



Global School-based Student Health Survey
2011
Country Report
Republic of Mauritius



Ministry of Health & Quality of Life, Mauritius

January 2013



Report of the
Global School-based Student Health Survey
2011

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ACKNOWLEDGMENTS

I would like to thank all those individuals at the Headquarters of the Ministry of Health & Quality of Life who contributed to the success of this survey, specially Dr N Gopee, the previous Director General Health Services and Dr K Pauvaday, the present Director General Health Services.

I am grateful to the WHO country office for funding this survey through the WHO Biennium funds 2010-2011.

I would like to acknowledge the contribution of the members of the GSHS Steering Committee for their help with questionnaire selection and the survey administrators in Mauritius and Rodrigues for the field work.

I wish to place on record the cooperation extended by the officials at the Headquarters of the Ministry of Education and Human Resources. This survey would not have been possible without the help of the Zone Directors, Rectors, staff and students of all the schools that participated in the survey in Mauritius and Rodrigues.

I would like to recognise the contribution of Laura Kann and Connie Lim of the Centers for Disease Control and Prevention (CDC), and that of Ms Leanne Riley of the WHO in this survey. Lastly, I acknowledge any contribution from anyone else who may inadvertently not have been recognised above.

EXECUTIVE SUMMARY

The Global School-based Student Health Survey (GSHS) was developed in 2001 by the World Health Organisation in collaboration with UNAIDS, UNESCO, and UNICEF, with technical assistance from the US Centers for Disease Control and Prevention (CDC). The GSHS focuses on critical health behaviours and protective factors established during adolescence and provides scientific evidence, based on which school health and youth health programs and policies can be developed, implemented and evaluated.

The Global School-based Student Health Survey was first conducted in the Republic of Mauritius in 2007, followed by a second survey in 2011. The GSHS employs a standardised two-stage cluster sample design to produce a representative sample of students aged between 13 to 15 years, which corresponds to Forms II, III and IV in Mauritius. Core questionnaire modules and core expanded questions are combined to form a self administered anonymous questionnaire which is administered in a regular class period. Survey administration was carried out from 28 June to 30 August 2011 in Mauritius and 20 to 24 June 2011 in Rodrigues.

The main findings are as follows:

- In Mauritius, 24 schools participated in the survey, the school response rate was 100 %, the student response rate was 82 %, and the overall response rate was 82 %, while in Rodrigues all 5 schools participated in the survey, the school response rate was 100 %, the student response rate was 91%, and the overall response rate was 91 %.
- A total of 2168 students in Mauritius and 1136 students in Rodrigues participated in the survey.
- 12.7% students in Mauritius and 5.1 % in Rodrigues were underweight, 21.2 % students in Mauritius and 20.0 % students in Rodrigues were overweight, while 6.2 % students in Mauritius and 5.6 % in Rodrigues were obese.
- 27.2 % students in Mauritius and 32.9 % students in Rodrigues usually ate fruits and vegetables five or more times per day during the preceding 30 days. 56.7 % students in Mauritius and 54.8 % in Rodrigues reported eating breakfast most of the time or always during the past 30 days.
- 33.9 % of students in Mauritius and 34.3 % students in Rodrigues were in a physical fight one or more times during the past twelve months, and 22.6 % of students in Mauritius

and 31.5 % in Rodrigues reported being physically attacked one or more times during the past 12 months. 38.8 % of students in Mauritius and 46.6 % in Rodrigues were seriously injured one or more times during the past 12 months. Concerning bullying, 34.8 % of students in Mauritius and 50.0 % in Rodrigues reported being bullied on one or more days during the past 30 days prior to the survey.

- 15.1 % of students in Mauritius and 13.5 % students in Rodrigues were current smokers, defined as students who smoked cigarettes on one or more days during the past 30 days, while among students who ever smoked cigarettes, 74.5 % students in Mauritius and 76.4 % in Rodrigues tried their first cigarette before the age of 14 years. 68.5 % of students in Mauritius and 78.8 % in Rodrigues reported people smoking in their presence, and among students who tried to buy cigarettes in the past 30 days, 32.8 % in Mauritius and 48.2 % in Rodrigues were refused sale of cigarettes because of their age. 70.8 % of current smokers in Mauritius and 74.3 % in Rodrigues reported having tried to stop smoking.
- The prevalence of current alcohol use, that is students who drank at least one drink containing alcohol on one or more of past 30 days, was 24.1 % in Mauritius and 26.8 % in Rodrigues. Among students who reported current alcohol use, 71.2 % in Mauritius and 72.6 % in Rodrigues had their first drink of alcohol before the age of 14 years. 47.0 % of students in Mauritius and 61.0% in Rodrigues usually drank alcohol in the company of friends. Among students who tried to buy alcohol in the past 30 days, 31.3 % of students in Mauritius and 44.6 % in Rodrigues reported that someone refused to sell them alcohol because of their age.
- The prevalence of lifetime marijuana use was 4.8% in Mauritius and 6.5% in Rodrigues.
- In Mauritius and Rodrigues 22.20 % and 29.7 % students respectively ever had sexual intercourse. It was found that among students who had sexual intercourse, 46.9 % in Mauritius and 55.7 % in Rodrigues had sexual intercourse before they were 14 years old. Of those who were sexually active, 44.0 % in Mauritius and 67.2 % in Rodrigues used a condom during their last sexual intercourse.
- Only 19.4 % of students in Mauritius and 18.8 % in Rodrigues were physically active for a total of at least 60 minutes per day on all 7 days during the past week, and 39.4 % of

students in Mauritius and 38.5 % of students in Rodrigues spent three or more hours per day doing sitting activities during a typical or usual day.

The results of the 2011 GSHS show that there is a substantial prevalence of risky health behaviours in the adolescent population in Mauritius and Rodrigues. GSHS surveillance data can be used as a basis for developing health policies and health promotion programs in schools and in other settings where adolescents congregate, so as to inculcate healthy lifestyles and to develop life skills among the young in view of the high prevalence of non-communicable diseases in the country. This report can also be used for health-related curriculum development. It is recommended that Mauritius continues with GSHS surveillance in order to track trends in health risk behaviors among the student population.

1. INTRODUCTION

The Global School-based Student Health Survey was conducted in the Republic of Mauritius (the islands of Mauritius and Rodrigues) from June to August 2011, by the Ministry of Health & Quality of Life in collaboration with the Ministry of Education & Human Resources and the World Health Organisation. This is the second national school health survey which has been conducted to comprehensively assess the range of health behaviors and protective factors among adolescents. The first Mauritius and Rodrigues GSHS was carried out in 2007.

1.1 Global School-based Student Health Survey (GSHS)

The Global School-based Student Health Survey (GSHS) was developed in 2001 by the World Health Organisation in collaboration with UNAIDS, UNESCO, and UNICEF, with technical assistance from the US Centers for Disease Control and Prevention (CDC). The GSHS focuses on critical health behaviours and protective factors established during adolescence and is designed to help countries measure and assess the behavioural risk factors and protective factors in ten key areas in young people aged 13 to 15 years.

Data from the GSHS provides scientific evidence, based on which school health and youth health programs and policies can be developed, implemented and evaluated.

To date 104 countries have implemented the GSHS or are in process of implementation¹.

The overall aim of the GSHS is to provide accurate data on student health behaviours in order 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 collects data on 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

Countries develop their unique questionnaire for students by selecting at least 6 of these topics, and using the core questionnaire and core expanded questionnaire modules for each topic, which have been developed by the WHO.

1.2 Health profile in Mauritius

Mauritius has undergone an epidemiological transition, whereby there has been a shift from a pattern of high prevalence of infectious diseases to a high prevalence of chronic and degenerative diseases. Economic and social progress has resulted in the population adopting modern lifestyles with changes in dietary habits, decreased physical activity, sedentary and stressful lifestyles, increased alcohol consumption and cigarette smoking. This has resulted in a high prevalence of non communicable diseases such as diabetes, hypertension, coronary heart disease, and cancers in the Mauritian population.

Since risky lifestyle habits are inculcated during childhood, strategies to reduce the burden of health problems, specially non communicable diseases, should be targeted towards the young. Besides providing basic education, schools can be an entry point for effective health promotion, so that pupils can develop healthy attitudes and behaviours which can be carried forward to the next generation.

1.3 School health services in Mauritius

There is a well established school health program in Mauritius which includes a number of activities in school settings. An ongoing screening program is carried out in both primary and secondary schools for the early detection of disease risk factors in schoolchildren, and for timely referral for further care and follow up.

The screening program is supplemented by a school health education program in pre-primary, primary and secondary schools. Interventions are tailored to the pupils' age groups and are mainly in the areas of environmental sanitation, good hygiene, healthy lifestyle, substance abuse and reproductive health.

Health education also forms part of the school curriculum. It is taught as a separate subject in primary schools while health topics are included in Science and Biology subjects in the secondary school curriculum.

1.4 Literature Review

Global school based student health surveys have been conducted in many countries. The 2007 Seychelles Global School-based Student Health Survey (GSHS) ² showed that among students aged between 11 to 17 years, 22% were overweight or obese and 45% of all students reported that they ate the recommended amount of five or more portions of fruits and vegetables per day. Only 15% of all students spent 30 minutes or more per day walking or riding a bicycle to and from school. More than half of all students (54%) reported doing sitting activities during at least 3 hours per day. This survey also documented that 17% of all students smoked cigarettes and 58% of all students drank alcohol on at least one day during the past 30 days, and 26% of all students ever had sexual intercourse.

India carried out a Global School-based Student Health Survey (GSHS) in 2007.³ The survey measured hygiene, dietary behaviours and overweight, physical activity, tobacco use, mental health and protective factors in a sample of 8,130 students. It was found that 10.8% of students aged between 13 to 15 years were overweight and 2.1% were obese.

It was seen that 30.2% of students were physically active for a total of at least 60 minutes per day on all 7 days of the week, while 23.2% reported doing sitting activities for at least 3 hours per day. The prevalence of current tobacco use was very low, that is 1.2% of all students smoked cigarettes on at least one day during the past 30 days.

The Global School-based Student Health Survey (GSHS) was carried out in Fiji in 2010⁴. It found that 19.2% of students aged between 13 to 15 years were overweight and 5.2 % were obese. In the same age group 11.7% of students smoked cigarettes on one or more days during the past 30 days, among whom 70.7% had first tried a cigarette before the age of 14 years. Survey findings also indicated that 33.4% of the students sampled were physically active for a total of at least 60 minutes per day on five or more days during the seven days prior to the survey and 26.9% reported doing sitting activities during at least 3 hours per day. 15.6% of all students surveyed ever had sexual intercourse, and 54.3% had sexual intercourse for the first time before age 14 years.

Several surveys to measure adolescent behaviours have previously been conducted in Mauritius.

The Global Youth Tobacco Survey⁵ was conducted in 2003 and 2008, and provided data on the smoking behaviour of the school population. The 2008 GYTS revealed that among the 13 to 15 year olds, 13.7% of students in Mauritius and 11.9% of students in Rodrigues were current smokers, 28.4% in Mauritius and 35.9% in Rodrigues had ever smoked a cigarette, and the most common age to start smoking both in Mauritius and in Rodrigues was 12 to 13 years.

The Mauritius Nutrition Survey⁶ which was carried out in 2004, revealed that in the age group 12 to 19 years, 7.3% of adolescents were obese while 8.4% were overweight, and 44.2% spent two or more hours per day watching television and playing with other electronic gadgets. In the same age group, 10.8 % of males and 4.2% of girls were current smokers, and 15.2% of males and 9.5% of females were casual drinkers.

A study on behaviours related to HIV/AIDS in young people aged between 15 and 24 years in Mauritius⁷ showed that 20% of the sample declared taking ‘soft drugs’ (cannabis/ marijuana/ ganja/ oral medication) while 4% admitted that they take ‘hard drugs’ (cocaine/ heroin/ subutex/ ecstasy). 1.4% of the respondents claimed that they inject heroin and 1.1% use Subutex or an equivalent drug. 43% of the young people interviewed declared that they have had sexual intercourse, which was more common amongst males (58%) versus females (29%). In general, 66% of the ‘ever had sex’ respondents were sexually committed to only one partner in the last 12 months and 25% to several partners. 15% of the interviewed sample claimed to have alcoholic drinks at least once a week and 37% less often.

A Knowledge, Attitude and Behavioral study related to HIV and AIDS amongst youth aged 15-24 years in Rodrigues⁸ revealed that 64% of the young interviewed already had had a sexual encounter. 70% had their first sexual experience when they were above 15 years old while 14% were aged less than 15 years old. Sexual intercourse is more prevalent amongst males (71%) than females (58%). 24% had only one sex partner while 49% had 5, or more than 5 sexual partners.

A study on Street children in Mauritius⁹ estimated that there are about 6780 children in the ‘street situation’ in Mauritius. This study found that among 940 respondents, 21.3% declared that they have had sexual intercourse. The average age at first sexual intercourse was found to be 13.8 years and ranged from the ages of 6 to 19 years. It is worth noting that 78.8% of those who have had sexual intercourse did so before the age of 16 years. In relation to substance abuse, 30.2% of the sample declared that they were either smoking and/or taking other illicit hard drugs.

2. METHODS

2.1 Sampling

The 2011 Mauritius and Rodrigues GSHS employed a two-stage cluster sample design to produce a representative sample of students in Forms II, III, and IV.

The first-stage sampling frame consisted of all schools containing Forms II, III, and IV. Schools were selected with probability proportional to school enrolment size.

25 secondary schools were selected to participate in the Mauritius GSHS and 5 secondary schools were selected to participate in the Rodrigues 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.

2.2 Weighting

In order to minimise bias and to reflect the likelihood of sampling each student, a weighting factor was applied to each student record, so that the results could be used to make accurate inferences about the priority health-risk behaviours of the whole population of students in Forms II, III, and IV. The weight used for estimation was calculated by the following formula:

$$W = W1 \times W2 \times f1 \times f2 \times f3$$

where:

W1 = the inverse of the probability of selecting the school;

W2 = the inverse of the probability of selecting the classroom within the school;

f1 = a school-level nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrolment instead of number of schools.

F2 = a student-level nonresponse adjustment factor calculated by class.

F3 = a poststratification adjustment factor calculated by Form.

2.3 Ethical considerations

Approval to conduct the survey was obtained from the Ethics Committee of the Ministry of Health & Quality of Life.

The survey questionnaire was submitted for vetting to the Ministry of Education & Human Resources, whose permission was obtained prior to survey administration in schools.

Written consent was obtained from parents and guardians to enable students to participate in the survey.

2.4 Response rates

In Mauritius, 2168 students in 24 schools participated in the 2011 GSHS. The school response rate was 100 %, the student response rate was 82 %, and the overall response rate was 82 %.

In Rodrigues, 1136 students in 5 schools participated in the 2011 GSHS. The school response rate was 100 %, the student response rate was 91%, and the overall response rate was 91 %.

Table 1 shows the response rates for Mauritius and Rodrigues.

Region	Number of schools	School response rate	Student response rate	Overall response rate
Mauritius	24	100	82	82
Rodrigues	5	100	91	91

Table 1. Response rates in Mauritius and Rodrigues

2.5 Data management

The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that took into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending Forms II, III and IV in Mauritius and Rodrigues.

The data was processed and analysed using the EPI-Info statistical package. In this report, percentages have been calculated, and some cross-tabulations have also been included.

2.6 Survey administration

After the selection of schools, the Rectors of each selected college were sent a formal invitation to participate in the 2011 Mauritius and Rodrigues GSHS. The parents of selected participants were given an information sheet about the survey and a consent form to allow their child or ward to participate in the GSHS.

Survey administration was carried out from 28 June to 30 August 2011 in Mauritius and 20 to 24 June in Rodrigues. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered 58-item questionnaire in their classroom and recorded their responses directly on a computer-scannable answer sheet.

12 Survey Administrators in Mauritius and 10 Survey Administrators in Rodrigues were specially trained to conduct the GSHS. They included staff from the NCD & Health Promotion Unit in Mauritius and from varied grades in Rodrigues. (List of survey administrators is at *Appendix I*).

2.7 GSHS questionnaire

The Mauritius and Rodrigues GSHS questionnaire included a total of 58 questions representing seven of the ten GSHS core modules. It addressed the following modules:

- Demographics
- Dietary behaviours
- Violence and unintentional injury
- Tobacco use
- Alcohol and other drug use
- Sexual behaviours
- Physical activity

The questionnaire was developed by selecting questions from the standard GSHS questionnaire by the GSHS technical steering committee. (Members of the Steering Committee at *Appendix II*). (Survey questionnaire is at *Appendix III*).

3. RESULTS

3.1 Demographic characteristics of participants

In **Mauritius** 2168 pupils participated in the survey, out of whom 990 were boys and 1172 were girls. In **Rodrigues** 1136 pupils participated in the survey, out of whom 495 were boys and 640 were girls.

Survey site	Total	Sex*				Age*			Forms*		
		Boys		Girls		12 yrs or younger	13-15 years	16 yrs or older	II	III	IV
		No	%	No	%						
M	2168	990	48.6	1172	51.4	189	1891	87	639	761	751
R	1136	495	47.0	640	53.0	82	979	75	339	372	414

*Missing data not included. *M=Mauritius* *R=Rodrigues*

Table 2. Demographic table

Figures 1a and 1b show the distribution of children by age group in Mauritius and Rodrigues respectively. 87% of the respondents in Mauritius and 86% in Rodrigues were aged between 13 to 15 years.

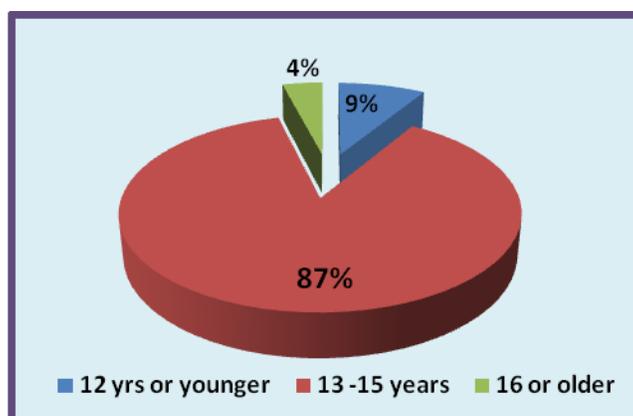


Figure 1a. Distribution of children by age group in Mauritius

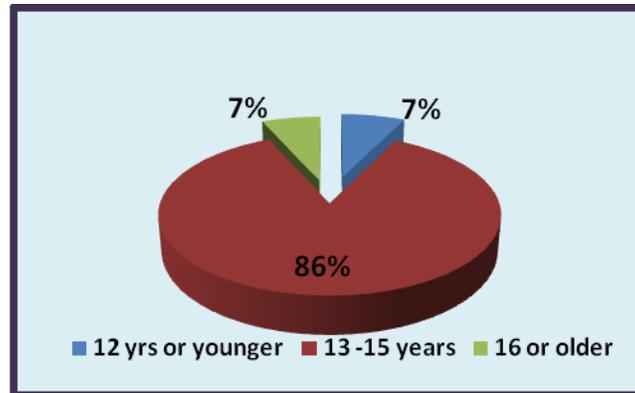


Fig 1b. Distribution of children by age group in Rodrigues

3.2 Dietary behaviours

3.2.1 Mauritius

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Students who were underweight	12.7 (10.6 - 15.1)	14.5 (11.2 - 18.6)	11.0 (9.1 - 13.1)
Students who were overweight¹	21.2 (19.3 - 23.3)	22.9 (19.8 - 26.2)	19.7 (16.6 - 23.2)
Students who were obese²	6.2 (5.3-7.3)	7.8 (7.0 - 8.7)	4.8 (3.3 - 6.9)

* CI 95% confidence interval.

¹Students who were above +1SD (equivalent to BMI 25 kg/m² at 19 years)¹⁰

²Students who were above +2SD (equivalent to BMI 30 kg/m² at 19 years)

Table 3. Body weight (Mauritius)

As shown in Table 3, 12.7 % of students were underweight (i.e., <-2SD from median for BMI by age and sex). Male students (14.5%) are not significantly different from female students (11.0 %) to be underweight.

It was found that 21.2 % of students were overweight (i.e., > + 1 SD for body mass index by age and sex). No significant difference was found between the percentage of male students (22.9%) and female students (19.7 %) who were overweight.

It was also found that 6.2 % of students were obese (i.e.,>+2SD from median for BMI by age and sex). No significant difference was found between the percentage of male students (7.8 %) and female students (4.8%) who were obese.

The category of above + 1 SD for body mass index by age and sex includes students who were overweight and obese, while that of above +2SD includes students who were obese only.

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Students who usually ate fruit two or more times per day during the past 30 days	30.2 (24.6-36.5)	33.7 (29.4-38.2)	26.9 (20.5-34.6)
Students who usually ate vegetables three or more times per day during the past 30 days	35.8 (33.1-38.6)	34.7 (30.5-39.2)	36.8 (32.2-41.7)
Students who usually ate fruits and vegetables five or more times per day during the past 30 days	27.2 (23.6-31.1)	28.0 (24.8-31.4)	26.4 (20.6-33.2)
Students who usually drank carbonated soft drinks one or more times per day during the past 30 days	39.7 (36.8-42.8)	43.3 (37.6-49.2)	36.3 (31.6-41.3)
Students who ate food from a fast food restaurant on three or more days during the past 7 days	9.5 (8.1-11.0)	10.6 (8.3-13.4)	8.4 (7.0-10.1)
Brought lunch to school most of the time or always during the past 30 days	85.2 (80.4-89.0)	83.3 (75.3-89.0)	87.2 (81.6-91.2)
Ate salty foods two or more times per day during the past 30 days	25.6 (23.6-27.7)	23.7 (20.9-26.7)	27.2 (24.0-30.7)
Ate breakfast most of the time or always during the past 30 days	56.7 (51.5-61.8)	63.7 (58.0-68.9)	50.4 (42.6-58.2)

* CI 95% confidence interval.

Table 4. Dietary behaviours among students in Mauritius

As seen in Table 4, overall 30.2% of students usually ate fruits two or more times per day during the past 30 days. There is no significant gender difference between students who usually ate fruits two or more times per day during the past 30 days.

It was seen that 35.8% of students usually ate vegetables three or more times per day during the past 30 days. There is no significant difference between the percentage of male students and female students who usually ate vegetables three or more times per day during the past 30 days.

In Mauritius, 27.2 % of students usually ate fruits and vegetables five or more times per day during the past 30 days. There is no significant difference between the percentage of male students (28.0 %) and female students (26.4 %) who usually ate fruits and vegetables five or more times per day during the past 30 days.

It was found that 39.7 % of students usually drank carbonated soft drinks one or more times per day during the past 30 days. Male students (43.3%) are not significantly different from female students (36.3%) to have usually taken carbonated soft drinks one or more times per day during the past 30 days.

In Mauritius, 9.5% of students ate food from a fast food restaurant on three or more days during the past 7 days. There is no significant gender difference between the percentage of male students (10.6%) and female students (8.4%) who ate food from a fast food restaurant on three or more days during the past 7 days.

It was reported that 85.2 % of students brought lunch to school most of the time or always during the past 30 days. No significant difference was found between the percentage of male students (83.3%) and female students (87.2%) who brought lunch to school most of the time or always during the past 30 days.

The survey results also showed that 25.6 % of students ate salty foods two or more times per day during the past 30 days. There is no significant difference between the percentage of male students (23.7%) and female students (27.2%) who ate salty foods two or more times per day during the past 30 days.

Overall, 56.7 % of students reported eating breakfast most of the time during the past 30 days. There is no significant gender difference between the percentage of male students (63.7%) and female students (50.4%) to report eating breakfast most of the time during the past 30 days.

3.2.2 Rodrigues

Questions	Total % (CI)*	Sex	
		Boys (CI)	Girls % (CI)
Students who were underweight	5.1 (3.8- 6.7)	5.8 (3.8-8.7)	4.5 (3.0-6.6)
Students who were overweight¹	20.0 (17.2-23.1)	20.1 (16.5-24.3)	19.9 (16.8-23.3)
Students who were obese²	5.6 (4.3-7.3)	3.8 (2.3-6.1)	7.2 (5.4-9.6)

* CI 95% confidence interval.

¹Students who were above +1SD (equivalent to BMI 25 kg/m² at 19 years)¹⁰

²Students who were above +2SD (equivalent to BMI 30 kg/m² at 19 years)

Table 5. Body weight (Rodrigues)

As depicted in Table 5, 5.1 % of students were underweight (i.e., below-2SD from median for BMI by age and sex). No significant difference was found between the percentage of male students (5.8 %) and female students (4.5 %) who were underweight.

It was found that 20.0 % of students were overweight (i.e., above + 1 SD for body mass index by age and sex). No significant difference was found between the percentage of male students (20.1 %) and female students (19.9%) who were overweight.

It was also found that 5.6 % of students were obese (i.e., above + 2 SD for body mass index by age and sex). Again, no significant difference was found between the percentage of male students (3.8 %) and female students (7.2 %) who were obese.

The category of above + 1 SD for body mass index by age and sex includes students who were overweight and obese, while that of above +2SD includes students who were obese only.

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Students who usually ate fruit two or more times per day during the past 30 days	44.1 (40.3-48.0)	46.0 (40.5-51.5)	42.4 (38.0-46.9)
Students who usually ate vegetables three or more times per day during the past 30 days	27.8 (24.7-31.2)	28.2 (23.9-32.9)	27.4 (23.4-31.8)
Students who usually ate fruits and vegetables five or more times per day during the past 30 days	32.9 (29.6-36.4)	35.9 (31.8-40.2)	30.2 (26.2-34.5)
Students who usually drank carbonated soft drinks one or more times per day during the past 30 days	29.8 (26.3-33.5)	33.7 (28.4-39.4)	26.4 (22.5-30.6)
Students who ate food from a fast food restaurant on three or more days during the past 7 days	9.3 (6.8-12.5)	10.1 (7.2-14.1)	8.5 (6.1-11.8)
Brought lunch to school most of the time or always during the past 30 days	53.2 (49.2-57.2)	50.7 (46.0-55.3)	55.4 (49.8-60.9)
Ate salty foods two or more times per day during the past 30 days	26.1 (23.0-29.6)	23.7 (19.6-28.4)	28.1 (24.3-32.4)
Ate breakfast most of the time or always during the past 30 days	54.8 (50.4-59.1)	60.6 (55.8-65.1)	49.5 (43.5-55.6)

* CI 95% confidence interval.

Table 6. Dietary behaviors among students in Rodrigues

Table 6 shows that in Rodrigues, 44.1 % of students usually ate fruits two or more times per day during the past 30 days. Male students (46.0 %) are not significantly different from female students (42.4 %) to usually eat fruits two or more times per day.

It was seen that 27.8% of students usually ate vegetables three or more times per day during the past 30 days. Male students (28.2 %) are not significantly different from female students (27.4 %) to usually eat vegetables three or more times per day.

Overall, 32.9 % of students usually ate fruits and vegetables five or more times per day during the past 30 days. There is no significant difference between the percentage of male students (35.9

%) and female students (30.2 %) who usually ate fruits and vegetables five or more times per day during the past 30 days.

It was found that 29.8 % of students usually drank carbonated soft drinks one or more times per day during the past 30 days. Male students (33.7%) are not significantly different from female students (26.4 %) to have taken carbonated soft drinks one or more times per day during the past 30 days.

In Rodrigues, 9.3 % of students ate food from a fast food restaurant on three or more days during the past 7 days. There is no significant difference between the percentage of male students (10.1 %) and female students (8.5 %) who ate food from a fast food restaurant on three or more days during the past 7 days.

It was reported that 53.2 % of students brought lunch to school most of the time or always during the past 30 days. There is no significant difference between the percentage of male students (50.7%) and female students (55.4%) who brought lunch to school most of the time or always during the past 30 days.

The survey results also showed that 26.1 % of students ate salty foods two or more times per day during the past 30 days. There is no significant difference between the percentage of male students (23.7%) and female students (28.1 %) who ate salty foods two or more times per day during the past 30 days.

Overall, 54.8 % of students reported eating breakfast most of the time during the past 30 days. Male students (60.6 %) are significantly more likely than female students (49.5 %) to report taking breakfast most of the time during the past 30 days.

3.3 Violence and Unintentional Injury

3.3.1 Mauritius

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Were in a physical fight one or more times during the past 12 months	33.9 (27.6-40.8)	47.7 (42.1-53.4)	20.9 (17.6-24.7)
Were physically attacked one or more times during the past 12 months	22.6 (18.3-27.7)	30.2 (23.8-37.4)	15.5 (11.6-20.2)
Were seriously injured one or more times during the past 12 months	38.8 (33.7-44.2)	47.2 (43.1-51.4)	30.9 (26.4-35.7)
Were bullied on one or more days during the past 30 days	34.8 (31.0-38.7)	41.9 (38.0-46.0)	28.2 (23.8-33.0)
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	13.4 (8.7-20.1)	18.3 (12.7-25.5)	7.0 (3.9-12.3)
Verbally abused by a teacher one or more times during the past 12 months	34.9 (30.3-39.7)	39.9 (32.9-47.3)	30.1 (22.6-38.9)

* CI 95% confidence interval.

Table 7. Violence and unintentional injury among students in Mauritius

As seen in Table 7, 33.9 % of students were in a physical fight one or more times during the past 12 months. Male students (47.7 %) are significantly more likely than female students (20.9 %) to have been in a physical fight.

Results showed that 22.6 % of students were physically attacked one or more times during the past 12 months. Male students (30.2 %) are significantly more likely to have been physically attacked than their female counterparts (15.5 %) during the past 12 months.

It was also found that 38.8 % of students were seriously injured one or more times during the past 12 months. Male students (47.2 %) are significantly more likely than female students (30.9 %) to have been seriously injured one or more times during the past 12 months.

Overall, 34.8 % of students were bullied on one or more days during the past 30 days. There is no significant gender difference between male students (41.9 %) and female students (28.2 %) in being bullied. Among students who were bullied during the past 30 days, 13.4 % were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (18.3 %) are significantly more likely than female students (7.0%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Survey findings show that 34.9 % of students were verbally abused by a teacher one or more times during the past 12 months. There is no significant difference between male students (39.9 %) and female students (30.1 %) being verbally abused by a teacher one or more times during the past 12 months.

3.3.2 Rodrigues

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Were in a physical fight one or more times during the past 12 months.	34.3 (30.5-38.4)	40.4 (34.4-46.6)	29.0 (25.6-32.7)
Were physically attacked one or more times during the past 12 months.	31.5 (27.7-35.6)	33.9 (28.9-39.4)	29.4 (25.1-34.1)
Were seriously injured one or more times during the past 12 months.	46.6 (42.5-50.7)	51.1 (45.9-56.3)	42.6 (37.2-48.3)
Were bullied on one or more days during the past 30 days.	50.0 (44.7-55.2)	45.1 (38.9-51.4)	54.1 (48.5-59.6)
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.	14.3 (10.0-20.0)	19.3 (13.4-27.0)	11.2 (6.8-17.9)
Verbally abused by a teacher one or more times during the past 12 months.	25.5 (21.7 - 29.8)	27.6 (21.5 - 34.7)	23.8 (19.9 - 28.1)

* CI 95% confidence interval.

Table 8. Violence and unintentional injury among students in Rodrigues

In Rodrigues, 34.3 % of students were in a physical fight one or more times during the past 12 months. Male students (40.4 %) are significantly more likely than female students (29.0 %) to have been in a physical fight.

Results showed that 31.5 % of students were physically attacked one or more times during the past 12 months. There is no significant difference between male students (33.9 %) and female students (29.4 %) being physically attacked during the past 12 months.

Overall, 46.6 % of students were seriously injured one or more times during the past 12 months. There is no significant difference between male students (51.1 %) and female students (42.6 %) to have been seriously injured one or more times during the past 12 months.

Overall, 50.0% of students were bullied on one or more days during the past 30 days. There is no significant gender difference between male students (45.1%) and female students (54.1 %) to report being bullied. Among students who were bullied during the past 30 days, 14.3 % were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. There is no significant difference between male students (19.3%) and female students (11.2 %) who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Survey findings show that 25.5 % of students were verbally abused by a teacher one or more times during the past 12 months. There is no significant difference between male students (27.6 %) and female students (23.8 %) being verbally abused by a teacher one or more times during the past 12 months.

3.4 Tobacco Use

3.4.1. Mauritius

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Smoked cigarettes on one or more days during the past 30 days	15.1 (11.7-19.3)	21.8 (16.5-28.2)	8.7 (6.2-12.1)
Among students who ever smoked cigarettes, those who tried their first cigarette before the age of 14 years	74.5 (67.1-80.7)	77.3 (68.9-84.0)	69.3 (58.0-78.6)
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes	70.8 (62.9-77.6)	67.2 (57.3-75.8)	78.8 (68.1-86.5)
People smoked in their presence on one or more days during the past seven days	68.5 (66.1-70.8)	71.0 (66.5-75.1)	66.2 (60.9-71.2)
Have a parent or guardian who uses any form of tobacco	28.5 (25.7-31.5)	29.1 (23.8-35.0)	28.0 (23.7-32.8)
Among students who tried to buy cigarettes during the past 30 days, those who had someone refuse to sell them cigarettes because of their age	32.8 (26.7-39.4)	36.1 (29.6-43.1)	25.5 (15.3-39.4)
Among students who ever smoked cigarettes, those who usually got their cigarettes by buying them in a store	48.8 (38.6-59.0)	58.7 (51.7-65.3)	26.3 (16.4-39.4)
Students who were in favour of banning smoking in public places	64.4 (57.2-71.0)	56.9 (48.4-65.0)	71.5 (59.4-81.2)
Students who saw a lot of anti-smoking media messages during the past 30 days	54.4 (51.1-57.6)	57.1 (52.2-61.8)	52.0 (47.5-56.5)
Students who thought smoking was definitely or probably harmful to their health	87.2 (82.6-90.7)	85.2 (76.3-91.1)	89.2 (78.5-94.9)
Students who definitely or probably thought smoke from others is harmful to their health	87.6 (83.5-90.8)	84.0 (75.6-89.9)	91.1 (82.7-95.6)

* CI 95% confidence interval.

Table 9. Tobacco use among students in Mauritius

As shown in Table 9, 15.1 % of students smoked cigarettes on one or more days during the past 30 days. Male students (21.8 %) are significantly more likely than female students (8.7%) to have smoked cigarettes on one or more days during the past 30 days.

Results show that among students who smoked cigarettes during the past 30 days, 74.5 % tried their first cigarette before the age of 14 years. There is no significant difference between male students (77.3 %) and female students (69.3 %) having tried their first cigarette before the age of 14 years.

Among students who smoked cigarettes during the past 12 months, 70.8 % tried to stop smoking cigarettes. Male students (67.2 %) are not significantly different from female students (78.8 %) to have tried to stop smoking during the past 12 months.

Overall, 68.5 % of students reported that people smoked in their presence on one or more days during the past seven days. There is no significant difference between male students (71.0 %) and female students (66.2 %) reporting that people smoked in their presence on one or more days.

It was found that 28.5 % of students had a parent or guardian who uses any form of tobacco. There is no significant difference between male students (29.1 %) and female students (28.0 %) having a parent or guardian who uses any form of tobacco.

Among those students who tried to buy cigarettes, only 32.8 % were refused sale of cigarettes because of their age. There is no significant difference between male students (36.1 %) and female students (25.5 %) reporting that they were refused sale of cigarettes because of their age.

Overall, among students who ever smoked cigarettes, 48.8 % usually got their cigarettes by buying them in a store. Male students (58.7 %) are significantly more likely than female students (26.3 %) to usually get their cigarettes by buying them in a store.

The survey showed that 64.4 % of students were in favour of banning smoking in public places. Male students (56.9 %) are not significantly different from female students (71.5 %) to be in favour of banning smoking in public places.

Among the students surveyed, 54.4 % had seen a lot of anti-smoking media messages during the past 30 days. Male students (57.1 %) are not significantly different from female students (52.0 %) to have seen a lot of anti-smoking media messages during the past 30 days.

In Mauritius, 87.2 % of students thought that smoking was definitely or probably harmful to their health. There is no gender difference between male students (85.2 %) and female students (89.2 %) in thinking that smoking is definitely or probably harmful to their health.

Overall, 87.6 % of students definitely or probably thought that smoke from others is harmful to their health. There is no significant difference between male (84.0 %) and female (91.1 %) students who thought that smoke from others is definitely or probably harmful to their health.

3.4.2 Rodrigues

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Smoked cigarettes on one or more days during the past 30 days	13.5 (10.5-17.3)	16.6 (12.1-22.2)	10.8 (7.9-14.7)
Among students who ever smoked cigarettes, those who tried their first cigarette before the age of 14 years	76.4 (68.2-83.0)	82.9 (75.2-88.6)	67.6 (54.7-78.4)
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes	74.3 (65.2 - 81.6)	NA	NA
People smoked in their presence on one or more days during the past seven days	78.8 (76.0-81.4)	80.2 (76.6-83.4)	77.6 (73.6-81.2)
Have a parent or guardian who uses any form of tobacco	27.7 (25.1-30.5)	28.8 (25.0-32.8)	26.8 (23.4-30.4)
Among students who tried to buy cigarettes during the past 30 days, those who had someone refuse to sell them cigarettes because of their age	48.2 (40.2-56.4)	51.7 (40.8-62.3)	44.7 (34.3-55.6)
Among students who ever smoked cigarettes, those who usually got their cigarettes by buying them in a store	32.0 (25.3-39.5)	NA	NA
Those who were in favour of banning smoking in public places	52.8 (46.4-59.1)	53.0 (45.1-60.8)	52.6 (46.1-59.0)
Those who saw a lot of anti-smoking media messages during the past 30 days	60.3 (56.4-64.0)	59.1 (53.8-64.2)	61.2 (56.9-65.4)
Those who thought smoking was definitely or probably harmful to their health	78.5 (73.7-82.6)	77.9 (72.3-82.6)	79.0 (73.3-83.7)
Those who definitely or probably think smoke from others was harmful to their health	80.4 (75.5-84.4)	80.2 (74.6-84.9)	80.4 (74.8-85.1)

* CI 95% confidence interval. NA: the number of respondents in this cell was less than 100.

Table 10. Tobacco use among students in Rodrigues.

In Rodrigues, 13.5 % of students smoked cigarettes on one or more days during the past 30 days. There is no significant gender difference in current cigarette use.

Among students who ever smoked cigarettes, 76.4 % tried their first cigarette before the age of 14 years. There was no significant gender difference between male students (82.9%) and female students (67.6%) in trying their first cigarette before the age of 14 years.

Among students who smoked cigarettes during the past 12 months, 74.3 % tried to stop smoking cigarettes.

Overall, 78.8 % of students reported that people smoked in their presence on one or more days during the past seven days. There is no significant difference between male students (80.2 %) and female students (77.6 %) reporting that people smoked in their presence on one or more days.

It was found that 27.7 % of students had a parent or guardian who uses any form of tobacco. Male students (28.8 %) are as likely as female students (26.8 %) to have a parent or guardian who uses any form of tobacco.

Results show that among those students who tried to buy cigarettes, 48.2 % were refused sale of cigarettes because of their age. There is no significant difference between male and female students reporting that they were refused sale of cigarettes because of their age.

In Rodrigues, among students who ever smoked cigarettes, 32.0 % usually got their cigarettes by buying them in a store.

The survey showed that 52.8 % of students were in favour of banning smoking in public places. Male students (53.0 %) are not significantly different from female students (52.6 %) to be in favour of banning smoking in public places.

Among the students surveyed, 60.3 % had seen a lot of anti-smoking media messages during the past 30 days. There is no significant gender difference among students in having seen a lot of anti-smoking media messages during the past 30 days.

Overall, 78.5 % of students thought that smoking was definitely or probably harmful to their health. Male students (77.9 %) are not significantly different from female students (79.0 %) in thinking that smoking was definitely or probably harmful to their health.

In addition, 80.4 % of students definitely or probably thought that smoke from others was harmful to their health. There is no significant difference between male (80.2 %) and female (80.4 %) students who thought that smoke from others was definitely or probably harmful to their health.

3.5 Alcohol and Drug use

3.5.1 Mauritius

Alcohol.

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Had at least one drink containing alcohol on one or more of the past 30 days (i.e., current alcohol use)	24.1 (20.8-27.7)	26.4 (20.3-33.6)	21.7 (15.8-29.0)
Among students who ever had a drink of alcohol, those who had their first drink of alcohol before age 14 years	71.2 (65.0-76.6)	74.7 (68.9-79.8)	67.0 (59.2-73.9)
Among students who reported current alcohol use, those who reported having two or more drinks per day on the days they drank alcohol during the past 30 days	29.9 (25.3-35.1)	32.4 (28.3-36.8)	27.1 (20.9-34.4)
Among students who drank alcohol during the past 30 days, the percentage who usually got the alcohol they drank from their friends	30.4 (24.7-36.8)	33.5 (25.1-43.0)	27.3 (18.5-38.4)
Among students who reported current alcohol use, those who usually got the alcohol they drank by buying it in a store or shop during the past 30 days	19.1 (11.1-27.1)	28.0 (19.7-36.4)	9.0 (4.7-3.4)
Among students who tried to buy alcohol during the past 30 days those who had someone refuse to sell them alcohol because of their age.	31.3 (24.6-38.9)	32.5 (27.3-38.2)	28.4 (15.5-46.2)
Among students who drank alcohol, those who usually drank alcohol with their friends	47.0 (38.6-55.5)	59.5 (53.6-65.2)	33.2 (26.1-41.1)
Among students who had a drink of alcohol, those who were at home or someone else's home the first time they had a drink of alcohol	58.3 (51.7-64.6)	49.0 (41.0-57.1)	68.9 (65.3-72.3)
Drank so much alcohol they were really drunk one or more times during their life	16.4 (12.9-20.5)	20.0 (14.7-26.7)	12.9 (8.1-20.1)
Among students who drank so much alcohol that they were really drunk one or more times during their life, the percentage who ever had sexual intercourse	48.5 (36.8-60.4)	59.4 (46.1-71.5)	32.4 (24.1 - 42.0)
Among students who had brothers and sisters, those whose siblings drank alcohol	25.2 (21.2-29.7)	23.9 (18.7-30.1)	26.6 (19.5-35.1)
Students whose parents or guardians drank alcohol	50.5 (46.3-54.8)	47.2 (39.7-54.8)	53.6 (48.6-58.6)

* CI 95% confidence interval.

Table 11. Alcohol use among students in Mauritius

As shown in Table 11, the prevalence of current alcohol use among students (i.e., having at least one drink containing alcohol on one or more of the past 30 days) was 24.1 %. Male students (26.4%) are not significantly different from female students (21.7 %) to report current alcohol use.

Among students who reported current alcohol use, 71.2 % had their first drink of alcohol before the age of 14 years. There is no significant difference between male students (74.7%) and female students (67.0%) reporting having had their first drink of alcohol before the age of 14 years.

Overall, among students who reported current alcohol use, 29.9 % reported having two or more drinks per day on the days they drank alcohol during the past 30 days. There is no significant difference between male students (32.4 %) and female students (27.1 %) having two or more drinks per day on the days they drank alcohol.

Among students who drank alcohol during the past 30 days, it was seen that 30.4 % usually got the alcohol they drank from their friends. There is no significant difference between male and female students in usually obtaining the alcohol they drank from their friends.

During their life, 16.4 % of students drank so much alcohol they were really drunk one or more times. Male students (20.0 %) are as likely as female students (12.9 %) to report that they drank so much alcohol they were really drunk one or more times during their life.

It was found that among those students who drank so much alcohol that they were really drunk one or more times during their life, 48.5 % had ever had sexual intercourse. The association between being really drunk and having sex was found to be significantly more likely in male students (59.4 %) than among female students (32.4%).

It was found that among students who tried to buy alcohol during the past 30 days, 31.3 % of students had someone refuse to sell them alcohol because of their age. There is no significant gender difference between students being refused sale of alcohol because of their age.

Overall, among those students who had a drink of alcohol, 58.3 % of them were at home or someone else's home the first time they had a drink of alcohol. Girl students (68.9 %) are significantly more likely than boys (49%) to have been at home or someone else's home the first time they had a drink of alcohol.

This survey found that among students who drank alcohol, 47.0 % reported that they usually drank alcohol in the company of friends. Male students (59.5 %) are significantly more likely than female students (33.2 %) to usually drink alcohol with their friends.

Survey results showed that 19.1 % of students who reported current alcohol use usually got the alcohol they drank by buying it in a store or shop.

Among students who had brothers and sisters, 25.2 % had siblings who drank alcohol. There is no significant gender difference between boys and girls having siblings who drank alcohol.

Overall, 50.5 % of students had parents or guardians who drank alcohol. There is no significant gender difference between boys and girls having parents or guardians who drank alcohol.

Drugs

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Used marijuana one or more times during their life (i.e., lifetime drug use).	4.8 (3.4-6.9)	7.8 (5.7-10.6)	2.1 (1.1-3.9)
Used marijuana one or more times during the past 30 days.	4.3 (2.9-6.2)	6.7 (4.7-9.5)	2.1 (1.0-4.1)
Among students who ever used drugs, those who first used drugs before the age of 14 years.	62.0 (44.3-77.0)	NA	NA

* CI 95% confidence interval. NA: the number of respondents in this cell was less than 100.

Table 12. Drug use among students in Mauritius

As shown in Table 12, the prevalence of lifetime marijuana use was 4.8 %. Male students (7.8 %) are significantly more likely than female students (2.1 %) to report lifetime marijuana use.

It was found that 4.3 % of students reported marijuana use during the past 30 days. Male students (6.7 %) are significantly more likely than female students (2.1 %) to report marijuana use during the past 30 days. Of those students who reported lifetime marijuana use, 62.0 % did so for the first time before the age of 14 years.

3.5.2 Rodrigues

Alcohol.

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Had at least one drink containing alcohol on one or more of the past 30 days (i.e., current alcohol use).	26.8 (23.8–29.9)	26.1 (22.1-30.4)	27.3 (23.7-31.2)
Among students who ever had a drink of alcohol, those who had their first drink of alcohol before age 14 years.	72.6 (65.2-78.9)	75.1 (68-81.1)	70.3 (60.5-78.5)
Among students who reported current alcohol use, those who reported having two or more drinks per day on the days they drank alcohol during the past 30 days	23.3 (18.6 - 28.7)	26.0 (18.4 - 35.5)	21.1 (15.5 - 27.9)
Among students who drank alcohol during the past 30 days, the percentage who usually got the alcohol they drank from their friends.	36.0 (28.9-43.8)	37.3 (29.3-45.9)	34.5 (25.2-45.1)
Among students who reported current alcohol use, those who usually got the alcohol they drank by buying it in a store or shop during the past 30 days.	15.9 (11-20.9)	25.6 (17.3-33.8)	7.8 (3.1-12.5)
Among students who tried to buy alcohol during the past 30 days those who had someone refuse to sell them alcohol because of their age.	44.6 (36.7-52.8)	46.6 (37.0-56.5)	42.3 (32.6-52.6)
Among students who reported current alcohol use, those who usually drank alcohol with their friends.	61.0 (55.9-65.8)	72.3 (64.8-78.7)	51.4 (45.3-57.5)
Among students who had a drink of alcohol, those who were at home or someone else’s home the first time they had a drink of alcohol.	66.1 (61.5-70.3)	55.8 (49.7-61.7)	74.6 (70.3-78.6)
Drank so much alcohol they were really drunk one or more times during their life.	23.8 (20.4-27.7)	28.3 (23.1-34.1)	20.1 (16.8-23.8)
Among students who drank so much alcohol that they were really drunk one or more times during their life, the percentage who had ever had sexual intercourse.	58.5 (51.7-65.1)	68.5 (60.2-75.7)	46.8 (38.3-55.6)
Among students who had brothers or sisters, those whose siblings drank alcohol.	32.6 (28.7-36.8)	31.6 (27.3-36.1)	33.4 (28.1-39.2)
Students whose parents or guardians drink alcohol.	55.6 (52.0-59.1)	53.2 (48.6-57.7)	57.6 (53.1-62.0)

* CI 95% confidence interval.

Table 13. Alcohol use among students in Rodrigues

In Rodrigues, the prevalence of current alcohol use among students (i.e., having at least one drink containing alcohol on one or more of the past 30 days) was 26.8 %. There is no significant gender difference between male and female students in current alcohol use.

Among students who reported current alcohol use, 72.6 % had their first drink of alcohol before the age of 14 years. There is no significant difference between male students (75.1%) and female students (70.3 %) reporting having had their first drink of alcohol before the age of 14 years.

Overall, among students who reported current alcohol use, 23.3 % reported having two or more drinks per day on the days they drank alcohol during the past 30 days. Male students (26.0 %) are not significantly different from as female students (21.1 %) in having two or more drinks per day on the days they drank alcohol.

Among students who drank alcohol during the past 30 days, it was seen that 36.0 % usually got the alcohol they drank from their friends. There is no significant difference between male and female students usually obtaining the alcohol they drank from their friends.

Overall, among students who reported current alcohol use, 15.9 % usually got the alcohol they drank by buying it in a store or shop during the past 30 days.

Overall, among students who tried to buy alcohol during the past 30 days, 44.6 % of students had someone refuse to sell them alcohol because of their age. There is no significant difference between male students (46.6 %) and female students (42.3 %) to have had someone refuse to sell them alcohol because of their age.

Among students who reported current alcohol use, 61.0% of students usually drank alcohol with their friends. Male students (72.3 %) are significantly more likely than female students (51.4 %) to usually drink alcohol with their friends.

Overall, among those students who had a drink of alcohol, 66.1 % of them were at home or someone else's home the first time they had a drink of alcohol. Girl students (74.6 %) are significantly more likely than boys (55.8 %) to have been at home or someone else's home the first time they had a drink of alcohol.

During their life, 23.8 % of students drank so much alcohol they were really drunk one or more times. There is no significant gender difference between students reporting having drunk so much alcohol that they were really drunk one or more times during their life.

It was found that among those students who drank so much alcohol that they were really drunk one or more times during their life, 58.5 % had ever had sexual intercourse. Among students who drank so much alcohol that they were really drunk one or more times during their life, male students (68.5 %) are significantly more likely than female students (46.8 %) to ever have sexual intercourse.

Among students who had brothers and sisters, 32.6 % had siblings who drank alcohol. There is no significant gender difference between boys and girls having siblings who drank alcohol. Overall, 55.6 % of students had parents or guardians who drank alcohol. There is no significant gender difference between boys and girls having parents or guardians who drank alcohol.

Drugs

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Used marijuana one or more times during their life (i.e., lifetime drug use).	6.5 (4.7 – 8.9)	9.9 (7.0 – 13.8)	3.5 (2.0 – 6.0)
Used marijuana one or more times during the past 30 days.	4.9 (3.3 – 7.1)	7.3 (4.7 – 11.1)	2.8 (1.7 – 4.5)

* CI 95% confidence interval.

Table 14. Drug use among students in Rodrigues

In **Rodrigues**, the prevalence of lifetime drug use was 6.5 %. Male students (9.9 %) are significantly more likely than female students (3.5%) to report lifetime marijuana use. It was found that 4.9 % of students reported marijuana use during the past 30 days. Male students (7.3 %) are significantly more likely than female students (2.8 %) to report marijuana use during the past 30 days.

3.6 Sexual behaviours

3.6.1 Mauritius

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Students who ever had sexual intercourse.	22.0 (17.0-28.0)	28.8 (20.3-39.1)	15.6 (12.7-18.9)
Among students who had sexual intercourse, those who had sexual intercourse for the first time before age 14 years.	46.9 (40.9-53.0)	48.4 (40.8-56.1)	43.3 (28.3-59.7)
Students who had sexual intercourse with two or more people during their life.	10.7 (7.7-14.8)	16.3 (11.7-22.3)	5.3 (3.3-8.3)
Among students who had sexual intercourse, those who used a condom the last time they had sexual intercourse.	44.0 (36.8-51.5)	46.3 (37.0-55.7)	40.3 (29.6-52.0)
Among students who had sexual intercourse, those who used any other method of birth control the last time they had sexual intercourse.	22.8 (17.0-29.8)	24.0 (16.7-33.2)	20.7 (13.1-31.3)

* CI 95% confidence interval.

Table 15. Sexual behaviours among students in Mauritius

Table 15 shows that 22.0 % of students ever had sexual intercourse during their life. Male students (28.8 %) are significantly more likely than female students (15.6 %) to have ever had sexual intercourse.

Among students who ever had sexual intercourse, 46.9 % of students initiated intercourse before the age of 14 years. There is no significant gender difference between male students (48.4 %) and female students (43.3 %) in initiating sexual intercourse before the age of 14 years.

Overall, 10.7 % of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Male students (16.3 %) are significantly more likely than female students (5.3 %) to have had intercourse with two or more partners during their life.

Among students who ever had sexual intercourse, 44.0 % used a condom the last time they had sexual intercourse. Male students (46.3 %) are as likely as female students (40.3 %) to have used a condom during the last sexual intercourse.

It was found that among students who ever had sexual intercourse, 22.8 % used any other method of birth control the last time they had sexual intercourse. Male students (24.0 %) are as likely as female students (20.7 %) in having used any other method of birth control during the last sexual intercourse.

3.6.2 Rodrigues

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Students who ever had sexual intercourse.	29.7 (24.8-35.2)	38.5 (32.6-44.7)	22.2 (17.1-28.3)
Among students who ever had sexual intercourse, those who had sexual intercourse for the first time before age 14 years.	55.7 (46.1-64.8)	64.6 (55.7-72.6)	42.5 (30.9-54.9)
Those who had sexual intercourse with two or more people during their life.	14.8 (11.9-18.3)	20.4 (16.0-25.6)	10.0 (7.3-13.4)
Among students who ever had sexual intercourse, those who used a condom the last time they had sexual intercourse.	67.2 (62.0-72.1)	68.0 (60.7-74.4)	66.1 (58.0-73.4)
Among students who had sexual intercourse, those who used any other method of birth control the last time they had sexual intercourse.	29.6 (24.8-35.0)	27.5 (21.2-34.7)	32.9 (24.6-42.4)

* CI 95% confidence interval.

Table 16. Sexual behaviours among students in Rodrigues

In Rodrigues, 29.7% of students ever had sexual intercourse during their life. Male students (38.5 %) are significantly more likely than female students (22.2%) to have ever had sexual intercourse.

Among students who ever had sexual intercourse, 55.7 % of students initiated intercourse before the age of 14 years. Male students (64.6 %) are significantly more likely than female students (42.5 %) to have initiated sexual intercourse before the age of 14 years.

Overall, 14.8 % of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Male students (20.4 %) are significantly more likely than female students (10.0%) to have had intercourse with two or more partners during their life.

Among students who ever had sexual intercourse, 67.2 % used a condom the last time they had sexual intercourse. Male students (68.0 %) are as likely as female students (66.1 %) to have used a condom at last sexual intercourse.

It was found that among students who ever had sexual intercourse, 29.6 % used any other method of birth control the last time they had sexual intercourse. There is no significant difference between male students (27.5 %) and female students (32.9 %) in having used any other method of birth control at last sexual intercourse.

3.7 Physical Activity

3.7.1 Mauritius

Questions	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Physically active for a total of at least 60 minutes per day on five or more days during the past seven days.	32.1 (26.8-37.8)	40.7 (34.8-46.9)	23.9 (21.1-26.9)
Physically active for a total of at least 60 minutes per day on all seven days during the past seven days.	19.4 (15.7-23.8)	26.0 (22.1-30.2)	13.2 (11.0-15.8)
Did not walk or bicycle to and from school during the past school week.	54.7 (49.6-59.8)	54.0 (45.9-61.9)	55.7 (48.9-62.3)
Went to physical education class 1 day each week during this school year.	52.8	50.3	55.5
Went to physical education class 2 days each week during this school year.	11.3	11.9	10.4
Spent three or more hours per day doing sitting activities during a typical or usual day.	39.4 (35.9-43.0)	38.3 (33.1-43.8)	40.4 (36.0-44.9)

* CI 95% confidence interval.

Table 17. Physical activity among students in Mauritius

As seen in Table 17, 32.1 % of students were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. Male students (40.7%) are significantly more likely than female students (23.9 %) to be physically active for a total of at least 60 minutes per day on five or more days during the past seven days.

It was found that 19.4 % of students were physically active for a total of at least 60 minutes per day on all seven days during the past seven days. Male students (26.0%) are significantly more likely than female students (13.2 %) to be physically active for a total of at least 60 minutes per day on all seven days during the past seven days.

The survey results showed that 54.7% of students neither walked nor bicycled to and from school during the past 7 days. There is no significant difference between male students (54.0%) and female students (55.7 %) reporting that they did not walk or bicycle to and from school during the past 7 days.

Overall, 52.8 % of students attended a physical education class on only one day per week during this school year and 11.3 % students on 2 days per week.

Results show that 39.4% of students spent three or more hours per day doing sitting activities during a typical or usual day. There is no significant difference between male students (38.3%) and female students (40.4%) spending three or more hours per day doing sitting activities.

4.7.2 Rodrigues

Question	Total % (CI)*	Sex	
		Boys % (CI)	Girls % (CI)
Physically active for a total of at least 60 minutes per day on five or more days during the past seven days.	26.9 (24.0-30.0)	30.6 (26.3-35.3)	23.7 (19.8-28.1)
Physically active for a total of at least 60 minutes per day on all seven days during the past seven days.	18.8 (16.5-21.4)	20.9 (17.5-24.9)	17.0 (13.5-21.3)
Did not walk or ride a bicycle to or from school during the past school week.	55.0 (52.0-58.1)	52.2 (47.7-56.7)	57.5 (53.6-61.2)
Went to physical education class 1 day each week during this school year.	49.9	50.3	49.4
Went to physical education class 2 days each week during this school year.	3.3	2.9	3.7
Spent three or more hours per day doing sitting activities during a typical or usual day.	38.5 (35.4-41.7)	38.2 (33.4-43.2)	38.9 (34.0-44.0)

* CI 95% confidence interval.

Table 18. Physical activity among students in Rodrigues

In Rodrigues, 26.9% of students were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. Male students (30.6 %) are not significantly different from female students (23.7 %) to be physically active for at least 60 minutes per day on five or more days during the past seven days.

It was found that 18.8 % of students were physically active for a total of at least 60 minutes per day on all of the past seven days. Male students (20.9 %) are not significantly different from female students (17.0 %) to be physically active for at least 60 minutes per day on all of the past seven days.

Overall, 55.0 % of students did not walk or ride a bicycle to or from school during the past 7 days. There is no significant difference between male students (52.2 %) and female students (57.5 %) not walking or bicycling to or from school during the past 7 days.

Overall, 49.9 % of students attended a physical education class on only one day per week during this school year and 3.3 % students on 2 days per week.

Results show that 38.5 % of students spent three or more hours per day doing sitting activities during a typical or usual day. There is no significant difference between male students (38.2%) and female students (38.9 %) in spending three or more hours per day during a typical or usual day doing sitting activities.

4. DISCUSSION

Adolescence is a very distinct and dynamic phase of development in the life of a human being. It is a period of transition from childhood to adulthood, characterized by spurts of physical, mental, emotional and social development. It is a stage of life when adolescents not only acquire new capacities and are faced with new situations, but are also vulnerable to risks to their health and well being. Actions taken during adolescence can affect a person's life, opportunities, education and health in the years to come. It is therefore important to identify the risk taking behaviours in adolescents and plan appropriate strategies to address them.

4.1 Dietary behaviours

Overweight and obesity combined is the fifth leading global risk factor for mortality and a known risk factor for diabetes, heart disease and certain cancers.

According to the WHO, over the past three decades the prevalence of overweight and obesity has increased substantially¹¹. It is estimated that globally 170 million children (aged less than 18 years) are overweight¹².

Overweight and obesity have a negative impact on the health of the child both during childhood as well as in adult life. Obese children can suffer from health consequences such as breathing difficulties, high blood pressure and insulin resistance. They are also at an increased risk for fractures and are likely to experience psychological effects related to increased body weight.

The main causes of both overweight and obesity usually start at an early age, and given their association with poor health outcomes, need to be addressed while children are still in school.

As seen in Fig 2, results of the GSHS 2011 showed that there is no significant difference between the prevalence of overweight and obesity in students in Mauritius and in Rodrigues, given that 21.2% of pupils in Mauritius and 20% in Rodrigues were overweight and obese, while 6.2% in Mauritius and 5.6% in Rodrigues were obese only.

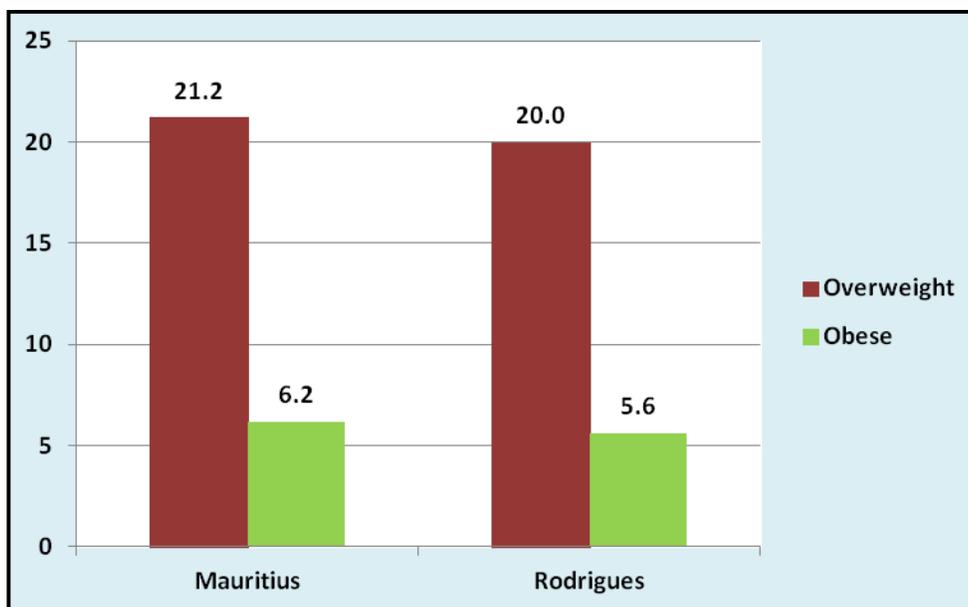


Fig 2. Prevalence of overweight and obesity in Mauritius and Rodrigues (%)

Fruit and vegetables provide fibre, vitamins, minerals, and other substances which are important for good health. An adequate intake of fruits and vegetables in the daily diet reduces the risk of heart disease, cancer, diabetes and obesity. Increasing fruit and vegetable intake in order to reduce the burden of non-communicable disease is one of the key recommendations of the WHO Global Strategy for Diet, Physical Activity and Health¹³.

The 2002 Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases¹⁴, recommends that the population consume at least 400 grams of fruits and vegetables per person per day (approximately equivalent to five servings).

However, the survey results showed that less than one-third students in Mauritius and Rodrigues usually ate fruits and vegetables five or more times per day. The habit of taking fruits and vegetables as part of the daily diet should be inculcated in children at an early age.

Regulations concerning the ban of sale of soft drinks in schools are in force, but consumption of carbonated drinks remains high in adolescents. It was seen that 39.7% of students in Mauritius and 29.8% of students in Rodrigues drank carbonated drinks one or more times per day in the 30 days preceding the survey. Students in Mauritius are significantly more likely than students in Rodrigues to usually take carbonated drinks one or more times per day. Only one-fifth of students in Mauritius and one fourth in Rodrigues did not take any carbonated drink. The

frequency of consumption of carbonated drinks by children is alarming and strategies to address this issue should enlist the participation of parents.

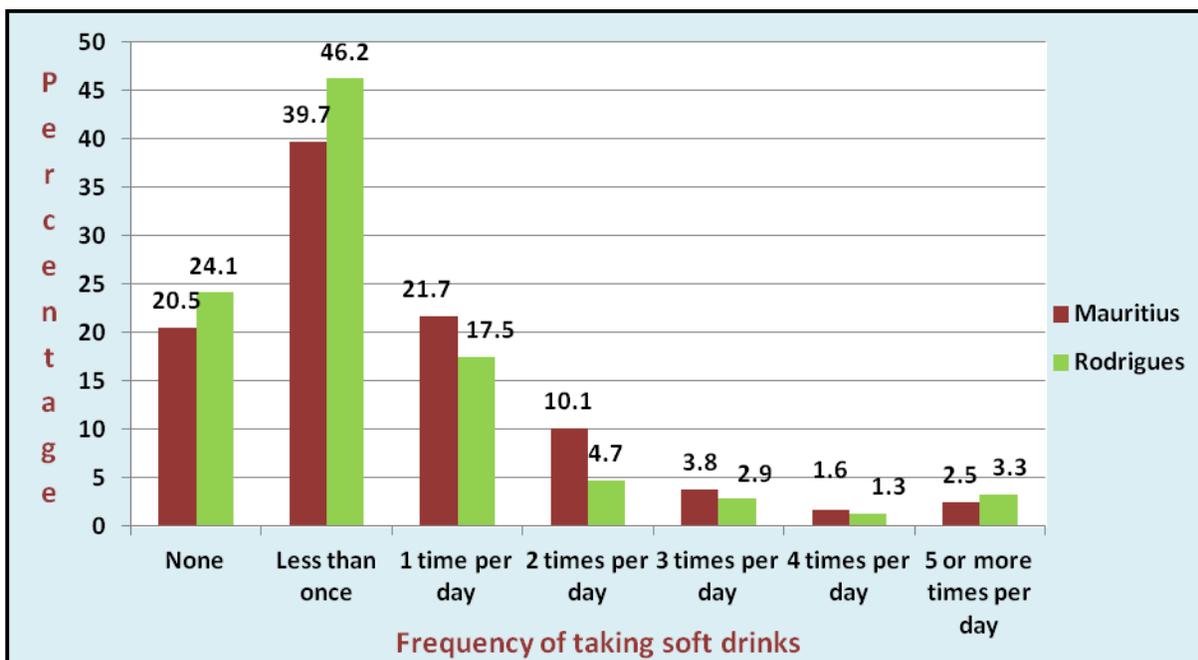


Fig 3. Comparison of frequency of taking carbonated drinks in Mauritius and Rodrigues

Eating breakfast is important, specially for children and adolescents. According to the American Dietetic Association, children who eat breakfast perform better in the classroom and on the playground, with better concentration, problem-solving skills, and eye-hand coordination. Although the survey results showed that the majority of students, 56.7% in Mauritius and 54.8% in Rodrigues, ate breakfast most of, or always all the time, the importance of breakfast should be emphasized at school through ongoing health education and information material in forms of posters.

The main reason for not eating breakfast was lack of enough time before leaving home for school or not being able to eat early in the morning, as shown in Fig 4. It is necessary that these factors should be addressed in a comprehensive school health promotion programme.

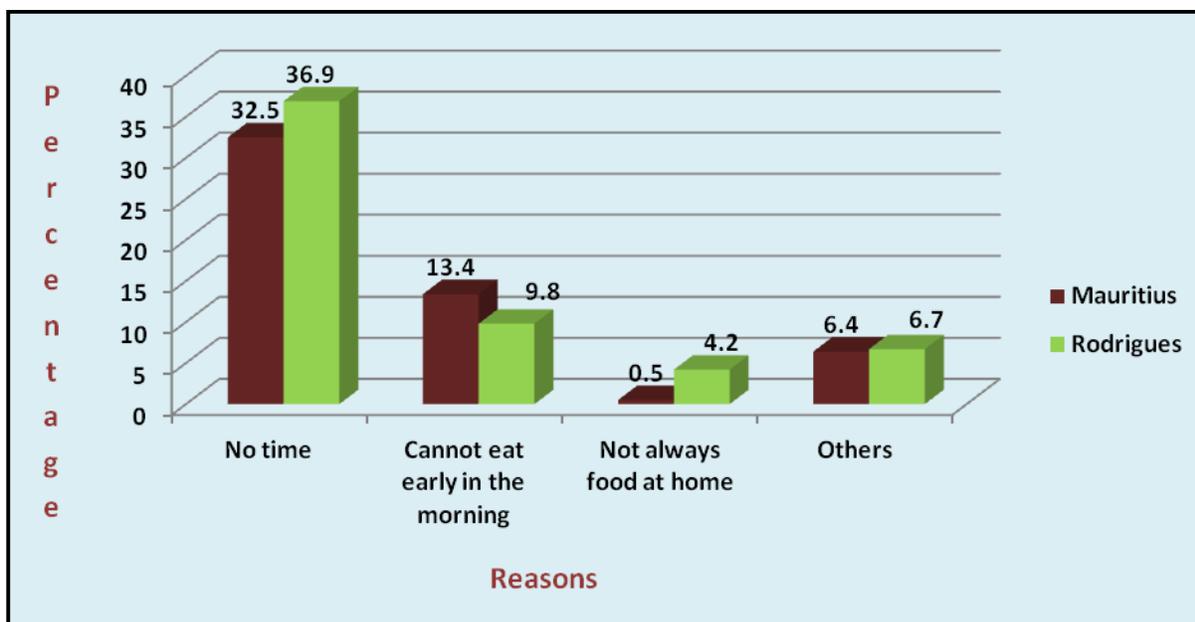


Fig 4. Reasons for not taking breakfast

Data on dietary behaviours in adolescents generated by this survey can be used to identify priority areas for action and to design nutritional interventions in schools as well as in the general community. It is important that effective and culturally appropriate population-based childhood obesity prevention programmes and initiatives are implemented now so as to prevent childhood obesity and its related health problems in the Republic of Mauritius. Studies have shown that the consequences of overweight and obesity are particularly important in children of Indian and African origin and prevention of Type 2 diabetes therefore needs to begin before adult life.¹⁵

4.2 Violence and Unintentional Injury

Violence and accidental injuries are a threat to public health across the globe. According to the World Health Organisation, about 5.8 million people die each year as a result of injuries, accounting for 10 % of the total deaths in the world¹⁶. Eight of the fifteen leading causes of death in people between the ages of 15 and 29 years are injury-related. Injuries are responsible for approximately 900,000 deaths a year among children and adolescents under 18 years of age.

Apart from causing death, violence and injuries take a tremendous toll on the health and well being of the young generation by undermining their health and learning potential, and resulting in serious physical and psychological consequences for both the victim and the family.

Violence is defined as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in, or has a

high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.”¹⁷

Children are exposed to violence in the home, at school, on the road, in parks and other recreation sites, and through television, computer games and movies. Violence in schools takes the form of fights among students, bullying, corporal punishment, harassment or verbal abuse by teachers.

Violence compromises the health, dignity, security and autonomy of victims. Victims of violence experience not only physical injury, but also psychological and emotional effects, which may persist throughout life in the form of behavioural problems, psychosomatic illness, poor self esteem, substance abuse and even suicidal or homicidal behaviours.

The results of the 2011 GSHS showed that in Mauritius 33.9 % of students had been in a physical fight and 22.6 % had been physically attacked in the 12 months prior to the survey, while in Rodrigues 34.3 % had been in a physical fight and 31.5 % had been physically attacked. Comparing this data to that obtained from the GSHS 2007, a significant decrease has occurred in Mauritius in the percentage prevalence of students who had been in a physical fight, whereas no such significant change has occurred in Rodrigues. It is also seen that in Mauritius 22.6% of students were physically attacked in 2011 as compared to 27.4% in 2007, while in Rodrigues there has been a significant increase in the number of students who were physically attacked in the interval between the two surveys.

Year of Survey	MAURITIUS		RODRIGUES	
	2007	2011	2007	2011
Question	Prevalence %		Prevalence %	
Were in a physical fight one or more times during the past 12 months	42.3	33.9	34.7	34.3
Were physically attacked one or more times during the past 12 months	27.4	22.6	23.6	31.5
Seriously injured one or more times during the past 12 months	52.9	38.8	48.7	46.6
Were bullied on one or more days during the past 30 days	40.9	34.8	45.5	50.0

Table 19. Comparison of some key variables of violence and injury among students in Mauritius and Rodrigues

Additionally, there has been a significant decrease in the percentage of students who were seriously injured in Mauritius, while there has been no significant change in this variable in Rodrigues. Concerning bullying, it was found that in Mauritius the number of students who were bullied decreased from 40.9% in 2007 to 34.8 % in 2011, while in Rodrigues 45.5% of students reported being bullied in school in 2007 as compared to 50.0 % in 2011. Figure 5 depicts some of the ways in which students were bullied most often at school.

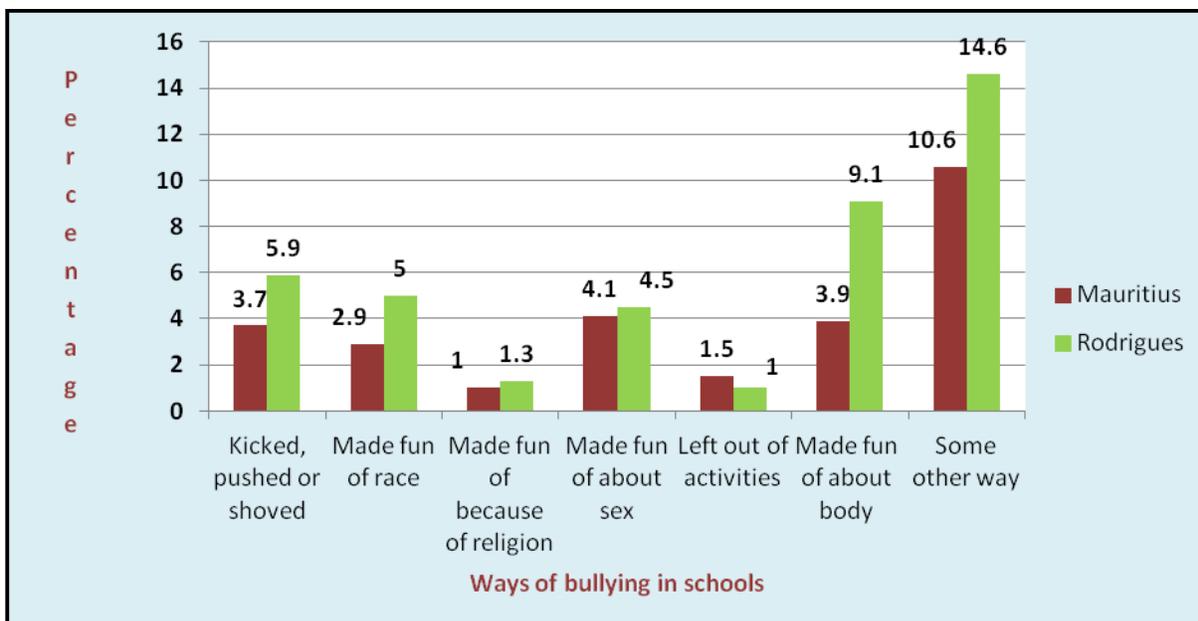


Fig 5. Ways in which students were bullied most often

Survey findings indicated that 34.9% students in Mauritius and 25.5 % in Rodrigues were verbally abused by a teacher one or more times during the past 12 months, which is another form of violence at school.

Violence is preventable, and just as public health approaches have helped to combat many diseases worldwide, these methods can also be used for violence prevention. The school system is an effective way in which to reach large portions of the population. Moreover, school-based interventions can reach children in their early and impressionable stages and inculcate healthy attitudes and behaviours.

Injuries account for more potential years of life lost before age of 65 years than cancer, heart disease and stroke combined. Contrary to popular belief, most injuries are not accidental, and are therefore both predictable and preventable.

This survey found that 38.8 % of students in Mauritius and 46.6 % students in Rodrigues were seriously injured one or more times during the 12 months prior to the survey. Figure 6 shows the most serious injury that happened to the students who took part in the survey.

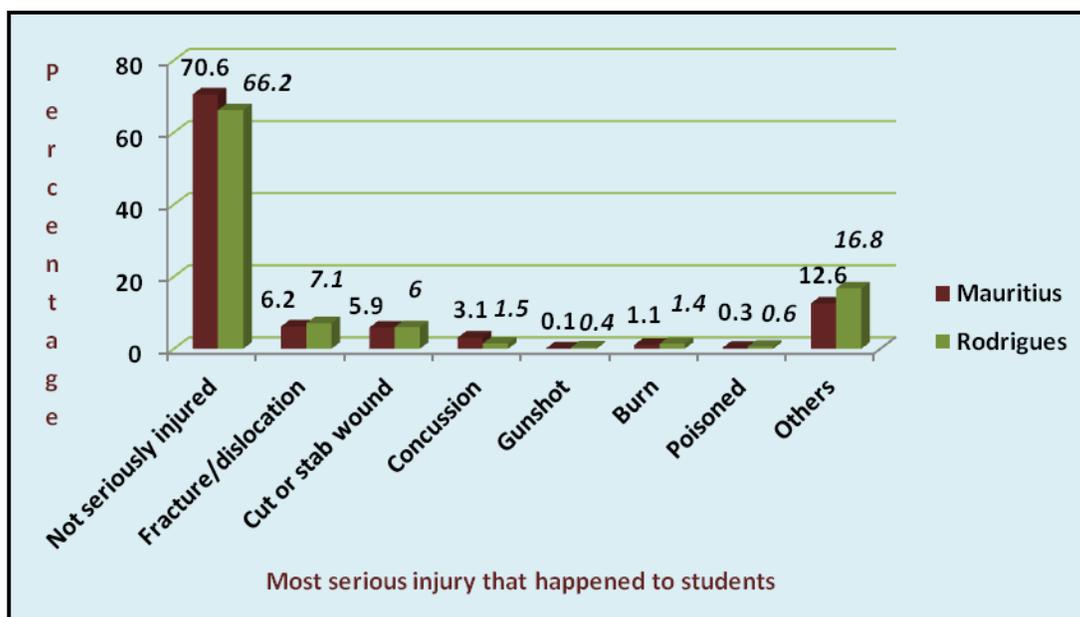


Fig 6. The most serious injury that happened to students in Mauritius and Rodrigues

A large proportion of accidental injuries, for example, fractures, burns, and poisoning are preventable. It is therefore important to create awareness about accidental injuries among the parents and carers of children through injury prevention programmes. The WHO Report on Child Injury Prevention¹⁸ encourages Governments and other stakeholders to consider its seven recommendations when developing child injury prevention programmes. According to this report, well-targeted financial investments can considerably reduce child injuries and deaths. Moreover, strategies such as introducing child injury prevention into school and university curricula, can also help sensitize young people about the risk of childhood injuries.

4.3 Tobacco use

There are currently about one billion smokers in the world. Nearly six million people die from tobacco use and exposure to second hand smoke each year, accounting for 6% of all female and 12% of all male deaths in the world.^{19,20}

It is projected that by 2030, tobacco-related deaths will increase to more than 8 million deaths every year^{21,20} In Mauritius, it is estimated that around 1000 deaths yearly are directly attributable to the use of tobacco.

Tobacco use is one of the main risk factors for a number of chronic diseases, including cancer, cardiovascular and respiratory diseases, and circulatory problems among others. The adverse health effects of tobacco are due not only to smoking tobacco but also from exposure to second-hand smoke.

Comparing the results of the two GSHS it was found that the prevalence of current smoking in Mauritius was 16.5 % in 2007 as compared to 15.1% in 2011, while in Rodrigues it was 12.5 % in 2007 as compared to 13.5% in 2011. Thus no significant change in the prevalence of current tobacco use has been noted between the two surveys, as seen in Table 20.

Concerning gender differences in use of tobacco, the results show that 8.7% of girls in Mauritius and 10.8% in Rodrigues were current smokers as compared to 21.8% of boys in Mauritius and 16.6% boys in Rodrigues. In Mauritius boys were significantly more likely to smoke than girls, while in Rodrigues there was no significant difference between boys and girls in current tobacco use.

It was found that the majority of students, i.e. 74.5% in Mauritius and 76.4% in Rodrigues, who were current smokers first initiated tobacco use before the age of 14 years. In Mauritius, the percentage of students who tried their first cigarette before they were 14 years old was 70.7% in 2007 as compared to 74.5% in 2011. In Rodrigues, 77.6% of students first smoked cigarettes before the age of 14 years in 2007 as compared to 76.4% in 2011. This data provides evidence that smoking prevention programs should target students when they are still at primary school, preferably in standard five.

Ratification of the FCTC by Mauritius on 17 May 2004 led to the passing of new FCTC-compliant tobacco regulations in December 2008. These public health regulations on tobacco banned the sale or distribution of tobacco products to and by minors.

However, as seen in Table 20, among students who tried to buy cigarettes during the past 30 days, only 32.8 % of students in Mauritius and 48.2 % in Rodrigues were refused sale of cigarettes because of their age. Study findings show that there has been no change in the accessibility and availability of cigarettes to adolescents in Mauritius and Rodrigues from 2007

to 2011. Stricter enforcement of tobacco control measures has to be carried out in order to reduce the access and availability of cigarettes to adolescents.

Year of Survey	MAURITIUS		RODRIGUES	
	2007	2011	2007	2011
Question	Prevalence %		Prevalence %	
Percentage of students who smoked cigarettes on one or more days during the past 30 days	16.5	15.1	12.5	13.5
Among students who ever smoked cigarettes, those who tried their first cigarette before the age of 14 years.	70.7	74.5	77.6	76.4
Among students who tried to buy cigarettes during the past 30 days, the percentage of students who had someone refuse to sell them cigarettes because of their age	31.9	32.8	39.1	48.2
People smoked in their presence on one or more days during the past seven days.	76.7	68.5	78.6	78.8

Table 20. Comparison of some key variables of tobacco use among students in Mauritius and Rodrigues

One of the provisions of the tobacco regulations is protection from secondhand tobacco smoke by banning smoking in most public places. Comparing the results of the two GSHS, it was observed that there was a decrease in the percentage of students who reported people smoking in their presence in Mauritius from 76.7% in 2007 to 68.5% in 2011. In Rodrigues however, no such change was observed (78.6% in 2007 and 78.8% in 2011).

It was found that adolescents supported the regulation of banning smoking in public places, 64.4 % of students in Mauritius and 52.8 % in Rodrigues being in favour of this regulation.

Survey findings showed that 54.4% of students in Mauritius and 60.3% of students in Rodrigues had seen a lot of anti-smoking media messages, and were aware that smoking as well as exposure to secondhand smoke was harmful to health. In order to empower pupils to translate this knowledge into positive attitudes and behaviours, activity based health education programs against tobacco use should be adopted in schools.

It is encouraging to note that 70.8% of students in Mauritius and 74.3% of students in Rodrigues who smoked reported that they had tried to stop smoking. In addition to the smoking cessation clinics which are now operational in Mauritius and Rodrigues, exclusive smoking cessation

programmes for the youth should be planned and implemented, whereby adolescents can be given the necessary support to help them with smoking cessation.

4.4 Alcohol and drug use

The harmful use of alcohol is a risk factor for a large spectrum of health problems, including hypertension, heart disease, cirrhosis and liver cancer, pancreatitis, violence, suicide and motor vehicle accidents. It is also a cause of social problems affecting the whole family.

Alcohol abuse can impair adolescents' physical as well as psychological development. Findings from this GSHS on alcohol use among students in Mauritius and Rodrigues showed that 24.1 % students in Mauritius, and 26.8% students in Rodrigues reported current alcohol use, i.e., having had at least 1 drink on one or more days during the 30 days prior to the survey. Table 21 shows a comparison between the two surveys concerning current alcohol use. As seen in the table, there has been no significant decrease in the prevalence of current alcohol use from that reported in 2007 to that in 2011.

Year of Survey	MAURITIUS		RODRIGUES	
	2007	2011	2007	2011
Question	Prevalence %		Prevalence %	
Had at least one drink containing alcohol on one or more of the past 30 days (i.e., current alcohol use).	20.8	24.1	24.4	26.8
Among students who reported current alcohol use, those who had their first drink of alcohol before age 14 years.	63.2	71.2	75.0	72.6
Among students who tried to buy alcohol during the past 30 days, the percentage of students who had someone refuse to sell them alcohol because of their age	21.4	31.3	23.5	44.6
Among students who drank alcohol, the percentage who usually drank alcohol with their friends	47.7	47.0	62.0	61.0

Table 21. Comparison of some key variables of alcohol use among students in Mauritius and Rodrigues

It is to be noted that among students who reported current alcohol use, a large majority of students, i.e., 71.2% in Mauritius and 72.6% in Rodrigues had their first drink before the age of 14 years. This is a vulnerable period because starting alcohol at this stage can lead to

development of early alcohol dependence and abuse. Early onset of alcohol use is associated with problem behaviors in youth and adult life, including alcohol-related violence, injuries, drinking and driving, and absenteeism from school or work, as well as an increased risk for other substance abuse.

Peers have a strong impact on adolescent's behaviour. As seen in Table 21, in both surveys, almost the same percentage of students in Mauritius and in Rodrigues drank alcohol with their friends. Students in Rodrigues are significantly more likely to drink alcohol in the company of friends as compared to those in Mauritius.

Adolescents who drink are more likely to engage in other risky behaviours such as smoking, drug abuse and unprotected sexual intercourse. It was found that among students who had so much alcohol that they were drunk, 48.5% in Mauritius and 58.5% in Rodrigues had ever had sexual intercourse. The combination of these risky behaviours can have serious consequences on the health of adolescents.

Despite laws prohibiting sale of alcohol to minors, the practice is still being carried out. Results showed that among students who tried to buy alcohol during the past 30 days, only 31.3 % of students in Mauritius and 44.6 % in Rodrigues were refused sale of alcohol because of their age. In 2007, among students who tried to buy alcohol during the past 30 days, 21.4% in Mauritius and 23.5% of students in Rodrigues were refused sale of alcohol. Laws concerning the marketing of alcohol need to be strictly enforced and severe sanctions taken against shopkeepers who sell alcohol to minors.

The prevalence of drug use among students in both Mauritius and Rodrigues is low. However it was found that in Mauritius, 62% of those who were taking drugs first used them before the age of 14 years. Innovative school based alcohol and drug prevention programs have to be put in place in all secondary and upper primary schools.

4.5 Sexual behaviours

Adolescence is a critical period in the life of an individual. Accompanied by physical and emotional changes, it is a time of experimentation and risk taking, and forming new relationships. Youngsters like to experiment with a risky life style without adequate knowledge about long-term health damages and risks.

During this time adolescents are often influenced by peers to engage in sexual activity. Sexually active adolescents are specially vulnerable to sexual and reproductive ill-health. Due to lack of reliable information on contraception, unprotected sex puts adolescents at risk of HIV, sexually transmitted infections (STI), and unwanted pregnancy, often leading to unsafe abortion. In this survey it was found that 22.0% of students in Mauritius and 29.7% of students in Rodrigues had ever had sexual intercourse. These students are at risk of contracting sexually transmitted infections and are also at risk of teenage pregnancy with its attendant complications.

Early onset of sexual activity has harmful and sometimes long lasting effects on the health and well being of adolescents. Studies have shown that adolescents who begin sexual activity early in life are likely to have sex with more partners. They are therefore more vulnerable to STIs, HPV infections and cancers. The survey findings showed that among those students who were sexually active, 46.9% in Mauritius and 55.7% in Rodrigues had sexual intercourse for the first time before the age of 14 years.

The study also showed that contraceptive use among adolescents in Mauritius is low, as shown by the fact that among students who had sexual intercourse, only 44% used a condom the last time they had sexual intercourse. This may be due to the fact that the reproductive health needs of adolescents are not being properly addressed as services exist only for married adults. In seeking health services they face barriers such as stigma, negative provider attitudes, fear that their confidentiality will be violated and misconceptions about the safety and side effects of contraceptive methods.

Adolescents need the right information as they go through this critical period in their lives. Schools are the ideal settings for reproductive health programs. Sexual health programs in schools can help students to develop the knowledge and skills they need to avoid or reduce risky sexual behaviours, and to provide access to information, counselling and services for contraceptives, sexually transmitted infections, and menstrual hygiene.

The sexual and reproductive health needs of adolescents are specific and different from those of adults. The Programme of Action adopted at the International Conference on Population and Development (ICPD) in 1994 (ICPD-PoA, 7.44) calls on countries to address adolescent sexuality and reproductive health issues through promotion of responsible and healthy reproductive and sexual health behavior and provision of appropriate services and counseling.

Adolescent sexual and reproductive health (ASRH) services should be provided in youth friendly settings, separate from those for adults.

4.6 Physical Activity

The Global Recommendations on Physical Activity of Health²² state that physical activity provides fundamental health benefits for children and youth, and recommend that children and youth aged between 5-17 years should practice at least 60 minutes of moderate to vigorous intensity physical activity daily. This recommended amount of physical activity helps children and adolescents to keep in good physical and mental health and to maintain a healthy body weight. It also helps in their social development by inculcation of lifeskills and building of self-confidence, thus promoting social interaction and integration.

As shown in Tables 17 and 18, 19.4% of students in Mauritius and 18.8 % in Rodrigues were physically active for a total of at least 60 minutes per day on all seven days during a usual week. It is encouraging to note that as shown in Table 22, these figures show an increase as compared to the GSHS 2007 data, when 15.6% of students in Mauritius and 14.2% in Rodrigues were physically active for a total of at least 60 minutes per day on all seven days during a usual week. Programs for promotion of physical activity in schools should be intensified so that this upward trend is maintained. The school environment must also be supportive for the practice of physical activity.

There are two periods of physical activity per week in secondary schools. Survey results in Mauritius showed that only 11.3 % of students went to physical education class on two days a week while the majority of students (52.8 %) attended physical education class only once a week.

In Rodrigues, this attendance was even lower, i.e., only 3.3% of students went to physical education class on two days a week, while 49.9 % attended physical education class only once a week.

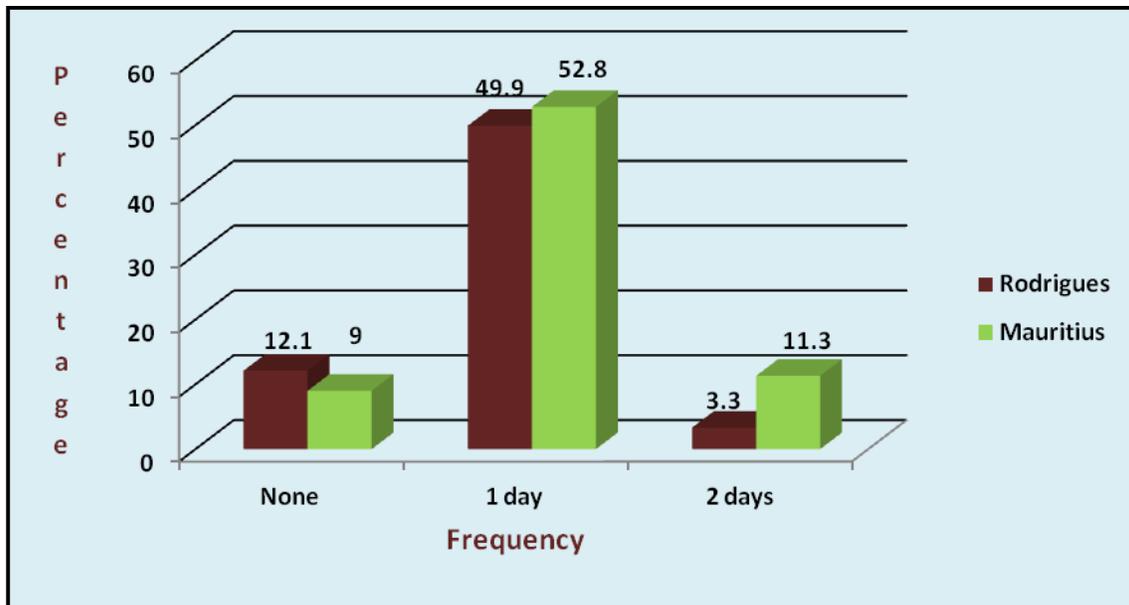


Fig7. Frequency of attendance at PE classes

This low attendance indicates that students are not motivated to attend physical education classes in school. Research needs to be carried out in order to find out the reasons for not attending PE. Schools are ideal entry points for promotion of physical activity and sports. A daily period of 30 minutes for physical activity should be made compulsory in all schools in Mauritius and Rodrigues. This will help to develop a routine of physical activity which will persist during adulthood, enabling the next generation of adults to remain free from the debilitating burden of chronic non-communicable diseases.

It is also a cause for concern to find that 39.4 % students in Mauritius and 38.5 % students in Rodrigues spent three or more hours per day doing sitting activities during a typical or usual day. Compared to data from the GSHS 2007, an increase has been noted in the number of students who spent more than three hours per day in sedentary activities in Mauritius, while in Rodrigues there has been no significant change in the percentage of students who spent more than three hours per day in sedentary activities.

Year of Survey	MAURITIUS		RODRIGUES	
	2007	2011	2007	2011
Question	Prevalence %		Prevalence %	
Percentage of students who were physically active for a total of at least 60 minutes per day on all seven days during the past seven days	15.6	19.4	14.2	18.8
Percentage of students who spent three or more hours per day during a typical or usual day doing sitting activities	34.8	39.4	40.0	38.5

Table 22. Comparison of some key variables of physical activity and sedentary habits among students in Mauritius and Rodrigues

Children spend a substantial portion of their time watching television or using the computer. These sedentary pastimes with no energy expenditure are increasingly replacing physically active games and thus contributing to weight gain. Moreover children and adults tend to snack often when watching television which further contributes to increased calorie consumption. The results reported here have important implications for prevention programs in schools.

5. CONCLUSION

Comparison between the first and second Global School-based Student Health Surveys conducted in 2007 and 2011 shows that overall there has not been any significant improvement in the health behaviours of adolescents in the Republic of Mauritius.

In Mauritius, a decrease has been noted in the number of students who were in a fight, those who were seriously injured and those who were bullied.

There has been no significant change in tobacco use, except for a decrease in the number of students who reported people smoking in their presence. Similarly, no change has been noted in alcohol use, in the age of first taking a drink of alcohol and the frequency and amount of alcohol intake. Specifically, students are still being able to buy cigarettes and alcohol, although there is a legal ban on the sale of these products to minors.

It is encouraging to note that there has been an increase in the percentage of students who were physically active, but at the same time there has also been an increase in the number of students who spent 3 or more hours per day doing sitting activities.

In Rodrigues, no change has been noted in the prevalence of violence, and more students have reported being physically attacked. Concerning tobacco and alcohol use, there has been no significant change in current use, age of initiation, frequency and amount used. A lesser number of students reported an attempt at smoking cessation in 2011. A positive observation in Rodrigues is that there has been a significant increase in the refusal of sale of alcohol to minors, but the increase in the refusal of sale of cigarettes to minors is not significant. As in Mauritius, there has been a significant increase in the percentage of students who were physically active, but the number of adolescents who spent 3 or more hours per day in sitting activities remains significantly unchanged.

6. RECOMMENDATIONS

Some recommendations on the key areas included in this GSHS report are listed below. However, more recommendations need to be developed in consultation with the Ministry of Education and Human Resources which is a major stakeholder in school health promotion.

The scientific evidence generated from the findings of the 2011 GSHS should form the basis of a framework of action for Health Promoting Schools. A multi-sectoral approach led jointly by the Ministry of Education and Human Resources and the Ministry of Health & Quality of Life, utilizing the combined resources and expertise of all stakeholders is essential for successful implementation of the action plan and its sustainability.

A monitoring and evaluation mechanism should be set up as part of the plan of action in order to assess progress and identify program bottlenecks.

Dietary behaviours

- Schools should promote healthy diets and physical activity in accordance with existing national action plans of the Ministry of Health & Quality of Life, and in line with the recommendations of the WHO Global Strategy for Diet, Physical Activity and Health.
- Affordable healthy food choices should be made available in school canteens.
- One fruit a day must be distributed to pupils in all schools.
- Parental involvement should be encouraged and they should be motivated to buy and prepare nutritious meals for the family with more fruits and vegetables.

Violence and injuries

- Interventions to reduce violence in schools must be developed and implemented.
- A confidential way of reporting bullying to school officials should be set up, and a severe mode of punishment for bullying devised so as to deter students from inflicting violence on other schoolchildren.
- Students should be empowered to avoid being bullied.
- Research on violence and injury in schools must be undertaken and appropriate actions taken to address this problem.
- Health education targeting students, teachers and other school staff must be carried out to create awareness about the issue.

Tobacco, alcohol and drug use

- Laws prohibiting sale of tobacco and alcohol to minors must be reviewed and strictly enforced.
- Health clubs at schools can be utilised as entry points to foster anti substance behaviours.
- Training programmes for school teachers on issues related to tobacco and alcohol use need to be organised on a regular basis.
- IEC campaigns on tobacco, alcohol and drug use should be held frequently in all schools.

Sexual behaviors

- Students should be provided with comprehensive sex education at school focusing on sexually transmitted diseases, safe sexual behaviours and unintended pregnancies.
- Peer education sessions should be encouraged and supervised by trained personnel.
- Youth friendly centres should be set up to provide adolescent sexual and reproductive health services exclusively for the youth.

Physical activity

The recommendations for physical activity should be in line with Objective 4 of the National Action Plan on Physical Activity (NAPPA) 2010-2014 of the Ministry of Health & Quality of Life, i.e., to raise awareness and knowledge of the health benefits of physical activity in 90% of the school going population, for which the Ministry of Education and Human Resources is the lead agency.

BIBLIOGRAPHY AND WEBOGRAPHY

1. World Health Organisation website. <http://www.who.int/chp/gshs/country/en/index.html>
2. GSHS Country Report. 2007 Seychelles Global School-based Student Health Survey. 19 September 2008.
3. Fact sheet. The Global School-based Student Health Survey (GSHS) 2007 India.
4. Fact sheet. Global School-based Student Health Survey (GSHS) 2010 Fiji.
5. Report of The Global Youth Tobacco Survey 2008 Mauritius and Rodrigues, Ministry of Health & Quality of Life, WHO, CDC.
6. Survey Report. The Mauritius Nutrition Survey, Ministry of Health & Quality of Life, 2004.
7. Report of the study of behaviours related to HIV and AIDS in young Mauritians aged 15-24years, Report v1.0, National AIDS Secretariat and Rogers Group – CSR Department. 29 October 2008.
8. Report of the Knowledge, Attitude and Behavioral study related to HIV and AIDS amongst youth aged 15-24 years in Rodrigues, Report v1.0 A, 13th October 2010, National AIDS Secretariat.
9. Report of a study on Street Children in Mauritius. Mauritius Family Planning and Welfare Association and Safire. 2011.
10. World Health Organization (WHO) Growth reference data for 5-19 years. http://www.who.int/growthref/bmifa_boys_5_19years_z.pdf
11. World Health Organization. Global Status Report on Noncommunicable Diseases 2010. WHO, Geneva 2011. Available online at http://www.who.int/nmh/publications/ncd_report2010/en
12. Lobstein T, Baur L, Uauy R. Obesity in children and young people: a crisis in public health. *Obesity Reviews*, 2004, 5(Suppl 1):4–104.
13. World Health Organization. Global strategy on diet, physical activity and health. WHO Geneva 2004. Available online at http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf
14. World Health Organization and Food and Agricultural Organization. Diet, nutrition and the prevention of chronic diseases. WHO & FAO, Geneva 2003. (WHO Technical Report Series, No. 916).

15. Whincup PH, Gilg JA, Owen CG, Odoki K, Alberti KG, Cook DG. British South Asians aged 13-16 years have higher fasting glucose and insulin levels than Europeans. *Diabet Med* 2005; 22 (9):1275-7.
16. World Health Organization. *Injuries and Violence: the facts*. WHO 2010.
17. Mercy, J.A., Rosenberg, M.L., Powell, K.E., Broome, C.V., & Roper, W.L., A public health policy for preventing violence. *Health Affairs*, Winter, 7-29.
18. WHO, UNICEF. *World Report on Child Injury Prevention*. 2008.
19. World Health Organization, *Causes of death 2008*. WHO Geneva. Available online at http://www.who.int/healthinfo/global_burden_disease/cod_2008_sources_methods.pdf.
20. World Health Organization. *Global status report on noncommunicable diseases 2010*. Geneva, WHO, 2010.
21. World Health Organization. *Global health risks: Mortality and burden of disease attributable to selected major risks*. WHO Geneva 2009.
22. World Health Organization. *Global Recommendations on Physical Activity for Health*. WHO 2011. Available online at <http://www.who.int/dietphysicalactivity/pa/en/index.htmlweek>

APPENDICES

APPENDIX I

Survey Administrators

MAURITIUS		
	Name	Post
1	Ms P Chekhor	Health Motivator
2	Mrs S Sobrun	Health Motivator
3	Mrs B Parmessur	Community Health Development Motivator
4	Mrs M D Jeetunshiv	Community Health Development Motivator
5	Mrs L D Mohit	Community Health Development Motivator
6	Mrs B Baurhoo	Community Health Development Motivator
7	Mr V A Sookeera	Health Care Assistant
8	Mr J Gaonjur	Health Care Assistant
9	Mr M Rummoa	Health Care Assistant
10	Mr P Gaoneadry	Health Care Assistant
11	Mr A K Seedoyal	Health Care Assistant
12	Mr N Koonjoobeharry	Health Care Assistant
RODRIGUES		
	Name	Post
1	Mr Raboude Christopher	Nutritionist
2	Mr Rose Alfred	Nursing Officer
3	Mr Speville Hortense Berthe	Community Health Nursing Officer
4	Mr Lisette Claudino	Community Health Nursing Officer
5	Ms Bissessur Priska	Nursing Officer
6	Ms Edouard M Ange	Nursing Officer
7	Ms Roussety Marline	Community Health Care Officer
8	Ms Pierre Louis Mary	Community Health Care Officer
9	Mr Grandcourt Kenny	Community Health Care Officer

GSHS Technical Steering Committee

Dr Mrs S Aboobakar	Regional Public Health Superintendent (Survey Coordinator)
Dr S Rughoo	Community Physician and NCD Coordinator, Dr A G J Hospital
Dr Mrs L K Surnam	Community Physician and NCD Coordinator, SSRN Hospital
Dr Mrs D Mungur	Community Physician and NCD Coordinator, Flacq Hospital
Dr P Ramhit	Community Physician and NCD Coordinator, JN Hospital
Dr Mrs A Deelchand	Community Physician and NCD Coordinator, Victoria Hospital
Mr S Panchoo	Principal HIEC Officer

QUESTIONNAIRE

2011 MAURITIUS AND RODRIGUES GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY

This survey is about your health and the things you do that may affect your health. Students like you all over your country are doing this survey. Students in many other countries around the world also are doing this survey. The information you give will be used to develop better health programs for young people like yourself.

DO NOT write your name on this survey or the answer sheet. The answers you give will be kept private. No one will know how you answer. Answer the questions based on what you really know or do. There are no right or wrong answers.

Completing the survey is voluntary. Your grade or mark in this class will not be affected whether or not you answer the questions. If you do not want to answer a question, just leave it blank.

Make sure to read every question. Fill in the circles on your answer sheet that match your answer. Use only the pencil you are given. When you are done, do what the person who is giving you the survey says to do.

Here is an example of how to fill in the circles:

Fill in the circles like this  Not like this  or 

Survey

1. Do fish live in water?
 - A. Yes
 - B. No

Answer sheet

1.        

Thank you very much for your help.

1. How old are you?

- A. 11 years old or younger
- B. 12 years old
- C. 13 years old
- D. 14 years old
- E. 15 years old
- F. 16 years old or older

2. What is your sex?

- A. Male
- B. Female

3. In what class are you?

- A. Form 2
- B. Form 3
- C. Form 4

The next 6 questions ask about your height, weight, eating breakfast, eating lunch, and going hungry.

4. How tall are you without your shoes on? ON THE ANSWER SHEET, WRITE YOUR HEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID. THEN FILL IN THE OVAL BELOW EACH NUMBER.

Height (cm)		
1	5	3
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input checked="" type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	I do not know	

5. How much do you weigh without your shoes on? ON THE ANSWER SHEET, WRITE YOUR WEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID. THEN FILL IN THE OVAL BELOW EACH NUMBER.

Weight (kg)		
0	5	2
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	I do not know	

6. During the past 30 days, how often did you go hungry because there was not enough food in your home?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
7. During the past 30 days, how often did you eat breakfast?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
8. What is the main reason you do not eat breakfast?
- A. I always eat breakfast
 - B. I do not have time for breakfast
 - C. I cannot eat early in the morning
 - D. There is not always food in my home
 - E. Some other reason
9. During the past 30 days, how often did you bring your lunch to school?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always

The next 5 questions ask about what you might eat and drink.

10. During the past 30 days, how many times per day did you **usually** eat fruit?
- A. I did not eat fruit during the past 30 days
 - B. Less than one time per day
 - C. 1 time per day
 - D. 2 times per day
 - E. 3 times per day
 - F. 4 times per day
 - G. 5 or more times per day
11. During the past 30 days, how many times per day did you **usually** eat vegetables?
- A. I did not eat vegetables during the past 30 days
 - B. Less than one time per day
 - C. 1 time per day
 - D. 2 times per day
 - E. 3 times per day
 - F. 4 times per day
 - G. 5 or more times per day

12. During the past 30 days, how many times per day did you **usually** eat salty foods, such as packed salty snacks, french fries, or confit?

- A. I did not eat salty foods
- B. Less than one time per day
- C. 1 time per day
- D. 2 times per day
- E. 3 times per day
- F. 4 times per day
- G. 5 or more times per day

13. During the past 30 days, how many times per day did you **usually** drink carbonated soft drinks? (Do **not** include diet soft drinks.)

- A. I did not drink carbonated soft drinks during the past 30 days
- B. Less than one time per day
- C. 1 time per day
- D. 2 times per day
- E. 3 times per day
- F. 4 times per day
- G. 5 or more times per day

14. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as Kentucky Fried Chicken, McDonalds, or Pizza Hut?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

The next 2 questions ask about physical attacks. A physical attack occurs when one or more people hit or strike someone, or when one or more people hurt another person with a weapon (such as a stick, knife, or gun). It is not a physical attack when two students of about the same strength or power choose to fight each other.

15. During the past 12 months, how many times were you physically attacked?

- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times

16. During the past 12 months, how many times were you verbally abused by a teacher?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

The next question asks about physical fights. A physical fight occurs when two students of about the same strength or power choose to fight each other.

17. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

The next 3 questions ask about serious injuries that happened to you. An injury is serious when it makes you miss at least one full day of usual activities (such as school, sports, or a job) or requires treatment by a doctor or nurse.

18. During the past 12 months, how many times were you seriously injured?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

19. During the past 12 months, what was the most serious injury that happened to you?
- A. I was not seriously injured during the past 12 months
 - B. I had a broken bone or a dislocated joint
 - C. I had a cut or stab wound
 - D. I had a concussion or other head or neck injury, was knocked out, or could not breathe
 - E. I had a gunshot wound
 - F. I had a bad burn
 - G. I was poisoned or took too much of a drug
 - H. Something else happened to me
20. During the past 12 months, **what was the major cause** of the most serious injury that happened to you?
- A. I was not seriously injured during the past 12 months
 - B. I was in a motor vehicle accident or hit by a motor vehicle
 - C. I fell
 - D. Something fell on me or hit me
 - E. I was attacked or abused or was fighting with someone
 - F. I was in a fire or too near a flame or something hot
 - G. I inhaled or swallowed something bad for me
 - H. Something else caused my injury

The next 2 questions ask about bullying. Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.

21. During the past 30 days, on how many days were you bullied?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
22. During the past 30 days, how were you bullied **most often**?
- A. I was not bullied during the past 30 days
 - B. I was hit, kicked, pushed, shoved around, or locked indoors
 - C. I was made fun of because of my race, nationality, or color
 - D. I was made fun of because of my religion
 - E. I was made fun of with sexual jokes, comments, or gestures
 - F. I was left out of activities on purpose or completely ignored
 - G. I was made fun of because of how my body or face looks
 - H. I was bullied in some other way

The next 12 questions ask about cigarette and other tobacco use.

23. How old were you when you first tried a cigarette?
- A. I have never smoked cigarettes
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 years old or older
24. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
25. During the past 30 days, did anyone ever refuse to sell you cigarettes because of your age?
- A. I did not try to buy cigarettes during the past 30 days
 - B. Yes, someone refused to sell me cigarettes because of my age
 - C. No, my age did not keep me from buying cigarettes
26. During the past 30 days, how did you **usually** get your own cigarettes? **SELECT ONLY ONE RESPONSE.**
- A. I did not smoke cigarettes during the past 30 days
 - B. I bought them in a store, shop, or from a street vendor
 - C. I bought them from a vending machine
 - D. I gave someone else money to buy them for me
 - E. I borrowed them from someone else
 - F. I stole them
 - G. An older person gave them to me
 - H. I got them some other way
27. During the past 30 days, on how many days did you use any tobacco products other than cigarettes, such as cigars, pipes, or shisha?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days

- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

28. During the past 12 months, have you ever tried to stop smoking cigarettes?
- A. I have never smoked cigarettes
 - B. I did not smoke cigarettes during the past 12 months
 - C. Yes
 - D. No
29. During the past 7 days, on how many days have people smoked in your presence?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 or 4 days
 - D. 5 or 6 days
 - E. All 7 days
30. Which of your parents or guardians use any form of tobacco?
- A. Neither
 - B. My father or male guardian
 - C. My mother or female guardian
 - D. Both
 - E. I do not know
31. Are you in favor of banning smoking in public places, such as in restaurants; in buses, streetcars, and trains; in schools; on playgrounds; in gyms and sport arenas; and in discos?
- A. Yes
 - B. No
32. During the past 30 days, how many anti-smoking media messages (such as television, radio, billboards, posters, newspapers, magazines, and movies) have you seen?
- A. A lot
 - B. A few
 - C. None
33. Do you think smoking cigarettes is harmful to your health?
- A. Definitely not
 - B. Probably not
 - C. Probably yes
 - D. Definitely yes

34. Do you think the smoke from other people's cigarettes is harmful to you?
- A. Definitely not
 - B. Probably not
 - C. Probably yes
 - D. Definitely yes

The next 6 questions ask about drinking alcohol. This includes drinking rum, whiskey, wine, beer, or alcopops. Drinking alcohol does not include drinking a few sips of wine for religious purposes. A "drink" is a glass of wine, a bottle of beer, a small glass of liquor, or a mixed drink.

35. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 years old or older
36. During the past 30 days, on how many days did you have at least one drink containing alcohol?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
37. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink per day?
- A. I did not drink alcohol during the past 30 days
 - B. Less than one drink
 - C. 1 drink
 - D. 2 drinks
 - E. 3 drinks
 - F. 4 drinks
 - G. 5 or more drinks

38. During the past 30 days, did anyone refuse to sell you alcohol because of your age?
- A. I did not try to buy alcohol during the past 30 days
 - B. Yes, someone refused to sell me alcohol because of my age
 - C. No, my age did not keep me from buying alcohol
39. During the past 30 days, how did you **usually** get the alcohol you drank? SELECT ONLY ONE RESPONSE.
- A. I did not drink alcohol during the past 30 days
 - B. I bought it in a store, shop, or from a street vendor
 - C. I gave someone else money to buy it for me
 - D. I got it from my friends
 - E. I got it from my family
 - F. I stole it or got it without permission
 - G. I got it some other way
40. Where were you the **first time** you had a drink of alcohol?
- A. I have never had a drink of alcohol
 - B. At home
 - C. At someone else's home
 - D. At school
 - E. Out on the street, in a park, or in some other open area
 - F. At a bar, pub, or disco
 - G. In a restaurant
 - H. Some other place
41. With whom do you **usually** drink alcohol?
- A. I do not drink alcohol
 - B. With my friends
 - C. With my family
 - D. With persons I have just met
 - E. I usually drink alone
42. Do any of your brothers or sisters drink alcohol?
- A. I do not have brothers or sisters
 - B. Yes
 - C. No
 - D. I do not know
43. Which of your parents or guardians drink alcohol?
- A. Neither
 - B. My father or male guardian
 - C. My mother or female guardian
 - D. Both
 - E. I do not know

Staggering when walking, not being able to speak right, and throwing up are some signs of being really drunk.

44. During your life, how many times did you drink so much alcohol that you were really drunk?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 or more times
45. During your life, how many times have you got into trouble with your family or friends, missed school, or got into fights, as a result of drinking alcohol?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 or more times

The next 4 questions ask about drug use. This includes using gandia, brown sugar, subutex, and cocaine.

46. How old were you when you first used drugs?
- A. I have never used drugs
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 years old or older
47. During your life, how many times have you used marijuana (also called gandia)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times

48. During the past 30 days, how many times have you used marijuana (also called gandia)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times
49. During your life, how many times have you used amphetamines or methamphetamines?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times

The next 5 questions ask about sexual intercourse.

50. Have you ever had sexual intercourse?
- A. Yes
 - B. No
51. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
 - B. 11 years old or younger
 - C. 12 years old
 - D. 13 years old
 - E. 14 years old
 - F. 15 years old
 - G. 16 years old or older
52. During your life, with how many people have you had sexual intercourse?
- A. I have never had sexual intercourse
 - B. 1 person
 - C. 2 people
 - D. 3 people
 - E. 4 people
 - F. 5 people
 - G. 6 or more people

53. The **last time** you had sexual intercourse, did you or your partner use a condom or capot?
- A. I have never had sexual intercourse
 - B. Yes
 - C. No
54. The **last time** you had sexual intercourse, did you or your partner use any other method of birth control, such as withdrawal, rhythm (safe time), birth control pills, or any other method to prevent pregnancy?
- A. I have never had sexual intercourse
 - B. Yes
 - C. No
 - D. I do not know

The next 3 questions ask about physical activity. Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time. Physical activity can be done in sports, playing with friends, or walking to school. Some examples of physical activity are running, fast walking, biking, dancing, football, swimming and aerobics.

55. During the past **7 days**, on how many days were you physically active for a total of at least 60 minutes per day? **ADD UP ALL THE TIME YOU SPENT IN ANY KIND OF PHYSICAL ACTIVITY EACH DAY.**
- A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days
56. During the past 7 days, on how many days did you walk or ride a bicycle to or from school?
- A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days

57. During this school year, on how many days did you go to physical education (PE) class each week?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 or more days

The next question asks about the time you spend mostly sitting when you are not in school or doing homework.

58. How much time do you spend during a **typical or usual** day sitting and watching television, playing computer games, talking with friends, or doing other sitting activities, such as going to the cinema or playing dominoes and cards?

- A. Less than 1 hour per day
- B. 1 to 2 hours per day
- C. 3 to 4 hours per day
- D. 5 to 6 hours per day
- E. 7 to 8 hours per day
- F. More than 8 hours per day