

GLOBAL SCHOOL-BASED  
STUDENT HEALTH SURVEY  
(GSHS ) 2007

Trinidad and Tobago  
Report



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## **EXECUTIVE SUMMARY**

This report describes results from the **first** Global School-based Student Health Survey (GSHS) conducted in Trinidad and Tobago by the Ministry of Health and Ministry of Education from 19-30, April 2007.

The Republic of Trinidad and Tobago, a twin island democratic republic, is the most southerly of the Caribbean islands. It has a total area of 5,128 km<sup>2</sup> of which Trinidad covers 4,828 km<sup>2</sup> and Tobago 300 km<sup>2</sup>. The country is a multi-ethnic, multi-cultural society. The population based on the 2000 census is of 1,262,366 of which 95.72 % are located in Trinidad; 50.2 % are males; an estimated 70.6% of the population is between 15-64 years old, 8.1 % are over 65 years, and 21.4 % below 14 years.

Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students. To date over 40 countries have completed the GSHS

### **Purpose**

The purpose of the GSHS is to provide accurate data on health behaviours and protective factors) *among students to:*

- Help countries develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies;
- Establish trends in the prevalence of health behaviours and protective factors by country for use in evaluation of school health and youth health promotion; and
- Allow countries, international agencies, and others to make comparisons across countries and within countries regarding the prevalence of health behaviours and protective factors

Prior to this Global School-based Student Health Survey, the Adolescent Youth Survey (1989) and the Global Youth Tobacco Survey (2000 ) and (2007) were conducted. However, no comprehensive study of the health behaviours and practices of students in the age group 13-15 years have been done.

### **Methodology**

*The* 2007 Trinidad and Tobago GSHS employed a two-stage cluster sample design to produce a representative sample of students in Forms 1-4. The first-stage sampling frame consisted of all schools containing any of Forms 1-4. (25 schools in Trinidad and 7 schools in Tobago). Schools were selected with probability proportional to school enrolment size. 32 schools were selected to participate in the Trinidad and Tobago GSHS.

The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All classrooms in each selected school were included in the sampling frame. All students in the sampled classrooms were eligible to participate in the GSHS. Students completed the 66 item self- administered questionnaire during one classroom period.

The questionnaire addressed the following areas: respondent demographics, alcohol and other drug use; BMI and dietary behaviours; hygiene-related behaviours; mental health issues; physical activity; protective factors; sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy; tobacco use; and violence and unintentional injury. Survey procedures were designed to protect students' privacy by allowing for anonymous, confidential, and voluntary participation. Computer packages like SUDAAN, SPSS and EPI INFO were used to analyse the data.

## Key Results

The school response rate was 100 %, with an overall response rate of 78% and a total of 2,969 students participated in the survey from, (32 schools in Trinidad and Tobago 25 school in Trinidad and 7 from Tobago) during 19 – 30 April 2007. The weighted results can be used to make important inferences about the priority health–risk behaviours and protective factors of all students, 69.1% of the sample were in the age group 13-15 years and 24.9% were from form one and 27.2% of the sample was from form four. Males constituted 49.8% of the sample and females 50.2%.

**Alcohol and other drug use:** In Trinidad and Tobago, the prevalence of current alcohol use among students overall is 42.5 % . Male students (47.9%) are significantly more likely than female students (36.3%) to have had two or more drinks on the days they drank alcohol during the past 30 days. In addition, 17.3% of the students usually get the alcohol they drank by buying it in a store, shop, or from a street vendor. Male students (27.1%) are significantly more likely than female students (7.4%) to usually get the alcohol they drink by buying it from a store, shop, or from a street vendor. This practice must cease, therefore, the appropriate legislation must be enforced to prevent students from having easy access to alcohol. The prevalence of lifetime drug use (using drugs such as marijuana, hemp, or cocaine one or more time during their life) was 13.6%. Male students (17.5%) are significantly more likely than female students (9.6%) to report lifetime drug use.

**Mental health issues:** The most disturbing finding from the survey was on suicide. It showed that females are significantly more likely than males to be affected with mental health issues. In the 13-15 year age group, 14.7% of females and 8.2% of males reported they felt lonely most of the time or always during the past 12 months. What is more unsettling is the findings showing 21.5% of females and 14.1% of males reported that they seriously considered attempting suicide during the past 12 months. Parents and teachers must be taught to recognize changes in the mood and behaviours of their children and refer them early for appropriate intervention. There is a dearth of data on mental health problems among adolescent in Trinidad and Tobago and research should be conducted in this area

**Physical Activity:** Physical activity among the study population was higher for the males (25.1%) compared to the females (13.8%) who reported they were active all seven days for a total of at least 60 minutes per day during the past seven days. The advantages of physical activity on good health and the consequences of inactivity and non communicable diseases in the future must be explained to students. Along with a school health policy which should clearly state the minimum period of time all students should engage in some type of planned physical activity.

**Protective factors:** Male students (29.1%) are significantly more likely than female students (17.3%) to miss classes or school without permission. As such, they could become involved in deviant behaviours, therefore it is important for parents to know where there are and who they are with, so that their activities and behaviours can be monitored.

**Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy:**

The study showed that students are engaging in sexual activity at about puberty when their bodies are still immature. In fact, male students were found to be more sexually active than the female students -- 32.0% of the males reported they had sexual intercourse and 19.9 % had sexual intercourse for the first time before the age of 13. In addition, 23.9% had multiple sex partners during their life and 29.9% had sexual intercourse during the past 12 months. Students must be dissuaded from these practices, since they are unable to cope with the unplanned pregnancies and or contraction of sexual transmitted infections and the resulting negative effect on their education. There fore, it is imperative that students be exposed to age-appropriate health and family life education early in their school life.

**Violence and unintentional injury:** The study found that violence, unintentional injury, bullying, and belonging to a violent group are more male dominated -- 26.6% of male students compared to

7.3% of female students reported being bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. In addition, 22.2% of male students compared to 10.9% of female students indicated they belonged to violent group. Also, 55.9% of male students in comparison to 27.9% of female students indicated they have been in a physical fight and 53.6% of males reported they have been seriously injured. This is a worrying trend which requires urgent action. Therefore, as a first line of intervention, conflict management and mediation sessions should be included in the school curriculum.

This study did not reveal any significant findings in the areas of dietary behaviour, Hygiene behaviour and Tobacco use, notwithstanding that, intervention and programmes must also address these areas.

In general, the results provide hard evidence for the urgent need to establish health promoting schools and Adolescent Health Services in Trinidad and Tobago.

### **Recommendations.**

- Health Education and Health Promotion should be introduced to students at an early age, since students must be provided with an enabling environment and equipped with knowledge, attitudes, skills, and values. These could assist students in facing challenges and help them in making healthy lifestyle choices in the face of peer and other social pressure.
- Implement the School Health Policy and establish a Comprehensive School Health Service and Adolescent Health for students.
- Mental health issues and other coping skill should be taught as of part of the curriculum
- Parents/guardians must be actively involved and supported to maintain students' healthy behaviours, through the strengthening of Parent Teachers Associations and other support groups.
- The mass media, both electronic and print, should be used to highlight health issues affecting students and provide interventions and or possible solutions to same.
- Create a supportive environment for student to seek and receive counselling for substance abuse, mental health issues and other personal / social problems with out fear of exposure and or discrimination.
- Reinforce abstinence messages and strongly encourage students to delay sexual initiation.
- Enforce legislation so as to prevent students from having easy access to purchase alcohol and tobacco.
- Health and Family Life Education must be placed on the curriculum and taught in all schools.
- Emphasis on adopting healthy lifestyles, including eating balanced meals , conflict management, and avoidance of alcohol, drugs, and other illicit substances must be stressed during teaching sessions.
- Students must be taught the benefit of exercise and they must be encouraged to participate in some type of structured physical activity.
- A follow up GSHS is recommended to be conducted in three years (2010) to obtain data on adolescent health behaviours, to determine trends, compare findings, and use to develop policies, programmes, and evaluate school and adolescent health.

## **INTRODUCTION**

In 2001, WHO, in collaboration with UNAIDS, UNESCO, and UNICEF, and with technical assistance from the US Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS).

Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students.

To date, over 40 countries have completed a GSHS. This report describes results from the first GSHS conducted in Trinidad and Tobago by the Ministry of Health and Ministry of Education during April 19 to 30, 2007

The purpose of the GSHS is to provide accurate data on health behaviours and protective factors among students to:

- Help countries develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies;
- Establish trends in the prevalence of health behaviours and protective factors by country for use in evaluation of school health and youth health promotion; and
- Allow countries, international agencies, and others to make comparisons across countries and within countries regarding the prevalence of health behaviours and protective factors

The GSHS is a school-based survey conducted primarily among students aged 13-15 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults in Trinidad and Tobago:

- Alcohol and other drug use
- Dietary behaviours
- Hygiene
- Mental health
- Physical activity
- Protective factors
- Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy
- Tobacco use
- Violence and unintentional injury

## **METHODS**

### **Sampling**

The 2007 Trinidad and Tobago GSHS employed a two-stage cluster sample design to produce a representative sample of students in *Forms 1-4*. The first-stage sampling frame consisted of all schools containing any of *forms 1-4* (25 schools in Trinidad and 7 schools in Tobago). Schools were selected with probability proportional to school enrolment size. Thirty-two schools were selected to participate in the Trinidad and Tobago GSHS.

The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All students in the sampled classrooms were eligible to participate in the GSHS. Students completed the 66 item self-administered questionnaire during one classroom period. Survey procedures were designed to protect students' privacy by allowing for anonymous, confidential and voluntary participation. Computer packages like SUDAAN, SPSS, and EPI INFO were used to analyse the data.

### **Weighting**

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection.

The weighting formula used for calculation was

W1 = the inverse of the probability of selecting the school

W2 = the inverse of the probability of selecting classrooms,

f 1 = a school-level non-response adjustment factor,

f 2 = a student-level non-response adjustment factor calculated by classroom, and

f 3 = a post stratification adjustment factor calculated by sex within grade.

### **Use of the weighted Results**

The weighted results can be used to make important inferences about the priority health-risk behaviours and protective factors of all students in forms 1, 2, 3, and 4. In addition, weighting allows the results to be applied to the whole population of students in forms 1-4 in Trinidad and Tobago.

### **Response Rate**

The Global School-Based Student Health Survey (GSHS), was completed by 2969 students in 32 schools in Trinidad and Tobago during 2007. The school response rate was 100 %, the student response rate was 78 %; 2998 of the 3,786 sampled students completed questionnaires. The data set was cleaned and edited for inconsistencies (2969 questionnaires were usable after data editing) and the overall response rate was 78%. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students aged 13-15 years attending forms 1-4 in schools in Trinidad and Tobago.

Survey administration occurred from 19 April 2007 to 30 April 2007. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet. Approximately, 53 survey administrators were specially trained to conduct the GSHS. The *Trinidad and Tobago* GSHS questionnaire contained 66 questions, fifty four (54) questions (1-54) were from the core



questionnaire modules and twelve (12) questions (55-66) were the core expanded GSHS questions and country –specific questions. (See Appendix for details) The core GSHS questionnaire consists of all core questionnaire addressing the following topics:

- Alcohol and other drug use
- Dietary behaviours
- Hygiene
- Mental health
- Physical activity
- Protective factors
- Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy
- Tobacco use
- Violence and unintentional injury

## **RESULTS**

In Trinidad and Tobago, 32 schools were selected to participate (25 schools in Trinidad and 7 schools in Tobago) and 2,696 students from Forms one to four completed the questionnaire. Males comprised 1,423 (49.8%) and females 1,513 (50.2%) of the sample.

### **Demographics**

The demographic characteristics of the sample are described in table 1. The results are representative of all students in Forms 1 to 4.

Result showed that female comprised 50.2% of the sample, 69.1% were in the age group 13-15 years, 24.9% were from Form one, and 27.2% of the sample was from Form four.

*Table 1: Demographic characteristics of the sample in Trinidad and Tobago, 2007.*

	<b>Sex</b>		<b>Age</b>			<b>Forms</b>			
	<b>Males</b>	<b>Females</b>	<b>12 or younger</b>	<b>13-15</b>	<b>16 or older</b>	1	2	3	4
Trinidad and Tobago	49.8%	50.2%	11.7%	69.1%	19.2%	24.9%	24.1%	23.3%	27.2%

### **Alcohol and Other Drug Use**

Worldwide, alcohol use causes 3% of deaths (1.8 million) annually, which is equal to 4% of the global disease burden. Across sub-regions of the world, the proportion of disease burden attributable to alcohol use is greatest in the Americas and Europe ranging from 8% to 18% of total burden for males and 2% to 4% of total burden for females. Besides the direct effects of intoxication and addiction, alcohol use causes about 20% to 30% of each of oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, and motor vehicle accidents worldwide (1), and heavy alcohol use places one at greater risk for cardiovascular disease (2).

In most countries, alcohol-related mortality is highest among 45- to 54-year-olds, but the relationship between the age of initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important (3).

Intentional and unintentional injuries are far more common among youth and young adults. Unintentional injuries are the leading cause of death among 15- to 25-year-olds and many of these injuries are related to alcohol use (4).

Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behaviour, than those who do not drink (5,6). Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively (7).

Table 2: Alcohol use and other drug use among students, by sex, Trinidad and Tobago, 2007.

Questions	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Drank at least one drink containing alcohol on one or more of the past 30 days	40.9 (38.9-42.9)	42.8 (38.5-47.0)	39.2 (36.7-41.8)
Drank two or more drinks per day on the days they drank alcohol during the past 30 days	42.5 (38.7-46.3)	<b>47.9</b> <b>(42.0-53.9)</b>	<b>36.3</b> <b>(31.2-41.5)</b>
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days.	17.3 (13.6-20.9)	<b>27.1</b> <b>(21.4- 32.8)</b>	<b>7.4</b> <b>(3.2-11.6)</b>
Drank so much alcohol they were really drunk one or more times during their life	28.0 (25.6-30.5)	31.0 (26.7-35.2)	25.2 (22.4-28.0)
Had a hang-over, felt sick, got into trouble, with their family or friends ,missed school, or got into fights as a result of drinking alcohol one or more times during their life	16.7 (14.7-18.8)	18.7 (15.5-21.9)	14.6 (11.8-17.4)
Used drugs such as marijuana, hemp or cocaine one or more times during their life	13.6 (11.1-16.0)	<b>17.5</b> <b>(13.8-21.2)</b>	<b>9.6</b> <b>(7.4-11.9)</b>
Among students who had a drink of alcohol other than a few sips, the percentage who had their first drink of alcohol before age 14 years.	78.3 (75.0 -81.6)	80.1 (76.0 -84.1)	76.6 (72.7 – 80.5)
Students who during the past 30 days almost daily or daily saw any alcohol advertisements	38.2 (34.9 -41.5)	40.0 (35.0 -44.9)	36.7 ( 33.1 – 40.3)

\*95% confidence interval.

In Trinidad and Tobago, the prevalence of current alcohol use among students (i.e., drinking at least one drink containing alcohol on one or more of the past 30 days) is 40.9%. Overall, 42.5% of students drank two or more drinks per day on the days they drank alcohol during the past 30 days. Male students (47.9%) are significantly more likely than female students (36.3%) to have drunk two or more drinks per day on the days they drank alcohol during the past 30 days.

Overall, 17.3% of students usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days. Male students (27.1%) are significantly more likely than female students (7.4%) to usually get the alcohol they drink by buying it from a store, shop, or from a street vendor.

During their life, 28.0% of students drank so much alcohol they were really drunk one or more times. Overall, 16.7% of students ever had a hang-over, felt sick, got into trouble with their family or friends, missed school, or got into fights as a result of drinking alcohol one or more times during their life.

In Trinidad and Tobago, the prevalence of lifetime drug use (using drugs, such as marijuana, hemp, or cocaine, one or more times during their life) is 13.6%. Male students (17.5%) are significantly more likely than female students (9.6%) to report lifetime drug use.

### Dietary Behaviours

During adolescence, overweight is associated with hyperlipidemia, raised blood pressure (hypertension), abnormal glucose tolerance, and adverse psychological and social consequences.

Overweight acquired during childhood or adolescence may persist into adulthood and increase risk later in life for coronary heart disease, diabetes, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. Nutritional deficiencies as a result of food insecurity (protein-energy malnutrition, iron, Vitamin A, and iodine deficiency) affect school participation and learning (8).

Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances important for good health. Dietary patterns that include higher intakes of fruits and vegetables are associated with several health benefits, including a decreased risk for some types of cancer (9).

Table 3: Dietary behaviours, by sex, Trinidad and Tobago, 2007.

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	6.0 (4.6-7.5)	6.1 (4.0-8.1)	5.9 (4.5-7.3)
Usually ate fruit, such as oranges, grapefruit, apples, grapes, melon, or pineapple, one or more times per day during the past 30 days	64.7 (61.8 - 67.5)	67.8 (62.6 - 73.0)	61.6 (58.3 - 64.9)
Usually ate vegetables, such as carrots, pumpkin, cabbage, lettuce, cucumber, or tomatoes, one or more times per day during the past 30 days	68.5 (64.8 - 72.2)	67.5 (61.8 - 73.1)	69.8 (64.8 - 74.9)
Ate fruits and vegetables five or more times per day during the past 30 days	24.6 (22.1 - 27.0)	24.9 (20.6 - 29.3)	24.1 (21.3 - 26.8)
Usually drank carbonated soft drinks ,such as Coke or Sprite, Chubby ,Busta Seven Up, Pepsi, Fanta Solo or Cannings, two or more times per day during the past 30 days.	51.6 (46.4 – 56.8)	52.0 (46.7 – 57.4)	51.4 ( 44.5 – 58.3)
Ate at a fast food restaurants , such as KFC, Church’s, Royal Castle, Mario’s,Pizza Boys, Pizza Hut, Bos Burger on three or more of the past seven days.	20.1 (17.5 – 22.8)	20.2 ( 16.4 – 24.0 )	20.0 (17.0 – 23.1)

\*95% confidence interval.

In Trinidad and Tobago, overall, 6.0% of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. Overall, 64.7% of students usually ate fruit, such as oranges, grapefruit, apples, grape, melon, or pineapple, one or more times per day during the past 30 days. Overall, 68.5% of students usually ate vegetables, such as carrots, pumpkin, cabbage, lettuce, cucumbers, or tomatoes, one or more times per day during the past 30 days. Overall, 24.6% of students usually ate fruits and vegetables five or more times per day during the past 30 days. Overall, 51.6% of students usually drank carbonated soft drinks, such as Coke or Sprite, Chubby, Busta, Seven-Up, Pepsi, Fanta, Solo, or Canning's, two or more times per day during the past 30 days. Overall, 20.1% of students ate at a fast food restaurant, such as KFC, Church's, Royal Castle, Mario's, Pizza Boys, Pizza Hut, or Bos Burger on three or more of the past seven days.

## Hygiene

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin American countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increased sugar consumption and inadequate fluoride exposure (10). In addition to causing pain and discomfort, poor oral health can affect children's ability to communicate and learn. More than 50 million school hours are lost annually because of oral health problems (11). In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental disease (12).

Diarrhoeal diseases kill nearly 2 million children every year. Hygiene education and the promotion of hand-washing can reduce the number of diarrhoeal cases by 45% (13). About 400 million school-aged children are infected with worms worldwide. These parasites consume nutrients from children they infect, cause abdominal pain and malfunction, and can impair learning by slowing cognitive development (14).

*Table 4: Hygiene-related behaviours, by sex, Trinidad and Tobago, 2007.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Cleaned or brushed their teeth during the past 30 days	4.5 (3.2 – 5.8)	5.8 (4.2 -7.4)	2.9 (1.4 -4.5 )
Never or rarely washed their hands before eating during the past 30 days	10.6 (8.5 - 12.7)	10.7 (8.3 – 13.1)	10.3 ( 7.6 -12.9)
Never or rarely washed their hands after using the toilet or latrine during the past 30 days	4.2 ( 3.2 – 5.1)	4.9 (3.1 – 6.8 )	3.2 ( 2.0 – 4.4 )
Never or rarely used soap when washing their hands	8.9 ( 7.2 – 10.5)	9.2 (7.2 -11.1)	8.5 (6.4 -10.6)

\*95% confidence interval.

### Hygiene behaviours

In Trinidad and Tobago, the percentage of students who cleaned or brushed their teeth during the past 30 days was 4.5%. Overall, 10.6% of students never or rarely washed their hands before eating during the past 30 days.

Overall, 4.2% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. Overall, 8.9 % of students never or rarely used soap when washing their hands during the past 30 days.

## Mental Health

World-wide, approximately 20% of children and adolescents suffer from a disabling mental illness (15). Anxiety disorders, depression and other mood disorders, and behavioural and cognitive disorders are among the most common mental health problems among adolescents. Half of all lifetime cases of mental disorders start by age 14 (16).

Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviours. Each year, about 4 million adolescents world-wide attempt suicide. Suicide is the third leading cause of death among adolescents (17,18).

Table 5: Mental health issues among students, by sex, Trinidad and Tobago, 2007.

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Most of the time or always felt lonely during the past 12 months	11.6 (9.3 – 14.0)	8.2 (5.7 – 10.6)	15.1 (12.1 -18.1)
Most of the time or always felt so worried about something that they could not sleep at night during the past 12 months	10.5 (8.6 – 12.4)	6.4 (4.8 – 8.0)	14.4 (11.4 – 17.4)
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months	21.5 (18.9 -24.1)	15.5 (12.8 – 18.1)	27.3 (23.5 -31.0)
Seriously considered attempting suicide during the past 12months	17.9 (16.3 – 19.5)	14.1 (11.5 -16.8)	21.5 (18.7 -24.2)
Made a plan about how they would attempt suicide during the past 12 months	17.4 (15.4 -19.4)	15.2 (12.8 -17.6)	19.6 (16.9 -22.3)
Have no close friends	9.0 (7.6 -10.5)	8.8 (6.7 -10.9)	9.2 (7.2 -11.2)
Students who think of themselves as a religious or spiritual person	68.4 (64.8 – 72.0)	67.5 (64.1 – 70.9)	69.3 (63.8 – 74.7)

\*95% confidence interval.

### Loneliness and depression

In *Trinidad and Tobago*, 11.6% of students most of the time or always felt lonely during the past 12 months. Female students (15.1%) are significantly *more* likely than male students (8.2%) to feel lonely most of the time or always. Overall, 10.5% of students most of the time or always felt so worried about something that they could not sleep at night during the past 12 months. Female students (14.4%) are significantly *more* likely than male students (6.4%) to most of the time or

always feel so worried about something they can not sleep at night. Overall, 21.5% of students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. Female students (27.3%) are significantly *more* likely than male students (15.5%) to feel so sad or hopeless almost every day for two weeks or more in a row.

### **Suicidal behaviour**

Overall, 17.9% of students seriously considered attempting suicide during the past 12 months. Female students (21.5%) are significantly *more* likely than male students (14.1%) to seriously consider attempting suicide. Overall, 17.4% of students made a plan about how they would attempt suicide during the past 12 months. Overall, 17.4% of student made a plan about how they would attempt suicide. Overall, 9.0% of students have no close friends.

### **Physical Activity**

Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes (19).

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood (20). Participating in adequate physical activity also helps build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being (21).

Roughly 60% of the world's population is estimated to not get enough physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behaviour adopted at a young age is likely to persist (22).

Table 6: Physical activity among students, by sex, Trinidad and Tobago, 2007.

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Physically active for a total of at least 60 minutes per day on all seven days during the past seven days	19.4 (15.5 -23.3)	<b>25.1</b> <b>(20.2 -30.0)</b>	<b>13.8</b> <b>(11.0 -16.6)</b>
Physically active for a total of at least 60 minutes per day on all seven days during a typical or usual week	17.4 (13.9 -20.8)	<b>21.5</b> <b>(17.2 -25.8)</b>	<b>13.3</b> <b>(10.3 -16.3)</b>
Participated in physical activity for at least 60 minutes per day on less than five days per week on average	74.3 (70.0 -78.7)	<b>66.7</b> <b>(60.2 -73.2)</b>	<b>81.6</b> <b>(78.8 - 84.4)</b>
Spent three or more hours per day doing sitting activities during a typical or usual day	48.8 (46.1 -51.5)	44.6 (41.3 -47.9)	52.9 (47.8 -58.0)
Did not walk or bicycle to and from school during the past seven days	75.1 (71.3 -78.9)	73.5 (68.3 -78.6)	76.9 (72.0 -81.8)
Usually took 29 minutes or less to get to and from school each day during the past seven days	50.6 (46.3 -55.0)	53.4 (45.9 -61.0)	48.0 (43.0 -53.0)
Walked or bicycled to and from school for a total of 150 minutes or more during the past seven days	92.6 (91.3 -93.9)	92.7 (90.9 -94.4)	92.9 (90.5 -95.3)
Students who went to physical education class 4 or more days each week during the school year.	19.6 (17.1 - 22.1)	21.1 (18.3 - 23.9)	18.1 (14.4 - 21.9)

\*95% confidence interval.

### Physical Activity

In Trinidad and Tobago, 19.4% of students were physically active all 7 days during the past 7 days for a total of at least 60 minutes per day. Male students (25.1%) are significantly *more* likely than female students (13.8%) to be physically active all 7 days during the past 7 days. Overall, 17.4% of students were physically active 7 days during a typical or usual week for a total of at least 60 minutes per day. Male students (21.5%) are significantly more likely than female students (13.3%) to be physically active 7 days during a typical or usual week.

### Insufficient physical activity

Overall, 74.3% of students participated in insufficient physical activity (i.e., participated in physical activity for a total of at least 60 minutes per day on five or fewer days on average). Female students (81.6%) are significantly *more* likely than male students (66.7%) to participate in insufficient physical activity. Overall, 48.8% of students spent three or more hours per day doing sitting activities during a typical or usual day. Overall, 75.1% of students did not walk or bicycle to and from school during the past 7 days. Overall, 50.6% of students usually took less than 30 minutes to get to and from school each day during the past 7 days. Overall, 92.6% of students walked or bicycled to and from school for a total of 150 minutes or more during the past seven days.



## Protective Factors

For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviours including violence and sexual risk behaviours (23).

Adolescents who have a positive relationship with teachers, and who have positive attitudes towards school are less likely to initiate sexual activity early, less likely to use substances, and less likely to experience depression. Adolescents who live in a social environment which provides meaningful relationships, encourages self-expression, and also provides structure and boundaries, are less likely to initiate sex at a young age, less likely to experience depression, and less likely to use substances (24).

Being liked and accepted by peers is crucial to young people's health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to feelings of loneliness and psychological symptoms. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events (25).

Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours, and violence (26).

*Table 7: Protective factors among students, by sex, Trinidad and Tobago, 2007.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Missed classes or school without permission on one or more days during the past 30 days	23.3 (19.6 - 26.9)	<b>29.1</b> <b>(23.3 – 34.9)</b>	<b>17.3</b> <b>(13.3 - 21.3)</b>
Reported that most of the students in their school were kind and helpful never or rarely during the past 30 days	42.0 (38.4 - 45.5)	42.9 (38.4 - 47.3)	41.1 ( 34.8 - 47.4)
Students whose parents or guardians never or rarely checked to see if their homework was done during the past 30 days	42.9 (39.5 - 46.4)	40.3 (34.3 - 46.3)	45.6 (42.4 -48.9)
Students whose parents or guardians never or rarely understood their problems and worries during the past 30 days	46.8 (44.4 - 49.3)	43.9 (39.7 – 48.1)	49.6 (46.1 -53.1)
Students whose parents or guardians never or really knew what they were doing with their free time during the past 30 days	33.9 (30.7 – 37.0)	35.3 (31.1 – 39.4)	32.4 (29.1 – 35.6)
Students who rode in a motor vehicle driven by some one else, the percentage who never used a seat belt during the past 30 days.	48.2 (43.4 – 53.1)	49.4 ( 42.3 – 56.6)	47.0 (42.3 – 51.6)

\*95% confidence interval.

In Trinidad and Tobago, 23.3% of students missed classes or school without permission on one or more of the past 30 days. Male students (29.1%) are significantly **more** likely than female students (17.3%) to miss classes or school without permission.

Overall, 42.0% of students reported that most of the students in their school were kind and helpful never or rarely during the past 30 days. Overall, 42.9% of students reported their parents or guardians never or rarely checked to see if their homework was done during the past 30 days. Overall, 46.8% of students reported their parents or guardians never or rarely understood their problems and worries during the past 30 days. Overall, 33.9% of students reported their parents or guardians really know what they were doing with their free time never or rarely during the past 30 days. Overall, among the students who rode in a motor vehicle driven by some one else, 48.2% never used a seat belt during the past 30 days.

### **Sexual Behaviours that Contribute to HIV Infection, Other STI, and Unintended Pregnancy**

AIDS has killed more than 25 million people since 1981. As of 2005, an estimated 40.3 million people were living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people became infected with HIV (27). Young people between the ages of 15 and 24 are the most threatened group, accounting for more than half of those newly infected with HIV. At the end of 2003, an estimated 10 million young people aged 15 to 24 were living with HIV. Studies show that adolescents who begin sexual activity early are likely to have sex with more partners and with partners who have been at risk of HIV exposure and are not likely to use condoms. In many countries, HIV infection and AIDS is reducing average life expectancy, threatening food security and nutrition, dissolving households, overloading the health care system, reducing economic growth and development, and reducing school enrolment and the availability of teachers (28).

STIs are among the most common causes of illness in the world and have far-reaching health consequences. They facilitate the transmission of HIV and, if left untreated, can lead to cervical cancer, pelvic inflammatory diseases, and ectopic pregnancies (29). Worldwide, the highest reported rates of STIs are found among people between 15 and 24 years; up to 60% of the new infections and half of all people living with HIV globally are in this age group (30).

*Table 8: Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students, by sex, Trinidad and Tobago, 2007.*

<b>Question</b>	<b>Total % (CI)*</b>	<b>Sex</b>	
		<b>Male % (CI)</b>	<b>Female % (CI)</b>
Ever had sexual intercourse.	26.0 (22.4 – 29.6)	<b>32.0</b> <b>(25.5 - 38.6)</b>	<b>20.2</b> <b>(16.5 – 24.0)</b>
Had sexual intercourse for the first time before age 13.	13.2 (10.8 – 15.6)	<b>19.9</b> <b>(14.8 – 24.9)</b>	<b>6.3</b> <b>(4.4 – 8.2)</b>
Had sexual intercourse with two or more people during their life	17.6 (14.8 -20.4)	<b>23.9</b> <b>(18.8 – 29.1)</b>	<b>11.4</b> <b>(9.0 – 13.8)</b>
Had sexual intercourse during the past 12 months	24.9 (21.7 – 28.2)	29.9 (25.2 – 34.7)	20.2 (16.5 -23.9)
Among students who had sexual intercourse during the past 12 months,	59.1 (53.6 – 64.6)	63.3 (56.0 -70.6)	53.3 (45.0 – 61.6)

those who used a condom the last time they had sexual intercourse			
Students who would most likely get a condom or rubbers from a pharmacy, clinic, or hospital if they wanted one	37.3 (35.0 – 39.7)	36.1 (31.9 – 40.2)	38.8 (36.4 -41.2)
Students who had sexual intercourse, who during the past 12 months most of the time or always used a method of birth control with their partner.	22.4 (15.8 – 29.1)	23.1 (14.4 – 31.7)	20.8 (11.2 – 30.4)

\*95% confidence interval.

In *Trinidad and Tobago*, 26.0% of students had sexual intercourse during their life. Male students (32.0%) are significantly *more* likely than female students (20.2%) to have had sexual intercourse. Overall, 13.2% of students had sexual intercourse for the first time before age 13. Male students (19.9 %) are significantly *more* likely than female students (6.3 %) to have sexual intercourse for the first time before age 13. Overall, 17.6% of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Male students (23.9%) are significantly *more* likely than female students (11.4%) to have had multiple partners. Overall, 24.9% of students had sexual intercourse during the past 12 months. Male students (29.9%) are significantly *more* likely than female students (20.2%) to have had sexual intercourse during the past 12 months. Among students who had sexual intercourse during the past 12 months, 59.1% used a condom the last time they had sexual intercourse.

Overall, 37.3% of students would most likely get a condom or rubbers from a pharmacy, clinic, or hospital if they wanted one. Among students who had sexual intercourse, 22.4% used a condom during the past 12 months most of the time or always with their partner the last time they had sexual intercourse.

### **Tobacco Use**

About 1.1 billion people worldwide smoke and the number of smokers continues to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020 (31). The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, strokes, emphysema and many other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. Children are at particular risk from adults' smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle ear disease, and possibly neuro-behavioural impairment and cardiovascular disease in adulthood. Many studies show that parental smoking is associated with higher youth smoking (32).

Table 9 : Tobacco use among students, by sex, Trinidad and Tobago, 2007.

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Among students who smoked cigarettes on one or more of the past 30 days, those who tried their first cigarette at age 13 or younger	80.9 (72.4 – 89.4)	85.9 (77.7 – 94.1)	NA**
Smoked cigarettes on one or more days during the past 30 days	9.9 (7.7 – 12.1)	11.2 (8.5 – 14.0)	8.5 (6.2 – 10.8)
Used any other form of tobacco, such as hemp, on one or more days during the past 30 days	7.3 (5.3 – 9.3)	8.3 (6.0 – 10.5)	6.2 (3.2 – 9.1)
Used any other form of tobacco on one or more of the past 30 days	12.2 (9.3 -15.0)	14.1 (10.5 -17.6 )	10.2 ( 7.3 -13.0)
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes	58.2 (52.9 – 63.4)	56.0 (48.0 – 64.0)	63.2 (56.4 -69.9)
Reported people smoked in their presence on one or more days during the past seven days	66.0 (62.5 – 69.4)	68.0 (63.7 – 72.2)	63.9 (59.0 -68.9)
Have a parent or guardian who uses any form of tobacco	29.5 (27.1 – 32.0)	28.3 (24.3 -32.4)	30.9 (28.2 – 33.7)
Students who probably or definitely think they will smoke a cigarette during the next 12months	11.7 (10.0 -13.3)	11.7 ( 9.7 -13.8)	11.6 ( 9.6 – 13.5)
Students who probably or definitely smoke if one of their best friends offered them a cigarette	9.6 (7.9 - 11.2)	11.1 ( 8.8 - 13.3)	8.0 (6.2 – 9.8 )

\*95% confidence interval.

\*\*Not available. Subgroup contains <100 students.

### Prevalence of tobacco use

In Trinidad and Tobago, of the students who smoked cigarettes on one or more of the past 30 days, 80.9% tried their first cigarette at age 13 or younger. Overall 9.9% smoked cigarettes on one or more days during the past 30 days. Overall, 7.3% of students used any other form of tobacco, such as hemp on one or more days during the past 30 days. Among students who smoked cigarettes during the past 12 months, 58.2% tried to stop smoking cigarettes. Overall, 66.0% of students reported that people smoked in their presence on one or more days during the past seven days. Overall, 29.5% of students had a parent or guardian who uses any form of tobacco.

Overall 11.7% of students probably or definitely think they will smoke a cigarette during the next 12 months. Overall 9.6% of students probably or definitely would smoke if one of their best friends offered them a cigarette. There were no significant findings of tobacco use among students by sex from this study. However, the Global Youth Tobacco Survey of 2000, finding revealed that 40% of those surveyed smoked cigarettes once in their lives, with males having a greater inclination. In addition, one fifth of those surveyed first smoked before age ten, and twice as many boys felt it looked more 'cool' to smoke.

## Violence and Unintentional Injury

Unintentional injuries are a major cause of death and disability among young children (33). Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000 (34). For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment (35). Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours. Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour, and suicide attempts (36).

*Table 10: Violence and unintentional injury among students, by sex, Trinidad and Tobago, 2007.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Were physically attacked one or more times during the past 12 months	39.8 (35.2 -44.4)	<b>49.2</b> <b>(44.5 -53.9)</b>	<b>30.0</b> <b>(25.5 -34.6)</b>
Were in a physical fight one or more times during the past 12 months	42.0 (38.2 – 45.8)	<b>55.9</b> <b>(52.7 – 59.1)</b>	<b>27.9</b> <b>(24.0 – 31.8)</b>
Were seriously injured one or more times during the past 12 months	47.9 (45.2 – 50.6)	<b>53.6</b> <b>(49.7 – 57.5)</b>	<b>42.0</b> <b>(38.3 – 45.6)</b>
Among students who were seriously injured during the past 12 months, those whose most serious injury happened to them while they were playing or training for a sport	28.9 (23.0 – 34.8)	35.8 (27.3 – 44.3)	20.5 (13.5 – 27.6)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	25.6 (22.3 – 28.9)	23.5 (18.5 – 28.5)	28.4 (24.8 – 32.0)
Among students who were seriously injured during the past 12 months, the percentage whose most serious injury was the result of them hurting themselves by accident	43.6 (38.4 – 48.8)	41.3 (33.6 – 49.0)	47.0 (41.6 – 52.4)
Among students who were seriously injured during the past 12 months, the percent who had a broken bone or dislocated joint as their most serious injury	17.0 (13.2 - 20.7)	19.6 (15.3 – 23.9)	14.0 (9.3 -18.7)
Were bullied on one or more days during the past 30 days	20.8 (17.7 -23.9)	22.6 (19.1 – 26.0)	18.9 (15.2 -22.6)
Among students who were bullied during the past 30 days, those who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.	17.4 (13.0 – 21.7)	<b>26.6</b> <b>(19.4 - 33.7)</b>	<b>7.3</b> <b>(3.9 – 10.8)</b>

Belonged to a violent group.	16.5 (13.1- 19.9)	<b>22.2</b> <b>(17.6 – 26.8)</b>	<b>10.9</b> <b>( 7.8 – 14.1)</b>
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\*95% confidence interval.

### **Physically attacked**

In Trinidad and Tobago, 39.8% of students were physically attacked one or more times during the past 12 months. Male students (49.2 %) are significantly more likely than female students (30.0%) to have been physically attacked one or more times during the past 12 months. Overall 42.0% of students were in a physical fight one or more times during the past 12 months. Male students (55.9 %) are significantly more likely than female students (27.9 %) to have been in a physical fight. Overall, 47.9% of students were seriously injured one or more times during the past 12 months. Male students (53.6 %) are significantly more likely than female students (42.0 %) to have been seriously injured.

### **Seriously injured**

Among students who were seriously injured during the past 12 months, 28.9% were playing or training for a sport when their most serious injury happened to them, 25.6% had their most serious injury caused by a fall, 43.6% had their most serious injury occur as a result of hurting themselves by accident, and 17.0% experienced a broken bone or dislocated joint as their most serious injury.

### **Bullied**

Overall, 20.8% of students were bullied on one or more days during the past 30 days. Among students who were bullied during the past 30 days, 17.4% were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (26.6%) are significantly more likely than female students (7.3%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

### **Belonging to violent groups**

Overall, 16.5% of students belong to a violent group. Male students (22.2%) are significantly more likely than female students (10.9%) to belong to a violent group.

## **CONCLUSIONS**

In Trinidad and Tobago, students today are faced with a number of challenges, such as substance abuse, violence in schools, peer pressure, media advertisement, and interpersonal relationships just to name a few. The GSHS revealed that students in Trinidad and Tobago engaged in dangerous health practices and therefore are at risk for a number of health problems related to lifestyle choices and behaviours. The study highlighted some interesting but troubling findings on health issues among the study population. The significant findings revealed the level of alcohol and other drug use; mental health issues; sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy; and violence and unintentional injury are high among adolescents. On the other hand, involvement in protective factors by parents and physical activity by students are low. It is imperative that the high and low levels in the respective areas be addressed urgently by the policy makers, parents, adolescent, and other stakeholders to reverse these unhealthy situations.

### **Alcohol and Other Drug Use**

The high consumption of alcohol and other drug used by students, coupled with the apparent easy access to the substance is a cause for serious concern. Notable from this survey, was the 13- 15 year old indulgence with alcohol, where 47.6% of the boys compared to 35.6 % of the girls drank two or more drinks per day on the days they drank alcohol. The study revealed that more boys (57.0 %) in form 2 than girls (29.8%) drank two or more drinks per day on the days they drank alcohol. Overall 42.5 % of students drank two or more drinks per day on the days they drank alcohol during the past 30 days with male students at 47.9% and females at 36.3%. In addition, the apparent easy access to alcohol by male students is also troubling. Since the survey showed that overall 27.1% of boys compared to 7.4% of girls reported they got the alcohol they drank by buying it in a store, shop, or street vendor. In the 13-15 age groups, 22.1% of males compared to 8.0% of females, got the alcohol they drank by buying it in a store, shop, or street vendor. However, 31.6% of male students in form 3 and 5.5% of the females reportedly access the alcohol they drank by buying it in a store, shop, or street vendor. This practice must cease, therefore, the appropriate legislation must be enforced to prevent students from having easy access to alcohol.

The prevalence of reported use of drugs, such as marijuana, hemp, or cocaine one or more times during their life was 13.6%. Males (17.5%) were significantly more likely than females (9.6%) to report drug use during their life. There was no significant difference in terms of age and form as related to reported drug use during their life.

### **Mental health (loneliness, being worried, hopelessness, suicidal ideas and plans)**

The most disturbing finding from the survey was on suicide. It showed that females are significantly more likely than males to be affected with mental health issues. In that 15.1% of females compared to 8.2% males felt lonely most of the time or always during the past 12 months. In the 13-15 year age group, 14.7% of females and 8.2% of males reported they felt lonely most of the time or always during the past 12 months. In addition, 14.4% of females compared to 6.4 % of males always felt so worried about something that they could not sleep at night. An overall 21.5% of students reported they felt sad or hopeless almost every day for more than two weeks in a row that they stopped doing their usual activities during the past month. Of these students, 27.3% were females and 15.5% were males. What is more unsettling is the findings showing 21.5% of females and 14.1% of males reporting that they seriously considered attempting suicide during the past 12

months. Also, the study revealed that 17.4% of the students made a plan about how they would attempt suicide during the past 12 months with female students at 19.6% and male students at 15.2%. The study found that overall 9.0% of students reported they have no close friends including 9.2% of females and 8.8 % of males.

Students must be encouraged to talk about things/issues that are affecting them. Parents and teachers must be taught to recognize changes in the mood and behaviours of their children and refer them for appropriate intervention. In addition, there is a dearth of data on mental health problems among adolescent in Trinidad and Tobago and research should be conducted in this area.

### **Physical activity**

Physical activity among the study population was higher for the males 25.1% compared to 13.8 % of the females who reported they were active all seven days for a total of at least 60 minutes per day during the past seven days. Interestingly, 81.6% of the females, while only 66.7% males reported they participated in physical activity for at least 60 minutes per day or less than five days per week on average. Within the 13-15 age groups the percentages were similar with male at 67.7% and females at 81.5%. The advantages of physical activity on good health and the consequences of inactivity and non communicable diseases in the future must be explained to students. Along with a school policy which should clearly state the minimum period of time all students should engage in some type of planned physical activity.

### **Protective factors**

In Trinidad and Tobago, 23.3% of students missed classes or school without permission on one or more of the past 30 days. Male students (29.1%) are significantly more likely than female students (17.3%) to miss classes or school without permission. They could become involved in deviant behaviours, therefore it is important for parents to know where they are and who they are with, so that their activities and behaviour can be monitored.

### **Sexual behaviours**

The study showed that students are engaging in sexual activity at about puberty when their bodies are still immature. In fact, the males in this survey were found to be more sexually active than the females. In that 32.0% of the males reported they had sexual intercourse and 19.9% had sexual intercourse for the first time before the age of 13. In addition 23.9% had multiple partners during their life and 29.9% had sexual intercourse during the past 12 months.

Students must be dissuaded from these practices, since they are unable to cope with the unplanned pregnancies and or contraction of sexually transmitted infections and the resulting negative effect on their education. Therefore, it is imperative that students be exposed to age-appropriate health and family life education early in their school life.

### **Violence and unintentional injury**

The study found that violence, unintentional injury, bullying, and belonging to a violent group were more male dominated. In fact, 49.2% of male students compared to 30.0% of female students reported to have been physically attacked one or more times during the past 12 months. In addition, 55.9% of male students in comparison to 27.9% of female students indicated they have been in a physical fight and 53.6% of male students reported they have been seriously injured. This is a worrying trend which requires urgent action.



## **RECOMMENDATIONS**

- Health Education and Health Promotion should be introduced to students at an early age, since students must be provided with an enabling environment and equipped with knowledge, attitudes, skills, and values. These could assist students in facing challenges and help them in making healthy lifestyle choices in the face of peer and other social pressure.
- Implement the School Health Policy and establish a Comprehensive School Health Service and Adolescent Health for students.
- Mental health issues and other coping skill should be taught as of part of the curriculum
- Parents/guardians must be actively involved and supported to maintain students' healthy behaviours, through the strengthening of Parent Teachers Associations and other support groups.
- The mass media, both electronic and print, should be used to highlight health issues affecting students and provide interventions and or possible solutions to same.
- Create a supportive environment for student to seek and receive counselling for substance abuse, mental health issues and other personal / social problems with out fear of exposure and or discrimination.
- Reinforce abstinence messages and strongly encourage students to delay sexual initiation.
- Enforce legislation so as to prevent students from having easy access to purchase alcohol and tobacco.
- Health and Family Life Education must be placed on the curriculum and taught in all schools.
- Emphasis on adopting healthy lifestyles, including eating balanced meals, conflict management, and avoidance of alcohol, drugs, and other illicit substances must be stressed during teaching sessions.
- Students must be taught the benefit of exercise and they must be encouraged to participate in some type of structured physical activity.
- A follow up GSHS is recommended to be conducted in three years (2010) to obtain data on adolescent health behaviours, to determine trends, compare findings, and use to develop policies, programmes, and evaluate school and adolescent health.

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## **Appendix**

### GSHS Questionnaire