (Newspapers, magazines, billboards) and electronic media (radio, television etc.), see Table 6.

Table 6: Media and Advertising

District	Saw Anti-Smoking Media Messages	Saw Anti-Smoking Messages at sporting & other events	Saw Pro-Cigarettes Ads on billboards	Saw Pro-Tobacco messages at sports & other events	Saw Pro-Cigarette Ads in Newspapers & Magazines	Had an object with a cigarette brand logo	Offered a free cigarette by Tobacco Company
Arua	**73.9**	**74.1**	**59.6**	**53.1**	**58.7**	**24.0**	**21.5**
Kampala	**80.9**	**77.5**	**75.6**	**66.1**	**70.8**	**15.7**	**11.1**
Mpigi	**74.7**	**73.2**	**68.5**	**58.5**	**63.0**	**19.3**	**13.8**
Rest of Central Districts	**63.5**	**71.4**	**56.8**	**59.9**	**58.3**	**20.9**	**17.2**

A comparison across districts shows that more students in Kampala were exposed to anti-and pro- tobacco messages and advertisements. More students in Arua (73.9%), Kampala (80.9%) and Mpigi (74.7%) had seen anti-smoking media messages in the past 30 days preceding the survey

compared to 63.5 % in Rest of Central districts (Table 6). Exposure to anti-smoking messages at sporting and other events was generally high, over 70% of students in all the districts.

Exposure to pro-cigarette advertisements on billboards was highest in Kampala (75.6%) and lowest in Rest of Central Districts (56.8%). Overall, 60% of the students in all the districts had been exposed to cigarette advertisements on billboards. A similar proportion had seen pro-cigarettes advertisements in the Newspapers and magazines, and at   in sporting and other events the past month preceding the survey.

Approximately one in five students in each region owned an object with a cigarette brand logo on it (mean 20%). The percentage of students who reported that a representative of a tobacco company had offered them free cigarettes was relatively high, with a mean of 15.9%. The highest rate was reported in Arua (21.5%) and lowest in Kampala (11.1%).

School curriculum and tobacco use

Table 7: School curriculum in four districts, GYTS Uganda

District	Percent taught dangers of smoking	Percent taught effects of tobacco use	Percent discussed reasons why people their age smoke
Arua	**76.9** ($\pm$3.9)*	**79.9** ($\pm$3.2)	**68.1** ($\pm$4.0)
Kampala	**65.2** ($\pm$3.1)	**65.5** ($\pm$3.8)	**60.0** ($\pm$3.2)
Mpigi	**66.2** ($\pm$5.2)	**66.7** ($\pm$5.1)	**59.7** ($\pm$5.2)
Rest of Central Districts	**64.1** ($\pm$3.1)	**67.8** ($\pm$3.6)	**58.4** ($\pm$4.0)

*Figures in parentheses are 95% confidence interval

To examine the awareness levels of students about tobacco use and effects, questions about the health education at school were asked. Over three-quarters of the students in Arua had been taught about the dangers of smoking and effects of tobacco use and 2/3 of students in Kampala, Mpigi and Rest of Central Districts (Table 7). Approximately, 6 in 10 students had discussed reasons why people of their age smoke. However, this percentage was low compared to those who had been taught about the dangers and effects of smoking.

DISCUSSION

The general situation of tobacco use among young people all over the world, and in less developed countries like Uganda in particular shows that young people are at a high health risk, not only as users but non-users exposed to tobacco products especially cigarette smoking through advertisements. The GYTS a school-based survey conducted in Uganda among secondary school students (Senior One-Senior Three) 13-15 age group presents the magnitude of the problem.

The prevalence rate of cigarette smoking among young people in-school is high with initiation age at less than 10 years. Yet, it is widely known that tobacco is one of the chief preventable causes of premature deaths in the world. Cigarette smoking is responsible for diseases like cancer of the lungs, mouth, oesophagus and bladder, hear diseases. The current trend predicts an increase in tobacco use among young people. This is attributed to the early age of trying to smoke, which develops into a habit difficult to quit. As indicated by over 70% current smokers who had tried to stop smoking in the past year preceding the survey but failed. Many young people tend to ignore the consequences of such risk-taking tendencies like tobacco use especially the addictiveness and premature death from tobacco related illnesses.

From the survey, high levels of tobacco use among students in Arua (33.1%) are attributed to the factor that tobacco is grown there, which makes it readily accessible and available.

In Uganda many people consider tobacco use among adolescents as an unhealthy social habit. To young people however, smoking is perceived as a tool to fit in with their peers who are also looking for social identity. For example, almost one in three of the students thought boys who smoke have more friends. In addition, over 60% thought smoking makes one lose weight. Research has shown that physical appearance especially looking thin/small among adolescent girls is of vital importance and valued more than any other lifestyle factor. Many start to smoke cigarettes with hope to lose weight ignoring the effects of its use. Such perceptions and attitudes towards smoking tend to potential grounds for peer pressure to use tobacco products. It is also increasingly evident that young people who are involved in such a health-risk behavior do it collectively and not as social isolates. Hence, peer groups are considered a critical factor in initiation and maintenance of adolescent smoking.

Although some health education programs within which tobacco effects is a component do exist, they are not specifically targeting the young people. Information is diffused with contradicting messages, which portray positive images of smoking and using tobacco products. These images are portrayed through advertisements in the media, on billboards, at public events and other means like concerts-street bashes. Cigarette smoking is a very powerful influence, especially when an adolescent model is promoting the product. Smoking is glamorized in the movies and television and often associated with modern life, sports, outdoor events and having fun. For example, with common advertisement slogans like: *Rex-the test of success; Safari-your best companion; Sportsman-Yee Ssebo; Embassy-smooth all the way* the youths are made to believe that smoking is 'cool', modern and foreign encourages them to smoke too. Students in Arua, Kampala, Mpigi and Rest of Central are exposed to both types of messages because of access to newspapers and popular FM radios.

Legislation on tobacco control is necessary but if it is not enforced it is useless. Enforcement of tobacco control policies enhances their efficacy both by deterring violators and sending a message to public that the community leadership believes the policies are important. Numerous studies have shown that the combination of enforcing laws that restrict tobacco sales to young people and sensitizing the public can reduce illegal sales of tobacco to minors. In Uganda like elsewhere is not possible. The survey indicates that current smokers were not refused to purchase cigarettes because of their age. Research has shown that apart from the accessing tobacco products from commercial outlets, young people tend use other channels like friends, older people to get access to tobacco product.

Efforts to ban smoking in public places are evident at NGO and individual levels. Some service providers have banned smoking in their premises by putting up '*No smoking*' stickers and posters. However, these efforts to prevent second-hand smoking or environmental tobacco smoke (ETS) exposure are not being supported at the policy level. The Environmental Action Network (TEAN) for example, in 2001 filed a suit in the High Court of Uganda; seeking declarations that smoking in public places violated non-smokers constitutional rights to a clean and healthy environment and to life. This was only recognized as a right on December 11, 2002, which is a clear indication of no existing law. The findings of the survey showed that a high percentage of the youths were exposed to ETS both at home and public places. Despite the awareness level of the obvious harmful effects of second-hand smoking among the youths, only half were in favor of banning smoking in public places.

School environment is important for the building of a health foundation of a child. It also forms part of the hidden curriculum of the school like tobacco use prevention education. Smoking prevention education programs that focus on life skill training have proven effective in reducing tobacco use and other substance abuse among adolescents. From the survey, over 3/4 of the students in Arua, and nearly 2/3 of the students in Kampala, Mpigi and Rest of Districts had been taught effects of tobacco use in class. However, the Ugandan school curriculum does not specifically have tobacco and drug use as a topic/lesson, often speakers are visited to the school to sensitize the students. School clubs like Red Cross, Debate and Drama are also used as agents of health education. In many Ugandan schools, cigarette smoking is considered bad behavior punishable by suspicion or expulsion. This can be influential to adolescent behavior.

Conclusions and Recommendations

Despite the obvious threat from tobacco products to global health, many governments, particularly the developing Uganda inclusive, have not taken significant action to reduce its toll. This is because of the scale of the threat is underestimated, or because of a belief that little can be done to reduce consumption or due to limited research about tobacco and health. The Ugandan government like many governments is reluctant to take action because of concerns that tobacco control/regulations will have undesirable economic consequences.

Economics, politics of tobacco Vs health: Cigarettes are cheap to make and enormously addictive, and are among the world's most profitable industries. Tobacco is the send cash crop and accounts for approximately US$ 35 million foreign exchange. This economic addiction however, makes it difficult for governments to take adverse decision on the industry. Many vested interests have to be overcome to deal with the tobacco epidemic because its use among young people is increasing, affecting their health.

From the survey, it is evident that there is high prevalence of tobacco use among in-school young people in Uganda. Therefore a need for recommendations:

– Educational programs and health promotion campaigns can serve a useful role in tobacco control, particularly in areas where dangers of tobacco use are not known. However, unless they are backed by strong public policies, which may prevent tobacco use among young people.
– Enact legislations to ban smoking from public places, such as hospitals, restaurants, markets, discos etc.
– Restrict the advertisement of cigarette smoking in print and electronic media –billboards, newspapers, radio, television and other promotional events like prize winning (include t-shirts, radios, flashlights), scholarships.
– Interventions for piloting cessation programs for schools and out-school youths which includes identification of relevant organizations and structures, inputs and processes for active adolescent involvement and participation, e.g. through peer educators, and other students' groups in school, churches, communities, etc. Parents, professional individuals- (teachers, health workers, community development and youth workers, welfare/probation officers, police, lawyers), and any other relevant adolescent friendly organizations e.g. the mass media, the local FM radio stations, willing to work for the health and welfare of

adolescents, and to be key actors, should be motivated/prepared to advocate, and be trained in the necessary skills for creating and offering tobacco use prevention and cessation health education services, in accordance with the local and needs of adolescents.

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