# 2000 GLOBAL YOUTH TOBACCO SURVEY GUYANA REPORT 

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## SUMMARY

Global Youth Tobacco Survey (GYTS) was developed by WHO and the US CDC to track tobacco use among youths in countries across the world. It is a school-based survey designed to use a two-stage cluster sample to produce representative data on smoking among school-age children 13 - 15 years old. GYTS was implemented in Guyana in 2000. Data collected include the prevalence of cigarette smoking and other tobacco use, access and price of tobacco, environmental tobacco smoke exposure, cessation, media and advertising and the school curriculum.

The school response rate was $86.0 \%$ and the student response rate was $72.1 \%$. This gave an overall response rate of $62.0 \%$.

Prevalence rate of ever smokers is about 30\%, with 9\% current smokers and about 17\% who currently use any tobacco product.

About 28\% students buy their cigarettes in a store and about 53\% of them smoke at home. More boys than girls smoke cigarettes and as much as 8 in 10 smokers want to stop.

Many students are exposed to tobacco smoke in their homes and in places outside their homes. About 70\% thought that tobacco smoke from others is harmful to them and they want smoking to be banned in public places.

Students were exposed to both anti- and pro-smoking media messages, and some even had objects with cigarette brand logos.

Less than $50 \%$ students in class were taught about the dangers of smoking, why people their age smoke and the effects of tobacco use.

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

## ACKNOWLEDGEMENTS

The following organizations, ministries and individuals have contributed towards the successful implementation of this survey:

| PAHO/WHO Guyana Office | - Dr Bernadette Theodore-Gandi, Guyana Representative <br> - Ms Paula Trotter, Nutritionist |
| :---: | :---: |
| PAHO/WHO Barbados Office | - Dr Beverly D Barnett, Chronic Diseases \& Health Promotion Adviser |
| WHO | - Ms Leanne Riley, Scientist |
| Centres for Disease Control \& | - Charles W Warren, Statistician |
| Prevention (Office on Smoking \& Health) | - Ralph S. Caraballo, Epidemiologist |
| Ministry of Health | - Mr Doorga Persaud, Permanent Secretary <br> - Dr Rudolph Cummings, Chief Medical Officer |
| Ministry Of Education | - Mr Hydar Ally, Permanent Secretary <br> - Mr Ed Caesar, Chief Education Officer <br> - The Planning Unit |
| Health Sciences Education | - Dr Sarah Gordon, Director |
| Ministry of Health Annexe | - Secretarial Staff <br> - Ms Carla James \& Ms Marlyn Cozier (Health Learning Material) |
| Survey Administrators | - Milton Canterbury <br> - Patrick Adams <br> - Rozana Girdharry <br> - Dada Enebli <br> - Capucine Phillips <br> - Ghalee Khan <br> - Donna Howard <br> - Regina Cort <br> - Peggy Benjamin <br> -Trevor Limerick |

Regional Education Officers in Regions 2, 3, 4, 5, 6, 7 \& 10
Headmasters \& Headmistresses of the selected schools and, above all, the students who participated in this survey

To others whose names are not mentioned here, but who may have in some ways contributed to this survey

To all of the above, thank you.
Shradhanand Hariprashad, Health Research Officer (Ministry of Health)
\& 2000 GYTS Research Co-ordinator.

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## INTRODUCTION

Even though tobacco use is considered to be one of the chief preventable causes of death in the world, WHO estimates that there are currently 3.5 million deaths each year from tobacco. This figure is expected to rise to about 10 million by 2030. By that date $70 \%$ of those deaths will occur in developing countries. The World Health Report 1998 (1) stated that " the majority of smokers began smoking by the age of 19; in some cases the majority of smokers had adopted the habit by 12 years of age. More boys tend to smoke than girls." Recent trends indicate that the smoking prevalence rate among adolescents is rising and the age of initiation is becoming younger. If these patterns continue, tobacco use will result in the deaths of 250 million children and young people living today, many of them in developing countries.

Despite widespread knowledge of the harm caused by smoking, only modest success has been achieved in global tobacco control initiatives. Since it is clear that children and young people are now more at risk than ever before, it therefore becomes imperative that they should be a primary focus for intervention strategies. It has been observed that the Caribbean currently lacks a mechanism for monitoring and tracking potential increases in tobacco use among our youths. The Global Youth Tobacco Survey (GYTS) has been recommended as one such mechanism.

Between 1970 and 1995, WHO adopted 14 resolutions on the need for both national and international tobacco control policies. Four of the 14 resolutions are relevant to the United Nations Foundation project- Global Youth Tobacco Survey (GYTS). The aim of the project is "to bring together the evidence, technical support and strategic alliances necessary to positively address the negative impact of tobacco and to encourage and support children and adolescents in leading healthy, active, tobacco-free lives."

The target population of GYTS is youth between the ages of $13-15$ years. The main objectives of this survey in Guyana are: to determine the level of tobacco use, to estimate age of initiation of cigarette use, to estimate levels of susceptibility to become cigarette smokers, to identify key intervening variables, such as, attitudes and beliefs on behavioural norms, with regard to tobacco use among young people and its health impact, including cessation, environmental tobacco smoke (ETS), media and advertising, minors' access, and school curriculum, and to assess the extent to which major prevention programmes are reaching school-based populations and establish the subjective opinions of those populations regarding such interventions.

## STUDY DESIGN AND METHODS

One of the prerequisites for the implementation of the GYTS in Guyana was the acquisition of current (1999-2000) school enrolment data. Complete data for this academic year was not available, and the previous academic year (1998-1999) could only have been extracted from the available (raw data) questionnaires at the Statistical Section of the Ministry of Education.

The data extracted from the Ministry of Education statistical questionnaires was forwarded through PAHO/WHO (Guyana Office) to CDC Office on Smoking and Health, where the preliminary sample was drawn.

A training workshop for Research Coordinators in the Caribbean was held at the PAHO/WHO Office of Caribbean Program Coordination, Barbados, from April 10 -12, 2000. The basic aim of the training workshop was the standardization of the research methodology. At the training workshop, with the use of the GYTS 2000 Handbook, the core questions and optional questions to be included in the final questionnaire were reviewed, item-by-item. Tasks of the Research Coordinator were identified and discussed, namely, GYTS Survey Design and Procedures, as well as the List of Sample Selection and the final sample size.

The GYTS was designed to be school-based and to focus on students aged 13-15 years. The questionnaire consisted of a 'core' component and an 'optional' component. The core questions allow for comparison between countries and regions, and the optional questions allow for specific issues pertaining to individual countries.

All the questions were multiple-choice and apart from 3 questions that asked for background information such as age, gender and class-level, the other 70 questions solicited information on the use of tobacco (prevalence, access, brand of cigarette and about other tobacco products), knowledge and attitude towards smoking, environmental tobacco smoke, cessation, media and advertising, school curriculum and community response to smoking.

During the third semester, in July 2000 to be specific, the survey was conducted.

## Sampling methods

A two-stage sample design was used for the GYTS:

## Stage 1: Selection of Schools

Since the target population for the GYTS is youth aged 13-15 years, a list of schools eligible to participate in the survey was sent to the Office for Smoking and Health/CDC where the sample selection was done. This list included students from the Secondary Department of Primary Schools, Community High Schools and Secondary School in regions 2,3,4,5,6,7 and 10. The schools were selected with a probability proportional to enrolment size. This meant that large schools were more likely to be selected than small schools. The outcome of this selection process gave Guyana 50 schools with an expected survey population of 1500, with no replacement or substitution allowed for schools that did not agree to participate.

## Stage 2: Selection of Classes and Students

In each selected school, the number of classes in Forms 2,3 and 4 and their respective enrolment were listed, and from this list, classes were randomly selected (based on the random start provided by OSH/CDC on the School-Level Form). It meant, then, that in each school, depending on the number of classes listed, one or two or three of those classes were selected, and in each class selected, every student present was interviewed.

The US Office on Smoking and Health/Centre for Disease Control and Prevention did the analysis of the raw data. A weighting factor was applied to reflect the likelihood of sampling each student and to reduce bias by compensating for differing pattern of non-response. Also, a statistical analysis of correlated data was used to compute $95 \%$ confidence intervals.

## Data Collection

Because GYTS is a school-based survey, cooperation of the Ministry of Health and the Ministry of Education was necessary, especially the latter since government schools were under its immediate control. And even though all the 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 Heads in the various regions of the country.

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.

The survey procedure employed allowed for students' voluntary participation, anonymity, and privacy.

The Survey Administrators were selected mainly from the staff of the Division of Health Sciences Education. They were assigned to specific schools and were responsible for the delivery and collection of all survey documentation forms, Answer Sheets, Header Sheets, and Questionnaires.

Two forms were provided for each selected school - the School-Level Form and the Classroom Level Form. These two forms provided the necessary identification information and were the primary data management forms.

The School-Level Form contained the Coordinating Agency, the School name, the sample size, and the School ID (this was supplied by the OSH/CDC). The grades taught and the grades surveyed in the school, as well as the total number of eligible classes, were filled in by the Survey Administrator. A list of random numbers was supplied by OSH/CDC and appeared just above the Class Tracking information. The Survey Administrator was expected to fill in the Class Tracking information. This contained a grid that was used to catalogue the completion status of each selected class.

The Classroom Level Form also showed the Coordination Agency (Guyana), the School name, the sample, the School ID and the Class ID. This information was previously entered by the OSH/CDC. Only one copy of the Classroom Level Form was provided by OSH/CDC. Additional copies were provided by the Coordinating Agency and each class participating in the selected school was given one. The Survey Administrator entered the number of students who were enrolled in the classes and the number of students who actually participated in the survey. All students in the selected classes were eligible for participation.

The Answer Sheet and the Header Sheet were also provided by OSH/CDC. One Answer Sheet was given to each student. Students were not required to write their names on the Answer Sheet, or provide any other kind of identifying information. This answer sheet on which students were asked to record their responses was machine-readable. A Header Sheet was completed for each participating class in each school and showed the School ID (from the School Level Form) and the Class ID (from the Classroom Level Form).

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

Each of the ten Survey Administrators was assigned to five schools and each had the responsibility to collect the enrolment data of all the classes in Forms II, III, and IV in each school and transmit such information to the Research Coordinator by hand or by phone so as to confirm the selection of the correct class or classes to be interviewed. The administration of the questionnaire, documentation of the class and school participation, and the security of the Answer Sheets were the assigned responsibility of the Survey Administrators. The Research Coordinator undertook the responsibility of the final editing and package of the Answer Sheets, the Header Sheets, the Classroom-Level Forms, and the School-Level Forms. This was done simply to establish quality data management throughout the data gathering process.

## RESULTS

Forty-three (43) of the 50 sampled schools participated in this survey. Out of the 1256 sampled students, 906 responded to the questionnaires. This gave an overall response rate of 62.04\%. There were 334 (40.2\%) male students and 484 (59.8\%) female students, with 205(23.3\%) in Form II, 271(36.4\%) in Form III, and 363 (40.3\%) in Form IV.

Table 1: Study sample size and response rate among school and students - 2000 Guyana GYTS

| No. of <br> schools in <br> the sample | No. of schools <br> participating | Response <br> rate of <br> schools | No. of <br> students <br> selected | No. of students <br> participated | Response <br> rate of <br> students | Overall <br> response <br> rate |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 50 | 43 | $86 \%$ | 1256 | 906 | $72.13 \%$ | $62.04 \%$ |

The following table shows the percentage of students who participated in the survey, according to age, gender and class-level:

Table 2: Background information of students - 2000 Guyana GYTS

| AGE <br> (Years) | $<11$ <br> $\& ~ 11$ | 12 | 13 | 14 | 15 | 16 | $17+$ | MALE | FEMALE | FORM <br> II | FORM <br> III | FORM <br> IV |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TOTAL | 3.1 | 4.8 | 14.8 | 26.6 | 30.6 | 15.7 | 4.3 | 40.2 | 59.8 | 23.3 | 36.4 | 40.3 |
| MALE | 4.3 | 5.3 | 15.6 | 24.4 | 26.8 | 18.4 | 5.2 | 100 | 0 | 29.7 | 32.8 | 37.5 |
| FEMALE | 1.2 | 1.9 | 14.5 | 29.7 | 34.7 | 14.5 | 3.4 | 0 | 100 | 19.0 | 36.9 | 44.1 |
| Form II | 8.0 | 9.7 | 54.0 | 22.1 | 3.4 | 1.3 | 1.6 | 51.8 | 48.2 | 100 | 0 | 0 |
| Form III | 2.5 | 2.5 | 6.1 | 55.8 | 28.1 | 4.5 | 0.5 | 38.0 | 62.0 | 0 | 100 | 0 |
| Form IV | 0.2 | 1.4 | 1.4 | 6.5 | 51.6 | 30.1 | 8.9 | 37.0 | 63.0 | 0 | 0 | 100 |
| AGE12yrs | 39.4 | 60.6 | 0 | 0 | 0 | 0 | 0 | 67.1 | 32.0 | 62.2 | 28.1 | 9.8 |
| 13yrs | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 41.7 | 58.3 | 81.7 | 14.8 | 3.6 |
| 14 yrs | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 35.4 | 64.6 | 18.0 | 72.8 | 9.2 |
| 15 yrs | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 33.9 | 66.1 | 2.4 | 32.5 | 65.0 |
| 16 yrs | 0 | 0 | 0 | 0 | 0 | 78.4 | 21.6 | 46.7 | 53.3 | 3.6 | 10.3 | 86.1 |

For the purpose of analysis, three main categories of students were identified in this survey: never smokers, ever smokers and current smokers.

Never smokers are those students who have not admitted to, or have never tried or experiment with cigarette smoking, even one or two puffs. There were 567 (70.5\%) students who can be associated with this category.

Ever smokers are all those students who have admitted to have ever tried or experimented with cigarette smoking, even one or two puffs. There were 264 (29.5\%) students who are identified with this category.

Current smokers are those students who have smoked on one or more days during the 30 days before the survey. There were 79 (8.7\%) students in this category.

## Prevalence

It can be observed that among ever smokers there were more males (36.7\%) than females (22.2\%) who have tried or experimented with cigarettes, most in Form II (33.1\%) and among 12 year-olds. About 40\% of ever smokers had their first cigarette before the age of 10 years.

About 2\% students said they smoked occasionally, but less than once per month; 1.9\% students smoked some time each month but less than one cigarette per week; $1.4 \%$ students smoked some time each week but less than one cigarette per day. Only $0.9 \%$ students smoked every day at least one cigarette.

Current smokers were about 9\%. There were twice more males than females, almost the same percentage for Forms II, III, and IV, but highest among 12 year-olds than in any other age groups. A breakdown shows that during the past 30 days (one month), at the time of the survey,
only $0.6 \%$ students smoked on all 30 days, $6 \%$ smoked for 1 or 2 days in the month, $1.4 \%$ smoked for 3 to 5 days, and $<1 \%$ smoked in as much as 6 to 29 days.

Table 3: Percentage prevalence of tobacco use among students aged 13 - $\mathbf{1 5}$ years - 2000 Guyana GYTS

|  | Smoked cigarettes, even one or two puffs | Current Use |  |  | Smoked cigarettes first before age of 10 years |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cigarettes | Other tobacco products | Any tobacco product |  |
| TOTAL | 29.5 | 8.7 | 9.9 | 16.9 | 40.3 |
| MALE | 36.7 | 11.1 | 12.6 | 21.1 | 35.7 |
| FEMALE | 22.2 | 5.5 | 6.0 | 10.8 | 35.1 |
| Form II | 33.1 | 7.7 | 13.0 | 18.0 | 50.3 |
| Form III | 26.5 | 8.7 | 8.2 | 15.8 | 36.4 |
| Form IV | 30.0 | 7.6 | 8.8 | 15.5 | 36.0 |
| AGE 12 yrs. | 36.3 | 19.1 | 19.9 | 32.1 | 58.4 |
| $13 \mathrm{yrs}$. | 29.3 | 9.0 | 13.8 | 20.1 | 55.5 |
| 14 yrs. | 23.3 | 5.3 | 5.2 | 10.1 | 32.8 |
| 15 yrs. | 29.0 | 10.4 | 8.6 | 17.5 | 35.1 |
| 16 yrs.+ | 31.6 | 6.1 | 6.9 | 12.2 | 35.0 |

Over the same period (30 days), while $5.1 \%$ students have smoked less than one cigarette per day, $1.2 \%$ students claimed to have smoked more than 20 cigarettes (1 pack) per day. Only $1.3 \%$ students claimed to have smoked more than 100 cigarettes (5 or more packs) for their entire life, while $26.4 \%$ students invariably had 1 or 2 puffs to 99 cigarettes.

## Access and Availability

About 73\% of current smokers bought cigarettes in the past 30 days but were not refused because of their age. Percentages of male and female smokers were about the same but the older students (16 year-olds - 86\%) in the upper classes (Form IV - 84.7\%) ranked the highest.

More than half (53.2\%) of current smokers usually smoke at home, far more females (80.5\%) than males (38.0\%), more students in Form II (71.3\%) and Form III (66.0\%) than in Form IV (41.4\%), and highest among 14 year-olds ( $86.0 \%$ ) than other age groups, although 12 year-olds ( $74.6 \%$ ) and 15 year-olds ( $68.5 \%$ ) were also significant.

About 15\% of current smokers usually smoke at friend's home, nearly 3 times more males than females, especially from Form IV, and from the over 16 year olds. Those who smoked at social events ( $8.2 \%$ ) were mostly the 16 year olds, especially from Form IV. And those who smoked in public places (13.3\%) were 6 times more males than females, mostly in Form IV and among the 16 year olds. The percentage of current smokers who usually smoke at school was very small (4\%).

Again, for ever smokers, the pattern was the same as current smokers. The home was the most frequent place where $11.4 \%$ students smoked. The next best place was at a friend's house where $3.4 \%$ students did so. Others preferred public places, such as parks, shopping centres or street corners $2.3 \%$ while $1.1 \%$ students preferred to smoke at social events. Of the $1.4 \%$ students who smoked at school, there were more males than females, more in Form II than in Form III or IV and more among 12 year olds than in any other age groups

Table 4: Percentage of current smokers aged 13-15 years who usually smoke at home and other places - $\mathbf{2 0 0 0}$ Guyana GYTS

|  | Usually <br> smoke at <br> home | Usually <br> smoke at <br> school | Usually smoke <br> at friend's <br> house | Usually <br> smoke at <br> social events | Usually smoke <br> in public places |
| :--- | :--- | :--- | :--- | :--- | :--- |
| TOTAL | 53.2 | 4.0 | 14.6 | 8.2 | 13.3 |
| MALE | 38.0 | 3.4 | 21.1 | 7.1 | 19.7 |
| FEMALE | 80.5 | 3.6 | 7.5 | 5.3 | 3.2 |
| Form II | 71.3 | 0 | 8.7 | 0 | 9.7 |
| Form III | 66.0 | 3.3 | 12.6 | 5.1 | 13.1 |
| Form IV | 41.4 | 3.3 | 19.4 | 6.7 | 19.6 |
| AGE 12 yrs. | 74.6 | 0 | 0 | 0 | 25.4 |
| 13 yrs. | 31.5 | 0 | 20.7 | 0 | 0.4 |
| 14 yrs. | 86.0 | 0 | 6.4 | 0 | 6.7 |
| 15 yrs. | 68.5 | 8.3 | 8.3 | 8.3 | 28.4 |
| 16 yrs.+ | 0 | 0 | 27.6 | 30.9 |  |

Bristol was the most popular brand of cigarette smoked by 7.7\% students. The next most popular brand was Benson \& Hedges (2\% students). Other brands such as 555, MORE, Rothman's were less popular, perhaps because they were more costly and less accessible than Bristol or Benson \& Hedges.

A little more than half the numbers (10.3\%) of students who ever smoked did not buy cigarettes or did not buy them in packs. Of the $9.2 \%$ students who bought cigarettes, $3.2 \%$ spent less than $\$ 120$ for a pack of 20 cigarettes, $3.5 \%$ spent $\$ 120$ to $\$ 140,0.4 \%$ spent $\$ 140$ to $\$ 160$, $0.5 \%$ spent $\$ 161$ to $\$ 200,0.4 \%$ spent $\$ 201$ to $\$ 260$, and $1.2 \%$ spent more than $\$ 260$. The $6.7 \%$ students who did not spend more than $\$ 140$ on a pack of 20 cigarettes could only purchase the popular brand, Bristol, for that amount of money, or "no usual brand" that $3.7 \%$ students claimed that they smoked, or they might simply buy "loose" or single cigarettes.

More so, $32.2 \%$ students claimed that they received no pocket money (allowance) and $10.4 \%$ received less than $\$ 180$ per month. In other words, $42.6 \%$ students or less could afford one pack of Bristol cigarettes per month, providing all the pocket allowance was spent on cigarettes only.

Then how did students usually get their own cigarettes? During a month period (30 days), current smokers obtained their cigarettes in the following manner:
28.2\% claimed to have bought their cigarettes in a store, shop or from a street vendor,
20.9\% said an older person gave them the cigarettes,
$18.6 \%$ stole the cigarettes,
12.4\% borrowed the cigarettes from someone,
7.2\% gave someone else money to buy the cigarettes.
9.4\% got their cigarettes some other way.

Table 5: Percentage of current smokers aged 13-15 years who bought cigarettes from a store 2000 Guyana GYTS

|  | Cigarettes <br> not refused <br> in a store <br> because of <br> being <br> under-age | Cigarettes <br> bought in <br> a store | Got <br> someone <br> to buy <br> their <br> cigarettes | Borrowed <br> their own <br> cigarettes <br> from <br> someone <br> else | Stole their <br> own <br> cigarettes | Obtained <br> their own <br> cigarettes <br> from an <br> older <br> person | Obtained <br> their own <br> cigarettes <br> some other <br> way |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TOTAL | 73.2 | 28.2 | 7.2 | 12.4 | 18.6 | 20.9 | 9.4 |
| MALE | 71.5 | 20.2 | 10.8 | 8.0 | 12.4 | 27.3 | 17.6 |
| FEMALE | 68.6 | 31.1 | 3.4 | 14.8 | 32.0 | 15.1 | 3.6 |
| Form II | 42.0 | 8.8 | 25.6 | 23.8 | 25.3 | 7.7 | 0 |
| Form III | 80.8 | 35.9 | 0 | 3.1 | 23.6 | 24.9 | 12.4 |
| Form IV | 84.7 | 27.4 | 6.9 | 20.3 | 12.0 | 18.3 | 15.1 |
| AGE | 54.9 | 37.6 | 20.7 | 10.8 | 24.3 | 6.5 | 0 |
| 12yrs. |  | 31.0 | 9.0 | 17.5 | 21.4 | 10.6 | 0 |
| 13yrs. | 70.8 | 24.7 | 5.5 | 5.9 | 19.4 | 19.6 | 24.9 |
| 14yrs. | 68.3 | 23.4 | 4.0 | 13.5 | 20.9 | 21.5 | 11.2 |
| 15yrs. | 78.9 | 25.4 | 0 | 16.5 | 6.8 | 42.8 | 8.5 |
| 16yrs.+ | 86.0 |  |  |  |  |  |  |

The pattern was the same for ever smokers.
More students (8.2\%) who were ever smokers said their age did not keep them from buying cigarettes than those (4.5\%) who said they tried to buy cigarettes but were refused on the grounds of their age. In the areas where they live, $83.9 \%$ of all students interviewed knew of places that sold single or loose cigarettes. For current smokers, $73.2 \%$ bought cigarettes and were not prevented because of their age.

During the 30-day period, $9.9 \%$ students admitted to have used any form of tobacco products other than cigarettes.

A little more than 3\% students said that although they smoked they have never drunk alcohol. About $1 \%$ students said that they were likely to smoke more when they drunk alcohol but $2.2 \%$ said that they tended to smoke less; $1.1 \%$ said they smoked about the same when they drunk alcohol.

## Knowledge and Attitude

Many students (57.3\%) had parents who did not smoke while 5.0\% had both parents smoking. More fathers than mothers tended to smoke: $25.4 \%$ fathers to $2.8 \%$ mothers. This
represented $33.1 \%$ students or one-third of the students interviewed who were exposed to smoking at home.

Many students (14.8\%) believed that their parents (grandparents, guardians) did not know that they smoked while $3.3 \%$ said that their parents were aware of their smoking.

On the question about the harmful effects of smoking, $67.7 \%$ students said that a family member had discussed the harmful effects of smoking with them but 32.3\% students said no one ever did so. A large percentage (69.5\%) of never smokers had a family member who had discussed the harmful effects of smoking. Among current smokers, $63.0 \%$ said they had such advice.

Once someone has started smoking, $24.7 \%$ students thought that it would not be difficult to quit, while $30.9 \%$ believed that it would be difficult; $44.4 \%$ were uncertain.

Some students (27.4\%) believed that boys who smoked cigarettes would have more friends but $37.5 \%$ said they would have fewer friends. However, $35.1 \%$ suggested that it did not matter, for boys who smoked were in no way different from boys who did not smoke. On the other hand, $15.4 \%$ students felt that girls who smoked tended to have more friends while $61.0 \%$ thought that they would have fewer friends; $23.6 \%$ saw no difference from non-smokers.

When boys smoked cigarettes, $8.4 \%$ students said that boys looked more attractive but $73.3 \%$ thought that they looked less attractive; $18.3 \%$ said there was no difference from nonsmokers.

However, when girls smoked, $6.6 \%$ students thought that girls looked more attractive but $77.8 \%$ felt that they looked less attractive; $15.7 \%$ saw no difference from non-smokers. When at celebrations, parties, or in social gatherings, $27.3 \%$ students believed that smoking cigarettes helped people to feel more comfortable; 44.9\% felt that it made them less comfortable; $27.8 \%$ saw no difference from non-smokers.

A large percentage (46.39\%) of students believed that smoking cigarettes could make you lose weight. Only $5.5 \%$ believed it could make you gain weight; $48.3 \%$ saw no difference. At the same time, 659(77.6\%) students agreed that cigarette smoking is harmful to your health, while $9.8 \%$ felt that this might not be so; $12.6 \%$ were uncertain.

Only $2.0 \%$ students said that all of their closest friends smoked, while $72.9 \%$ said none of their closest friends smoked; $3.5 \%$ said most of their closest friends smoked and $21.6 \%$ said some of them did.

There seemed to be little variation, whether male or female, in the attitude of students towards seeing a man or a woman smoking. However, most students felt that when they saw a man or a woman smoking, they believed that that man or woman lacked confidence. Some felt that they were either stupid or just losers, while some felt the 'macho' for men image and the 'sophisticated' for women image were okay. Only a handful of students attributed success or intelligence to such smokers.

The majority of students $72.5 \%$ disagreed that it is safe to smoke for only a year or two as long as you quit after that. Similarly, $65.7 \%$ of students thought that the smoke from other people's cigarettes is harmful to you.

## Cessation

Students who wanted to stop smoking now represent $10.8 \%$ of all the students who responded to this question. During the past year $10.4 \%$ students said they have tried to stop smoking; $3.5 \%$ made no effort. Those who claimed to have stopped smoking, $4.0 \%$ students said they have done so 1 to 3 months ago, 2.9\% said 4 to 11 months ago, 2.9\% said one year ago, $1.6 \%$ said 2 years ago, $11.5 \%$ said 3 years or longer, $3.1 \%$ said they have not stopped smoking.

Table 6: Percentage of current smokers aged 13 - 15 years who wanted to stop and unsuccessfully tried to stop cigarette smoking - 2000 Guyana GYTS

|  | Desire to stop | Tried to stop |
| :--- | :--- | :--- |
| TOTAL | 78.7 | 81.2 |
| MALE | 80.1 | 85.5 |
| FEMALE | 83.9 | 75.0 |
| Form II | 74.6 | 89.2 |
| Form III | 91.9 | 90.8 |
| FORM IV | 79.0 | 61.9 |
| AGE 12 yrs. | 72.5 | 80.0 |
| 13 yrs. | 100 | 100 |
| 14 yrs. | 84.9 | 65.0 |
| 15 yrs. | 63.1 | 81.5 |
| 16 yrs. | 100 | 72.6 |

The main reason given by 12.8 students for deciding to stop smoking was to improve their health. For others (3.8\%) they said they gave up smoking because their family did not like it; $2.2 \%$ said they did so to save money while $0.7 \%$ said that their friends did not like it.

Some students (13.8\%) claimed that they have already stopped smoking cigarettes; 12.8\% believed that if they had wanted to stop smoking they could have done so; $9.1 \%$ said they tried to stop smoking and found that they could have done it: $13.9 \%$ students claimed to have successfully stopped smoking. However, $5.2 \%$ students doubted whether they could have exercised that selfcontrol; $4.3 \%$ students said they tried but could not quit. Some students ( $8.9 \%$ ) said that they tried 1 to 2 times to quit smoking, $5.8 \%$ tried 4 or more times.

On the day of the survey, $3.3 \%$ students said that was the last time they smoked a cigarette, even one or two puffs; $2.7 \%$ said that the last time they smoked was some time in the past week; $1.7 \%$ said some time in the past month; $26.9 \%$ said more than 6 months ago.

Some $9.9 \%$ students said that they have not ever received help or advice to help them stop smoking. However, $4.5 \%$ students said they have received such help or advice from a programme or a professional; $3.3 \%$ from a friend; $3.7 \%$ from a family member; $5.2 \%$ from both programme and professionals and from friends and family members as well.

Among current smokers, about $82.1 \%$ said that they could have stopped smoking if they want to, $78.7 \%$ indicated that they want to stop smoking while $81.2 \%$ said they have tried to quit in the past year. Only $32.7 \%$ maintained they have smoked 2 or more cigarettes in the past 30 days.

A large number of students (13.7\%) said that they did not have or felt like having a cigarette first thing in the morning, but 1.15 said they definitely did have or felt like having that cigarette. No current smoker indicated that they always have or felt like having a cigarette first thing in the morning.

If offered a cigarette by their friend, $90.5 \%$ of never smokers would definitely not smoke it. However, $1.6 \%$ said they probably would but less than $1 \%$ said they definitely would. If offered a cigarette by a friend, $83.5 \%$ students said they would refuse it; $15.7 \%$ were uncertain but $0.8 \%$ said they would definitely smoke it. Among current smokers, $5.4 \%$ said they would definitely smoke the cigarette. These were students mainly in Form II and among 13 year olds.

At any time during the next 12 months (1 year), $1.2 \%$ students said they would definitely smoke but $82.3 \%$ said they would not; $16.4 \%$ were uncertain. However, $4.9 \%$ current smokers said they would definitely smoke cigarettes 5 years from now.

## Media and Advertising

Over a 30-day (1 month) period, 43.4\% students said they saw a lot of anti-smoking media messages (e.g. TV, radio, billboards, posters, newspapers, magazines, movies); 37.4\% saw a few; $19.2 \%$ saw none. In other words, $80.8 \%$ students were exposed to anti-smoking media messages of some sort.

Those students who went to sport events, fairs, concerts, community events or social gathering, $16.7 \%$ said they saw a lot of anti-smoking messages; $48.7 \%$ students saw such messages sometimes, and $21.5 \%$ claimed to have never seen any.

Table 7: Percentage of students aged 13 - 15 years who were exposed to anti- and pro-smoking advertising - 2000 Guyana GYTS

|  | Saw antismoking message s on the media | Saw antismoking messages at sporting and other events | Saw ads for cigarette s on billboard s | Saw ads for cigarettes in newspapers \& Magazines | Saw brand names at a sport event or on TV | Saw ads for cigarettes at sport event |  | Cigarettes offered free by tobacco company |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL | 80.8 | 78.5 | 80.3 | 79.4 | 84.2 | 76.1 | 17.5 | 12.6 |
| MALE | 80.6 | 76.3 | 77.7 | 75.5 | 80.6 | 75.4 | 20.1 | 16.4 |
| $\begin{aligned} & \text { FEMAL } \\ & \text { E } \end{aligned}$ | 83.2 | 80.5 | 83.4 | 83.1 | 88.1 | 76.3 | 15.0 | 9.2 |
| Form II | 78.5 | 82.7 | 72.1 | 79.5 | 74.4 | 75.8 | 19.0 | 16.4 |
| Form III | 83.9 | 79.1 | 78.3 | 77.0 | 83.8 | 72.3 | 19.4 | 13.6 |
| Form IV | 81.6 | 74.4 | 85.4 | 81.3 | 89.2 | 77.8 | 14.3 | 10.1 |
| $\begin{aligned} & \text { AGE } \\ & 12 \mathrm{yrs} . \end{aligned}$ | 65.8 | 78.2 | 75.4 | 79.1 | 62.7 | 74.2 | 25.5 | 30.8 |
| 13 yrs | 76.8 | 84.3 | 73.9 | 75.3 | 81.2 | 76.7 | 22.3 | 14.3 |
| 14 yrs. | 85.2 | 81.5 | 79.6 | 77.8 | 86.7 | 69.9 | 15.2 | 11.3 |
| 15 yrs. | 83.1 | 76.8 | 85.5 | 86.5 | 87.6 | 80.3 | 16.3 | 9.4 |
| 16 yrs.+ | 84.1 | 73.2 | 81.6 | 76.3 | 88.1 | 76.6 | 15.7 | 11.8 |

Although 9.0\% students said that they never watch TV, video or movies, 44.4\% students who did watch said they have seen a lot of times when actors smoked cigarettes; $41.4 \%$ students sometimes saw actors smoking; 5.2\% never did. Generally, cigarette companies promote their products by putting cigarette brand logos on items such as T-shirts, pen, satchel, etc. Many students (17.5\%) students said they have such items with a cigarette brand logo on them; 82.5\% said that they did not have such items.

Among current smokers, $28.1 \%$ had something with cigarette brand logo on it, $10 \%$ had never seen brand names on TV, 12.6\% saw no cigarette advertisement in newspapers or magazines, $22.1 \%$ have never seen cigarette advertisements at sport events. But $36.3 \%$ have seen a lot of cigarette advertisement on billboards.

## Environmental Tobacco Smoke (ETS)

Over a seven-day period, students were asked to say on how many days have people smoked in their home, in their presence. The majority, $65.7 \%$ students, said that at no time anyone had smoked in their homes, in their presence, while $13.5 \%$ students said that people have done so for all 7 days. Some $12.9 \%$ students believed that persons have smoked 1 or 2 days, $4.7 \%$ witnessed
smoking on 3 or 4 days, and $3.2 \%$ on 5 or 6 days. It means that $34.3 \%$ students were exposed to other people's smoke in their own (students') homes, in their presence.

The majority of students (62.3\%) were again exposed to other people's cigarette smoke in places other than in their own homes.

Most students (75.1\%) are in favour of banning smoking in public places, such as, in restaurants, in buses, among commuters, in schools, on playgrounds, in gyms and sport areas, and in discos.

Table 8: Percentage of students aged $13 \mathbf{- 1 5}$ years who were exposed to tobacco smoke in the home and other places - 2000 Guyana GYTS

|  | \% of others <br> who smoke in <br> the student's <br> home | \% exposed to smoke <br> from persons in other <br> places | \% who definitely <br> think smoke from <br> others is harmful to <br> them | \% who think <br> smoking should <br> be banned in <br> public places |
| :--- | :--- | :--- | :--- | :--- |
| TOTAL | 34.3 | 62.3 | 65.7 | 75.1 |
| MALE | 40.6 | 61.7 | 60.0 | 72.0 |
| FEMALE | 27.1 | 62.2 | 70.5 | 78.8 |
| Form II | 30.5 | 57.4 | 51.0 | 69.6 |
| Form III | 35.3 | 58.2 | 65.6 | 69.8 |
| Form IV | 32.7 | 68.1 | 74.6 | 82.1 |
| AGE 12 yrs. | 42.4 | 66.3 | 43.2 | 66.7 |
| 13 yrs. | 28.8 | 60.8 | 64.2 | 72.4 |
| 14 yrs. | 33.0 | 55.7 | $\mathbf{6 . 7}$ | $\mathbf{7 2 . 6}$ |
| 15 yrs. | 31.6 | 65.7 | $\mathbf{7 0 . 4}$ | 80.9 |
| 16 yrs. + | 38.0 | 68.8 | 73.6 |  |

Most students (83.1\%) believed that a person who smokes around others should ask permission. But, even if they did ask permission, $83.7 \%$ said they would not give it.

## School Curriculum

Questions were asked whether students were taught in any of their classes about the dangers of smoking and while $45.9 \%$ said it was done, $38.6 \%$ disagreed. When asked if they discussed in class the reasons why people their age smoke, $54.1 \%$ said it was not done. While $47.2 \%$ said they were taught in classes about the effects of smoking (like it makes your teeth yellow, causes wrinkles or make you smell bad), 40.9\% disagreed.

Table 9: Percentage of students aged 13 - 15 years who were taught the facts about tobacco smoking during the past school year - $\mathbf{2 0 0 0}$ Guyana GYTS

|  | Dangers of <br> smoking <br> taught in class | Reasons why people <br> your age smoke <br> discussed in class | Effects of tobacco <br> use taught in class |
| :--- | :--- | :--- | :--- |
| TOTAL | 46.0 | 31.5 | 47.2 |
| MALE | 39.5 | 32.4 | 48.0 |
| FEMALE | 52.5 | 31.2 | 48.1 |
| Form II | 44.0 | 34.3 | 48.5 |
| Form III | 44.9 | 29.6 | 46.9 |
| Form IV | 48.8 | 32.4 | 46.0 |
| AGE 12 yrs. | 36.0 | 44.3 | 40.2 |
| 13 yrs. | 47.0 | 28.1 | 47.9 |
| 14 yrs. | 47.7 | 34.6 | 51.2 |
| 15 yrs. | 42.5 | 29.2 | 43.1 |
| 16 yrs. | 53.8 | 28.3 | 51.3 |

About 23\% students said that this term (at the time of the survey) they discussed smoking and health as a part of a lesson: $15.5 \%$ said that this was done the previous term, $7.6 \%$ said it was two terms ago, $4.4 \%$ said it was three terms ago while $12.2 \%$ said it was more than a year ago. On the other hand, $37.8 \%$ said that such lesson was never done.

## Community Response

During the past year, $62.3 \%$ students said they heard from youth groups discouraging young people their own age from smoking but 37.2\% said that this was not so. About $53 \%$ students said health professionals explained to them why smoking is dangerous to their health but about 47\% said that this was not so. When $61.4 \%$ said that religious organization discouraged young people their own age from smoking, $38.6 \%$ denied this.

## DISCUSSION

GYTS was implemented in Guyana mainly to provide base-line data on tobacco use among youths. Now that this has been done, the results confirm that we are not alone. Data now available on many countries around the world, where GYTS was implemented, show that tobacco use among young people range from a $10 \%$ low to a high of $33 \%$, and as in Moscow and Kiev, more than onethird of youths aged between 13 and 15 years currently smoke.

Although smoking prevalence is low in Guyana, the current trend predicts an increase in tobacco use among young people. Smoking initiation at an early age portends a lifetime addiction and premature death from tobacco-related illnesses. This inevitably would raise the cost of health care.

It is necessary to implement a surveillance system that would enhance and strengthen the present data-base on tobacco use, for it can offer a useful tool for supporting medium-term and long-term programmes and advocacy actions for youth-oriented tobacco control.

It would be appropriate to consider several issues on 'Building Capacity for National Action' as expounded in the PAHO document "Tobacco Use in the Americas" (4) since it can be adapted to suit the Guyana situation.

Strengthening the evidence base
There is need to support research on health and economic effects of policies and programmes in Guyana and on the strategies and activities of tobacco companies to better understand what responses are required to reduce tobacco use.

Developing and disseminating information
Despite the existence of a lot of information on tobacco control, a significant information gap exists. There is a need to have access to relevant information about approaches to tobacco control. A World Bank report shows that tobacco control measures are effective and do not have a negative impact on most national economies.

Coordinating rapid response
A rapid response to tobacco control interventions that may be based on legislative, funding and policy decisions is necessary when critical decisions are to be made. Tobacco companies usually are more equipped to respond quickly while health institutions have fewer resources to do so.

Strengthening alliance
It is necessary to build alliance both nationally and globally. On the national front, governmental and non-governmental institutions need to mobilise political support and funding, and to exchange knowledge. This linkage can better facilitate strategic alliances between countries.

Building human capacity through training
Training is vital in the promotion of knowledge and skill building among the population, especially among key personnel in both governmental and non-governmental institutions. An informed population is likely to respond positively to tobacco control programmes.

Promoting leadership by health professional schools
There is a high level of tobacco use among health professionals and this is an obstacle to progress. Efforts should be made to raise the awareness of this situation and to enhance the creation of good role models. This can be done at all levels of the health institution. Advocacy in this direction can be an agent of change for tobacco control.

The first phase of the Tobacco Free Initiative (TFI) is harnessing the evidence for action. More researches need to be done to strength the existing database but it does not prevent moving on to the next phase, the activating phase, which provides the opportunity to implement mechanism nationally to address the issue of tobacco use among children and young people.

## CONCLUSIONS

The percentage of young people between the ages of $13-15$ years who currently use any tobacco product is $16.9 \%$, with $9.9 \%$ currently using other tobacco products and $8.7 \%$ currently smoking cigarettes. The percentage of students who ever smoked cigarettes, even one or two puffs, is $29.5 \%$. It has been estimated that one year after this survey $14.2 \%$ of never smokers are likely to start smoking. This prevalence rate is considered low but if the present trend is not arrested many of those youths who currently smoke would have to endure a lifetime of addiction and may die prematurely from tobacco-related diseases.

Disheartening is the realisation that 40.3\% 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 become addicted. Addiction leads to heavy smoking and premature death from tobacco-related illnesses.

Generally, young people usually smoke at home. More boys than girls use tobacco but it has been observed that girls tend to smoke more at home than boys, while boys, especially older ones, tend to smoke in public places. More boys than girls smoke in a friend's house.

A high percentage of current smokers aged $13-15$ years who have bought cigarettes in a store were not refused purchase because of their age and most of them obtained their own cigarettes from the store or from an older person.

Nearly 79\% of current smokers desired to stop smoking. About 81\% tried unsuccessfully to stop over the past year, although about 71\% said they have received help.

Students were exposed to both anti- and pro-smoking media messages. A large percentage saw anti-smoking messages on the media and at sporting and other events. On the other hand, a large percentage saw advertisement for cigarettes on billboards, in newspapers and magazines and brand names at sport events or on television. Some even had an object with a cigarette brand logo on it.

Less than $50 \%$ students were taught in class during the past year about the dangers of smoking, the reasons why people their age smoke and the effects of tobacco.

Exposure of young people to tobacco smoke is high. About one-third students live in homes where others smoke and nearly twice that amount are around others who smoke in places outside their home. Almost 70\% students felt that other people cigarette smoke is harmful to them and about $75 \%$ of them would like to see smoking banned from public places. The time is ripe for appropriate legislature to be introduced to create a tobacco-free environment in which children would be able to enjoy a healthy lifestyle.

## RECOMMENDATIONS

Despite the relatively low smoking prevalence in the Caribbean, it has been suggested that all countries in the Region must adopt strategies to avoid increase and facilitate decrease in this preventable risk factor for non-communicable diseases, which are the main causes of death and illnesses. Guyana is no exception.

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

1. Enact legislations to restrict or ban smoking in public places, such as, restaurants, cinemas, play parks, supermarkets, public transport, e.g. taxis, buses, steamers, ferries, etc.
2. Restrict the advertisement of cigarette smoking on billboards, newspapers, radio and television, and at the same time increase public awareness campaign on the harmful effects of smoking cigarettes, as well as other tobacco use, on the mass media.
3. Appeal to sporting clubs to refuse sponsorship from tobacco entrepreneurs and to avoid the use of cigarette advertisement in the promotion of their respective sport.
4. Work towards the banning of cigarette smoking at workplaces.
5. Enact and enforce legislations that prevent minors from purchasing cigarettes and other tobacco products by prosecuting those who sell tobacco products to minors.
6. Formulate public policies and enact legislations that regulate tax increases for tobacco products, as well as point of sale and distribution.
7. Involve the Ministries of Health and Education, as well as NGO's, in the campaign to promote the cessation of cigarette smoking and use of other tobacco products especially among youths.
8. Design and implement cessation programmes for schools and all youthoriented or affiliated organisations. Cessation programmes in schools must be integrated in the school curriculum and should not be done on an ad hoc basis

## REFERENCES

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$6^{\text {th }}$ April 2000

