2009 Maldives

Global School-based Student Health Survey

GSHS Country Report

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GLOBAL SCHOOL - BASED STUDENT HEALTH SURVEY

Maldives 2009

COUNTRY REPORT

Implemented by Ministry of Education in collaboration with
Ministry of Health and Family;
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Executive Summary

In 2001, World Health Organization (WHO) in collaboration with United Nations' UNICEF, UNESCO, and UNAIDS; and with technical assistance from Centre for Disease Control and Prevention (CDC), initiated the development of the Global School-based Student Health Survey (GSHS).

To date 55 countries have completed a GSHS. This report describes results from the first GSHS conducted in Maldives by the Ministry of Education in collaboration with WHO, Ministry of Health and Family and technical assistance from CDC, during the period from August-September 2009.

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

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

In 2009 Maldives GSHS employed a two-stage cluster sample design to produce a representative sample of students in grades 8 to 10. The first-stage sampling frame consisted of all schools containing any of the grades 8-10. Maldives was divided in to two sub groups representing Atolls (Rural) and Male' (Urban). Schools were selected with probability proportional to school enrolment size. 39 schools were selected to participate in the Maldives GSHS. 14 schools from Male' sample and 25 schools from Atoll schools were selected. The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All classes in each selected schools were included in the sampling frame. All students in the sampled classrooms were eligible to participate in the GSHS.

The Maldives GSHS questionnaire contained 93 questions, 43 questions in core questionnaire module and 50 from core expanded questions, addressing all the GSHS core modules: Demographics, dietary behaviours, hygiene, violence and unintentional injury, mental health, tobacco use, alcohol and drug use, sexual behaviours, physical activity and protective factors. The 2009 Maldives GSHS questionnaire was developed by the input from the steering committee, school heads of selected schools and a religious leader. For the 2009 Maldives GSHS, 3,241 questionnaires were completed in 39 schools. The school response rate was 100%, the student response rate was 80%, and the overall response rate was 80%.

The survey results have identified the seriousness of health issues (suicidal thoughts, drugs, alcohol, tobacco, violence, dietary behaviour etc.) associated with our adolescent age school children. It is also evident that the problems are much greater among students in Atoll.
The 2009 Maldives GSHS indicated high percentage (19.9%) of students who seriously consider attempting suicide during the past 12 months in national sample. The Atoll survey showed

students reported higher percentage than that of the National and the Male surveys, who considered attempting suicide.

The result also showed Maldives (5.4%) has high prevalence of lifetime drug use. Male students (7.5%) are significantly more likely than female students (3.2%) to report lifetime drug use. Life time drug uses in the Atoll (6.1%) are much more than Male' (3.7%). Among students who ever had tried drugs, 67.7% were 13 years old or younger when they first tried drugs. In Maldives the prevalence of current alcohol use is 6.7%; male students (9.1%) are significantly more likely than female students (4.2%) to drink alcohol on one or more days during the past 30 days. The prevalence of current tobacco use in Maldives is 11.6%; Male students (17.7%) are significantly more likely than female students (5.5%) to smoke cigarettes. Among students who ever drank alcohol or smoked cigarette 71.5% of the students in Maldives national survey had their first drink of alcohol before the age of 14 years while 65% of students had their first tried of cigarette before the age of 14 years. In Maldives 57.5% of the students reported that people smoked in their presence one or more time during the past 7 days. Male students (61.1%) are significantly more likely than female students (54.1%) to report that people smoked in their presence on one or more days. Overall, 36.0% of students had a parent or guardian who uses any form of tobacco.

Results related to violence and unintended injuries showed that more than one-third of the students reported to experience bullies, physical fights, and serious injuries for one or more times in the past 12 months. Nationally, male students (47.6%) are significantly more likely than female students (29.2%) to have been physically attacked. In comparison, students (41.7%) from Atoll are significantly more likely than students (30.7%) from Male' to be physically attacked. Overall in Maldives, 37.7% of students were bullied on one or more days during the past 30 days. Male students (41.2%) and female students (34.2%) are equally likely to be bullied on one or more days. The result of sexual abuse was astonishing. The national survey shows that it is not only female students (16.1%) who are victims but male students (17.8%) are equally affected to had ever been physically forced to have sexual intercourse when they did not want to.

The results indicate that 22.7% of students usually ate fruit such as banana two or more times per day during the past 30 days. Male students (26.4%) are significantly more likely than female students (19.3%) to eat fruit. Vegetable consumption is still lower, 10.1% of students usually ate vegetable such as pumpkin three or more times per day during the past 30 days. Male students (12.6%) are significantly more likely than female students (7.7%) to eat vegetables. The consumption of fruit and vegetables in Male' is much lower compared to Atoll with fruit intakes 24.7% and vegetables intake 11.2% in Atoll and in Male' fruit intakes is 5.2% and vegetables intake 7.5%.The prevalence of hunger among students in Maldives is 6.9%; students (7.6%) from Atoll are slightly more likely than students (5.2%) from Male' to go hungry most of the time or always.

In Maldives the percentage of students who did not clean or brush their teeth during the past 30 days was 8.0%. Male students (9.9%) are significantly more likely than female students (6.0%) not clean or brush their teeth. Likewise, the percentage of students who did not clean or brush their teeth was (9.3%) in Atoll, this is significantly more likely than Male' (4.7%). The study showed that 8.3% of students never or rarely washed their hands before eating during the past 30 days. Male students (10.7%) are more likely than female students (5.7%) to never or rarely wash

their hands before eating. In Maldives 5.9% of students never or rarely washed their hands after using the toilet or latrine. Among students who washed their hands at school during the past 30 days, 46.1% of students never or rarely used soap to wash their hands, (47.9%) are significantly more likely than female students (43.8%) to never or rarely use soap to wash their hands. Among students who washed their hands at school during the past 30 days, (41.8%) from Atoll are significantly more likely than (55.1%) from Male', never or rarely used soap to wash their hands. Satisfyingly 70.9% of students described the health of their teeth and gums as good and very good and 69.7% of students never or rarely had a toothache during the past 12 months. Students (82.8%) from Male' is significantly more likely than students (64.0%) from Atoll to never or rarely have a toothache

The study showed that nationwide 70.7% had ever heard of HIV infections or the disease called AIDS. Students (66.6%) from Atoll are significantly less likely than students (80.1%) from Male' to have ever heard of HIV infections or the disease called AIDS. Male students (67.2%) are significantly less likely than female students (74.3%) to have ever heard of HIV infections or the disease called AIDS. With regards to teaching HIV infections or AIDS in schools, close to one third of the students in all samples were taught in any of their classes during the school year about of HIV infections or AIDS.

Forlornly the result from the national survey revealed that only one fourth (25.5%) of students were physically active for a total of at least 60 minutes per day on five or more days during the past 7 days. Male students (29.3%) are significantly more likely than female students (21.9%) to be physically active. Overall, 41.6% of students spent three or more hours per day doing sitting activities during a typical or usually. Male students (43.5%) are significantly more likely than female students (39.7%) to spend three or more hours per day doing sitting activities. Likewise, students (39.6%) from Atoll are significantly less likely than students (46.2%) from Male' to be engaged in sedentary behaviour.

In Maldives, high percentage 46.9% of students reported their parents or guardians really know what they were doing with their free time most of the time or always during the past 30 days. Male students (42.6%) are significantly less likely than female students (51.1%) to report their parents or guardians really know what they are doing with their free time most of the time or always. 28.5% of students reported their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Nationally close to half (49.6%) of students reported that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Male students (43.5%) are significantly less likely than female students (55.7%) to report that most of the students in their school are kind and helpful. Students (46.0%) from Atoll are significantly less likely than students (58.0%) from Male to report that most of the students in their school were kind and helpful. In Maldives more than a quarter (30.3%) of students missed classes or school without permission on one or more of the past 30 days. Male students (34.5%) are significantly more likely than female students (27.5%) to miss classes or school without permission. Students (32.1%) from Atoll are significantly more likely than students (26.4%) from Male' to miss classes or school without permission.

In general it is recommended that the results should be disseminated to all stake holders and creates awareness among them in order to realize the seriousness of our students' health

problems and take proper action to minimize and also develop advocacy materials using this information in simple materials that target audience (school heads/senior management, teachers, public health workers and parents) would understand. Advocating “schools to implement concepts of health promoting school initiative” with the target to achieving the standards in health and family dimension of “Child Friendly Barabaru School Indicators” (CFBS). This dimension looks into the physical, social aspects of school children as well as the physical and social environment of the school which in turn have an impact on the students as a whole. At the same time Strengthen “skills based health education” in schools with a focus to develop communication, negotiation and interpersonal skills and competencies and health practices related to students health. Maldives should continue with the GSHS surveillance in order to track the trends in the prevalence of health risk behaviours and protective factors.

Part 1: Introduction

Background

In 2001, World Health Organization (WHO) in collaboration with United Nations' UNICEF, UNESCO, and UNAIDS; and with technical assistance from Centre for Disease Control and Prevention (CDC), initiated the development of the Global School-based Student Health Survey (GSHS).

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

Global School-based Student Health Survey (GSHS) is a school-based survey conducted primarily among students aged 13–15 years. The health and wellbeing of children and youth is a fundamental issue since health is inextricably linked to educational attainment, quality of life and economic productivity.

To date 55 countries have completed a GSHS. This report describes results from the first GSHS conducted in Maldives by the Ministry of Education during the period from August- September 2009.

Purpose

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

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

About GSHS

The purpose of the GSHS is a school-based survey conducted primarily among students aged 13-15 years which correspond to grades 8-10 students in Maldives. Since, students age range in these grades goes beyond the specified age range, all students attending the selected classes were included in the survey 2009 Maldives GSHS. It measures behaviour and protective factors related to the leading causes of mortality and morbidity among youth and adults in Maldives.

- Demographics
- Dietary Behaviours
- Hygiene
- Violence and Unintentional Injury

- Mental health
- Tobacco Use
- Alcohol Use
- Drug Use
- Sexual Behaviours
- Physical Activity and
- Protective Factors

The 2009 Maldives GSHS is the very first national school health survey conducted to look into health behaviour and protective factors among adolescent in schools. Maldives has conducted Global Youth Tobacco Survey (GYTS) twice in 2003 and 2007. The GYTS is a school based survey specially designed to assess behaviour, attitude and knowledge on tobacco (1, 2). The 2009 Maldives Demographic and Health Survey (MDHS) is another national level health survey focusing on the whole population age 15-64. The 2009 MDHS is designed to provide data to monitor the population and health situation in Maldives (3).

School health program in the Maldives was first initiated after the implementation of First Health Sector Development Medium Term Plan in 1985. The school health program was implemented in 1987 to conduct health promoting activities and health awareness programs for parents and teachers as well as health education for students in schools. The school health programs are run by the School Health and Safety Section (SHSS) previously known as School Health Unit (SHU) within the Educational Supervision and Quality Improvement Section of the Ministry of Education. Placement of the SHSS within the Ministry of Education gives easy access to schools and further, as it is within the monitoring section, it becomes easier to assess, evaluate and monitor the school health initiatives that are conducted in schools. Maldives joined the global concept of health promoting school; Maldives Health Promoting School Initiative (MHPSI) in 2004 with the aim of helping schools to build and use their organisational capacity to improve health among the students, staff, families and community members (4, 5).

Methods

Sampling

In 2009 Maldives GSHS employed a two-stage cluster sample design to produce a representative sample of students in grades 8 to 10. The first-stage sampling frame consisted of all schools containing any of the grades 8-10. Maldives was divided in to two sub groups representing Atolls (Rural) and Male' (Urban).

- Atolls sample: consist of all the lower secondary school in Maldives excluding the school in the capital Male'
- Male' sample: consist all lower secondary schools in the capital city Male'

Schools were selected with probability proportional to school enrolment size. 39 schools were selected to participate in the Maldives GSHS. 14 schools from Male' sample and 25 schools from Atoll schools were selected.

The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All classes in each selected schools were included in the sampling frame. All students in the sampled classrooms were eligible to participate in the GSHS.

Weighting

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

$$W = W1 * W2 * f1 * f2 * f3$$

- 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 non-response 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 non-response adjustment factor calculated by class.
- f3 = a post stratification adjustment factor calculated by Class Standard.

Response rates

For the 2009 Maldives GSHS, 3,241 questionnaires were completed in 39 schools. The school response rate was 100%, the student response rate was 80%, and the overall response rate was 80%. The following table shows the response rate for the sub samples (Male'/Atoll) and the national sample (Maldives).

Table 1: Survey response rates, of the sample, 2009 Maldives GSHS.

	Male'	Atoll	Maldives
School response rate	100%	100%	100%
Student response rate	81%	80%	80%
Overall response rate	80%	80%	80%

The data was cleaned and edited for inconsistencies. Missing data was not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS are representative of all students attending grades 8-10 in Maldives.

Administering the survey

Survey administration occurred from August to September 2009. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Student completed the self-administered questionnaire during 45 minutes duration and recorded

their responses directly on computer-scannable answer sheet. Approximately, 41 Survey Administrators were specially trained to conduct the GSHS.

Ministry of Education formally informed all the head of schools of selected schools to participate in the GSHS. Parents and students of selected classes were informed beforehand and their consents were taken. Before attending the questionnaire students who do not have parental/guardian permission to participate in the GSHS were double checked.

Maldives GSHS Questionnaire

The Maldives GSHS questionnaire (Appendix 1) contained 93 questions; 43 questions in core questionnaire module and 50 from core expanded questions, addressing all the GSHS core modules: Demographics, dietary behaviours, hygiene, violence and unintentional injury, mental health, tobacco use, alcohol and drug use, sexual behaviours, physical activity and protective factors. The 2009 Maldives GSHS questionnaire was developed by the input from the steering committee, school heads of selected schools and a religious leader. The questionnaire was finalized in September 2008.

Pilot Testing

The 2009 Maldives GSHS questionnaire was piloted among a group of 15 students in September 2008. The following questions were asked for their feedback:

1. Did any of the questions make you feel uncomfortable?
2. Did you understand all of the words?
3. How clear was the intent of the questions?
4. Did you know what was being asked?
5. How could we make it clearer?

Part 2: Results

Overview

The results of the main questions for each module are presented using tables. Results are presented by sex (male and female) and by the sub groups (Male'/Atoll) and the combine National (Maldives).

The results have been divided into 11 topics, as follows:

1. Demographics
2. Dietary Behaviours
3. Hygiene
4. Violence and Unintentional Injury
5. Mental Health
6. Tobacco Use
7. Alcohol Use
8. Drug Use
9. Sexual Behaviours
10. Physical Activity and
11. Protective Factors

Demographics

The demographics characteristics of the sample are described in the following table.

Table 2: Demographic characteristics of the sample, 2009 Maldives GSHS.

	Male'		Atoll		Maldives	
Characteristics	N	%	N	%	N	%
Sex						
Male	687	48.4	766	49.8	1453	49.5
Female	821	51.6	931	50.2	1752	50.6
Age						
12 or below	12	1.0	24	1.5	36	1.4
13-15	979	64.7	992	58.1	1971	60.0
16 or above	494	34.4	656	40.4	1150	38.6
Grades						
Grade 8	569	36.3	668	37.5	1237	37.1
Grade 9	485	35.4	530	32.8	1015	33.5
Grade10	437	28.2	478	29.8	915	29.3

According to the 2006 census the total population of Maldives was 298,968. Adolescent age 10-19 years represents 25% (76,903) of the population (6). From the 2008 statistics of Ministry of Education, there were 28,164 students in grade 8-10 (7).

In this survey, nationwide 50.6% of respondents were females and 49.5% were males. 60% respondents' age is 13 to 15 years old, 1.4% of respondents' age is 12 years old or younger and 38.6% of respondent's age is 16 years old and older. 37.1% percent were attending Grade 8, 33.5% were in Grade 9 and 29.3% in Grade 10.

From sub sample Male', 51.6% of respondents was females and 48.4% were males. 64.7% respondents' age is 13 to 15 years old, 1.0% of respondents' age is 12 years old or younger and 34.4% of respondent's age is 16 years old and older. 36.6% percent were attending Grade 8, 35.4% were in Grade 9 and 28.2% in Grade 10.

From sub sample Atoll, 50.2% of respondents were females and 49.8% were males. 58.1% respondents' age is 13 to 15 years old, 1.5% of respondents' age is 12 years old or younger and 40.4% of respondent's age is 16 years old and older. 37.5% percent were attending Grade 8, 32.8% were in Grade 9 and 29.8% in Grade 10.

Dietary Behaviour

Background

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

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

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

According to the 2004 NCD Risk Factor Survey conducted in the urban city of Maldives, the prevalence of NCD risk factors was high among both men and women in the low education group: overweight (BMI >/= 23 kg/m(2)) (60.8, 65.5%); abdominal obesity (24.2, 54.1%); raised blood pressure (29.7, 32.9%); raised blood glucose (4.3, 4.7%); hypercholesterolemia (53.7, 54.9%). Fruits and vegetables were consumed on a median of 3 days per week each with a median of one serving per day. Only 2.7% of the subjects had five or more servings of fruits and vegetables a day (10, 11).

The 2001Multiple Cluster Survey, conducted in Maldives shows that 30.4% of children under five years of age are underweight, 24.8% are stunted and 13.2 % are wasted. The percentage of children who received Vitamin A supplements within the last 4-6 months prior to the survey was 50.6%. Likewise, more than 5% of children have reported vision difficulty and are suffering

from Vitamin A deficiency among children aged 24-59 months. This indicates that Maldives has severe Vitamin A deficiency among children as under functional classification.

Similarly, during their last pregnancy 55% of women had difficulty seeing in daylight and the same number of women suffered night blindness. The mean BMI for women in Maldives is 23.5. 23% of women in the Maldives have a BMI below 18.5 indicates a high prevalence of nutritional deficiency. This deficiency is high among women in the age groups 15-19 and 20-24. The survey also indicates that 41% of women are mildly anaemic, 10% moderately anaemic, and 1% severely anaemic (12).

Results

Table 3: Dietary behaviors, by sex, 2009 Maldives GSHS.

Dietary Behaviour	Sample	Total	Boys	Girls
Went hungry most of the time or always because there was not enough food in your home, during the past 30 days	Male'	5.2 (4.0-6.9)	5.5 (3.9-7.7)	4.8 (3.0-7.5)
	Atoll	7.6 (5.6-10.4)	8.2 (6.1-11.0)	7.1 (4.7-10.4)
	Maldives	6.9 (5.4-8.8)	7.4 (5.9-9.4)	6.4 (4.7-8.7)
Usually ate fruit such as banana two or more times per day during the past 30 days	Male'	17.9 (15.8-20.2)	19.3 (16.5-22.6)	16.7 (13.919.8)
	Atoll	24.7 (20.6-29.2)	29.3 (24.7-34.3)	20.4 (15.4-26.6)
	Maldives	22.7 (19.9-25.7)	26.4 (23.2-29.9)	19.3 (15.8-23.4)
Usually ate vegetables such as pumpkin three or more times per day during the past 30 days	Male'	7.5 (6.1-9.3)	9.6 (7.2-12.7)	5.6 (4.1-7.7)
	Atoll	11.2 (8.5-14.6)	13.8 (10.5-18.0)	8.6 (5.8-12.6)
	Maldives	10.1 (8.2-12.4)	12.6 (10.2-15.5)	7.7 (5.7-10.3)
Ate fruits and vegetables such as banana and pumpkin five or more times per day during the past 30 days	Male'	9.1 (7.4-11.2)	10.5 (8.1-13.5)	7.9 (5.9-10.5)
	Atoll	14.5 (11.4-18.4)	17.7 (14.2-22.0)	11.4 (7.7-16.7)
	Maldives	12.9 (10.7-15.5)	15.6 (13.1-18.5)	10.4 (7.7-13.8)
Usually drank carbonated soft drinks such as coke one or more times per day during the past 30 days	Male'	36.2 (32.9-39.7)	36.5 (31.7-41.5)	35.9 (31.2-40.9)
	Atoll	31.7 (27.3-36.5)	35.3 (30.4-40.7)	28.2 (23.2-33.9)
	Maldives	33.0 (29.9-36.4)	35.7 (32.0-39.5)	30.5 (26.9-34.4)
Usually ate food from a fast food restaurant such as Dine-more on three or more times per day	Male'	15.4 (13.0-18.1)	18.9 (15.3-23.2)	11.8 (9.4-14.8)

during the past 7 days	Atoll	15.9 (13.0-19.2)	18.5 (15.2-22.4)	12.6 (9.3-17.0)
	Maldives	15.7 (13.6-18.1)	18.6 (16.1-21.5)	12.4 (10.0-15.4)
Describe their weight as slightly or very overweight	Male'	24.0 (21.4-26.8)	23.8 (20.1-27.9)	24.1 (20.5-28.2)
	Atoll	18.9 (15.6-22.6)	19.4 (14.3-25.7)	18.5 (15.3-22.2)
	Maldives	20.4 (18.0-23.0)	20.7 (16.9-25.0)	20.2 (17.9-22.8)
Trying to lose weight	Male'	30.9 (27.9-34.1)	28.8 (24.6-33.4)	32.9 (28.4-37.6)
	Atoll	18.6 (16.3-21.1)	17.8 (14.3-21.9)	19.6 (17.3-22.1)
	Maldives	22.2 (20.3-24.2)	21.0 (18.3-24.0)	23.6 (21.5-25.8)
Exercised to lose weight or to keep from gaining weight during the past 30 days	Male'	31.5 (28.7-34.4)	35.8 (31.8-40.0)	27.5 (23.7-31.7)
	Atoll	31.0 (27.8-34.4)	34.7 (29.2-40.6)	27.4 (23.6-31.6)
	Maldives	31.3 (28.8-33.5)	35.0 (31.1-39.1)	27.4 (24.6-30.5)
Ate less food few calories, or food low in fats to lose weight or to keep from gaining weight during the past 30 days	Male'	33.6 (30.2-37.2)	29.9 (26.6-33.3)	37.0 (31.0-43.5)
	Atoll	36.6 (32.6-40.8)	39.3 (33.3-45.6)	33.8 (30.5-37.2)
	Maldives	35.7 (32.9-38.7)	36.6 (32.4-41.1)	34.7 (31.9-37.7)
Ate breakfast most of the time or always during the past 30 days	Male'	48.2 (45.1-51.3)	54.0 (49.1-58.8)	42.8 (38.347.4)
	Atoll	45.9 (42.6-49.2)	45.6 (41.9-49.3)	45.9 (39.6-52.4)
	Maldives	46.5 (44.2-48.9)	48.0 (45.2-50.8)	45.0 (40.6-49.5)
Main reason for not eating breakfast was that there was not always food in their home	Male'	3.4 (2.5-4.6)	3.5 (2.1-5.7)	3.3 (2.1-5.1)
	Atoll	3.4 (2.6-4.5)	4.4 (3.2-5.8)	2.4 (1.6-3.6)
	Maldives	3.4 (2.8-4.2)	4.1 (3.2-5.2)	2.7 (2.0-3.6)

Prevalence of Hunger

National

Overall, in Maldives 6.9% of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. Male students (7.4%) and female

students (6.4%) are equally likely to go hungry most of the time or always because there is not enough food in their home.

Sub national

In comparison, students (7.6%) from Atoll are slightly more likely than students (5.2%) from Male' to go hungry most of the time or always because there was not enough food in their home. Male students (8.2%) from Atoll and (5.5%) from Male' and female students (7.1%) from Atoll and (4.8%) from Male' are equally likely to go hungry most of the time or always because there is not enough food in their home.

Fruit and vegetable intake

National

Overall, in Maldives 22.7% of students usually ate fruit such as banana two or more times per day during the past 30 days. Male students (26.4%) are significantly more likely than female students (19.3%) to eat fruit two or more times per day.

Overall, in Maldives 10.1% of students usually ate vegetable such as pumpkin three or more times per day during the past 30 days. Male students (12.6%) are significantly more likely than female students (7.7%) to eat vegetables three or more times per day.

Overall, in Maldives 12.9% of students usually ate fruit and vegetable five or more times per day during the past 30 days. Male students (15.6%) are significantly more than female students (10.4%) to eat vegetables five or more times per day.

Sub national

In comparison, students (24.7%) from Atoll are significantly more likely than students (5.2%) from Male' to eat fruit two or more times per day. Male students (29.3%) from Atoll and (19.3%) from Male' are significantly more likely than female students (20.4%) from Atoll and (16.7%) from Male' to eat fruit two or more times per day.

In comparison, students (11.2%) from Atoll are significantly more likely than students (7.5%) from Male' to eat vegetables three or more times per day. Male students (13.8%) from Atoll and (9.6%) from Male' are significantly more likely than female students (8.6%) from Atoll and (5.6%) from Male' to eat vegetables three or more times per day.

In comparison, students (14.5%) from Atoll are significantly more likely than students (9.1%) from Male' to eat fruit and vegetables five or more times per day. Male students (17.7%) from Atoll and (10.5%) from Male' are significantly more likelythan female students (11.4%) from Atoll and (7.9%) from Male' to eat fruit and vegetables five or more times per day.

Consumption of carbonated soft drinks

National

Overall, in Maldives 33.0% drink carbonated soft drinks such as coke one or more times per day during the past 30 days. Male students (35.7%) and female students (30.5%) are equally likely to drink carbonated soft drinks one or more times per day.

Sub national

In comparison, students (36.2%) from Male' is more likely than students (31.7%) from Atoll to drink carbonated soft drinks one or more times per day. Male students (35.3%) from Atoll and (36.5%) from Male' and female students (28.2%) from Atoll and (35.9%) from Male' are equally likely to drink carbonated soft drinks one or more times per day.

Consumption of food from fast food restaurant

National

Overall, in Maldives 15.7% eat food from fast food restaurant such as Dine-more on three or more times per day during the past 7 days. Male students (18.6%) and female students (12.4%) are equally likely to eat food from fast food restaurant on three or more times per day.

Sub national

Likewise, students (15.4%) from Male' and students (15.9%) from Atoll are equally likely to eat food from fast food restaurant on three or more times per day. Male students (18.5%) from Atoll and (18.9%) from Male' and female students (12.6%) from Atoll and (11.8%) from Male' are equally likely to eat food from fast food restaurant on three or more times per day.

Perception about weight

National

Overall, in Maldives 20.4% of students describes their weight as slightly or very over weight. Male students (20.7%) and female students (20.2%) are equally likely to describe their weight as slightly or very over weight.

Sub national

In comparison, students (24.0%) from Male' is significantly more likely than students (18.9%) from Atoll to describe their weight as slightly or very over weight. Male students (19.4%) from Atoll and (18.5%) from Male' and female students (23.8%) from Atoll and (24.1%) from Male' are equally likely to describes their weight as slightly or very over weight.

Maintenance of weight

National

Overall, in Maldives 22.2% of students are trying to lose weight. Male students (21.0%) and female students (23.6%) are equally trying to lose weight.

Overall, in Maldives 31.3% of students are exercising to lose weight or to keep from gaining weight during the past 30 days. Male students (35.0%) are significantly more likely than female students (27.4%) are exercising to lose weight or to keep from gaining weight.

Overall, in Maldives 35.7% of students are eating less food few calories or food low in fats to lose weight or to keep from gaining weight during the past 30 days. Male students (36.6%) and female students (34.7%) are equally likely to eat less food few calories or food low in fats to lose weight or to keep from gaining weight.

Sub national

In comparison, students (30.9%) from Male' is significantly more likely than students (18.6%) from Atoll, to try to lose weight. From Atoll, male students (17.8%) and female students (19.6%) from Atoll are equally trying to lose weight. However, from Male' female students (32.9%) are more likely than male students (28.8%), to try to lose weight.

Similarly, students (31.5%) from Male' and (31.0%) from Atoll are equally exercising to lose weight or to keep from gaining weight. However, Male students (35.8%) from Male' and (34.7) from Atoll are significantly more likely than female students (27.5%) from Male' and (27.4%) from Atoll to exercise to lose weight or to keep from gaining weight.

Similarly, students (36.6%) from Atoll and (33.6%) from Male' are equally likely to eat less food few calories or food low in fats to lose weight or to keep from gaining weight. From Atoll, male students (39.3%) are significantly more than female students (33.8%) to eat less food few calories or food low in fats to lose weight or to keep from gaining weight. In contrast, from Male', female students (37.0%) are significantly more than male students (29.9%) to eat less food few calories or food low in fats to lose weight or to keep from gaining weight.

Consumption of breakfast

National

Overall, in Maldives 46.5% of students eat breakfast most of the time or always during the past 30 days. Male students (48.0%) and female students (45.0%) are equally likely to eat breakfast most of the time or always.

Overall, in Maldives 3.4% of students did not eat breakfast because there was not always food in their home. Male students (4.1%) and female students (2.7%) are equally likely not eat breakfast because there was not always food in their home.

Sub national

Similarly, students (45.9%) from Atoll and (48.2%) from Male' are equally likely to eat breakfast most of the time or always. From Atoll, male students (45.6%) and female students (45.9%) are equally likely to eat breakfast most of the time or always. However, in Male', male students (54.0%) are significantly more likely than female students (42.8%) to eat breakfast most of the time or always.

Similarly, students (3.4%) from Atoll and Male' did not eat breakfast because there was not always food in their home. Male students (4.4%) from Atoll and (2.4%) from Male' and female students (3.5%) from Atoll and (3.3%) from Male' are equally likely not eat breakfast because there was not always food in their home.

3. Hygiene

Background

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin American countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increased sugar consumption and inadequate fluoride exposure (13). In addition to causing pain and discomfort, poor oral health can affect children's ability to communicate and learn. More than 50 million school hours are lost annually because of oral health problems (14). In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental disease (15).

Diarrhoeal diseases kill nearly 2 million children every year. Hygiene education and the promotion of hand-washing can reduce the number of diarrhoeal cases by 45% (16). About 400 million school-aged children are infected with worms worldwide. These parasites consume nutrients from children they infect, cause abdominal pain and malfunction, and can impair learning by slowing cognitive development (17).

In the Maldives the prevalence of water and sanitation diseases is a major concern and the children are at most risk. According to the School Sanitation and Hygiene Education Situation Analysis in the Maldives (2002) only 32% of island schools could supply rain water for drinking purposes all year and only 39% had appropriate hand washing facilities. Soap was available in only 1 of the 46 schools observed (18).

76% of the households in Male' have desalinated water piped into dwelling units, and 23% percent have rain tanks as the major source of water. In the islands the main source is rain water. Well water is also another source of water used in the island. The survey shows that in more than four fifth of the household water available is used to drinking without any further purification (12). According to the 2006 census data, out of 46, 194 households, 174,631 have toilets connected to sea and 23,247 connected to septic tank (6).

According to the 2001 Maldives Health Report Helminthes infest an estimated 50-75% of students. Diarrhea morbidity is a persistent problem in the country. The infestations and water and sanitation related diseases are spread in schools due to improper facilities and poor hygiene behaviors (19).

Results

Table 4: Hygiene-related behaviors, by sex, 2009 Maldives GSHS.

Hygiene	Sample	Total	Boys	Girls
Usually cleaned or brushed their teeth less than one time per day during the past 30 days	Male'	4.7 (3.5-4.6)	5.8 (4.1-8.1)	3.6 (2.2-6.0)
	Atoll	9.3 (7.6-11.3)	11.6 (9.4-14.2)	6.9 (5.1-9.4)
	Maldives	8.0 (6.7-9.4)	9.9 (8.3-11.8)	6.0 (4.6-7.7)
Never or rarely washed their hands before eating during the past 30 days	Male'	8.2 (6.6-10.1)	12.4 (9.9-15.5)	3.9 (2.7-5.6)
	Atoll	8.6 (7.2-9.7)	10.0 (8.1-12.3)	6.5 (4.7-8.9)
	Maldives	8.3 (7.4-9.3)	10.7 (9.2-12.4)	5.7 (4.4-7.4)
Never or rarely washed their after using the toilet or latrine during the past 30 days	Male'	4.7 (3.5-6.2)	5.9 (4.2-8.3)	3.5 (2.4-5.1)
	Atoll	6.4 (4.8-8.6)	6.6 (4.8-8.9)	5.9 (4.1-8.3)
	Maldives	5.9 (4.7-7.4)	6.4 (5.0-8.1)	5.2 (3.9-6.9)
Never or rarely used soap when washing their hands during the past 30 days	Male'	8.3 (7.1-9.7)	11.5 (9.4-14.0)	5.4 (4.0-7.4)
	Atoll	7.9 (5.6-11.1)	8.7 (6.0-12.5)	7.1 (5.0-9.9)
	Maldives	8.0 (6.4-10.1)	9.5 (7.5-12.0)	6.6 (5.1-8.5)
Never or rarely washed their hands after using the toilet or latrine at school during the past 30 days	Male'	16.5 (14.6-18.6)	17.6 (15.1-20.4)	15.4 (12.5-18.7)
	Atoll	22.1 (19.2-25.3)	18.4 (15.6-21.7)	25.8 (22.5-29.5)
	Maldives	20.4 (18.4-22.6)	18.2 (16.1-20.4)	22.6 (20.2-25.3)
Among students who had toilets or latrines at school during the past 30 days , those who most of the time or always used the toilets or latrines at school	Male'	13.2 (11.3-15.4)	15.5 (12.6-19.0)	11.0 (8.8-13.7)
	Atoll	11.2 (8.6-14.5)	14.0 (10.3-18.6)	8.1 (5.7-11.3)
	Maldives	11.8 (10.0-14.0)	14.4 (11.8-17.6)	9.0 (7.2-11.1)
Among students who had toilets or latrines at	Male'	75.2	65.6	84.1

school, those who had separate toilets and latrines for boys and girls		(71.0-78.9)	(57.7-72.7)	(79.4-87.9)
	Atoll	73.7 (66.0-80.2)	73.6 (65.7-80.2)	74.0 (65.2-81.2)
	Maldives	74.2 (69.0-78.7)	71.2 (65.4-76.4)	77.2 (71.3-82.1)
Among students who washed their hands at school during the past 30 days, those who never or rarely used soap to wash their hands	Male'	55.1 (50.1-59.9)	60.7 (54.4-66.7)	50.1 (42.7-57.5)
	Atoll	41.8 (35.2-48.7)	42.5 (37.3-47.9)	40.2 (30.4-51.0)
	Maldives	46.1 (41.4-50.8)	47.9 (43.9-52.0)	43.8 (36.9-50.9)
Did not have a source of clean water for drinking at school	Male'	40.6 (36.0-45.5)	36.0 (29.7-42.9)	44.8 (37.6-52.2)
	Atoll	37.8 (31.1-45.1)	38.5 (30.3-47.4)	37.3 (31.3-43.8)
	Maldives	38.7 (33.9-43.6)	37.8 (31.9-44.0)	39.6 (35.0-44.3)
Brought water from home to drink while they were at school	Male'	39.0 (34.3-43.9)	30.7 (24.6-37.5)	46.5 (39.3-53.7)
	Atoll	27.2 (22.7-32.1)	20.6 (16.0-26.1)	33.8 (27.7-40.5)
	Maldives	30.7 (27.3-34.2)	23.5 (19.9-27.6)	37.6 (33.0-42.5)
Among students who had a water source at school, those who most of the time or always drank water from the water source	Male'	21.2 (18.2-24.7)	26.9 (21.132.3)	16.2 (12.0-21.6)
	Atoll	16.0 (12.4-20.3)	20.1 (16.1-24.7)	12.0 (7.8-18.1)
	Maldives	17.6 (15.0-20.5)	22.1 (19.0-25.5)	13.3 (10.1-17.4)
Taught in any of their classes during this school year how to avoid worm infection	Male'	7.4 (5.7-9.4)	8.6 (6.3-11.6)	6.1 (4.2-8.7)
	Atoll	17.0 (12.8-22.2)	18.2 (13.1-24.7)	15.9 (11.8-21.1)
	Maldives	14.2 (11.2-17.7)	15.4 (11.7-20.0)	12.9 (10.0-16.5)
Taught in any of their classes during this school year where to get treatment for a worm infection	Male'	6.1 (4.5-8.3)	7.5 (5.1-10.8)	5.0 (3.2-7.7)
	Atoll	16.5 (12.5-21.5)	16.5 (12.0-22.1)	16.5 (12.4-21.7)
	Maldives	13.4 (10.6-16.8)	13.8 (10.6-17.8)	13.0 (10.1-16.5)
Described the health of their teeth and gums as good and very good	Male'	67.5 (64.7-70.1)	66.2 (61.8-70.4)	68.7 (65.5-71.6)
	Atoll	72.4 (69.3-75.3)	71.0 (66.4-75.2)	73.9 (70.3-77.2)
	Maldives	70.9 (68.8-73.0)	69.6 (66.3-72.7)	72.3 (69.9-74.6)

Never or rarely had a tooth ache during the past 12 months	Male'	82.8 (79.8-85.5)	81.9 (76.7-86.1)	83.9 (79.9-87.3)
	Atoll	64.0 (55.8-71.6)	64.8 (55.2-73.3)	63.3 (56.0-70.1)
	Maldives	69.7 (63.9-74.9)	69.9 (63.2-75.8)	69.6 (64.2-74.4)

Personal Hygiene

National

In Maldives, the percentage of students who did not clean or brush their teeth during the past 30 days was 8.0%. Male students (9.9%) are significantly more likely than female students (6.0%) to not clean or brush their teeth.

Overall, 8.3% of students never or rarely washed their hands before eating during the past 30 days. Male students (10.7%) are more likely than female students (5.7%) to never or rarely wash their hands before eating.

Overall, 5.9% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. Male students (6.4%) and female students (5.2%) are equally likely to never or rarely wash their hands after using the toilet or latrine.

Overall, 8.0% of students never or rarely used soap when washing their hands during the past 30 days. Male students (9.5%) are significantly more likely than female students (6.6%) to never or rarely use soap when washing their hands.

Sub national

Likewise, Students (9.3%) from Atoll, is significantly more likely than students (4.7%) from Male' not clean or brush their teeth. Male students (11.6%) from Atoll and (5.8%) from Male' are significantly more likely than female students (6.9%) from Atoll and (3.6%) from Male' to not clean or brush their teeth.

Likewise, students (8.6%) from Atoll and (8.2%) from Male' are equally likely to never or rarely wash their hands before eating. Male students (10.0%) from Atoll and (12.4%) from Male' are significantly more likely than female students (6.5%) from Atoll and (3.9%) from Male' to never or rarely wash their hands before eating.

Similarly, students (6.4%) from Atoll and (4.7%) from Male' are equally likely never or rarely washed their hands after using the toilet or latrine. Male students (6.6%) from Atoll and (5.9%) from Male' and female students (5.9%) from Atoll and (3.5%) from Male' are equally likely to never or rarely wash their hands after using the toilet or latrine.

Similarly, students (7.9%0 from Atoll and (8.3%) from Male' are equally likely to never or rarely used soap when washing their hands. In Atoll, male students (8.7%) and female students (7.1%) are equally likely to never or rarely use soap when washing their hands. However, in

Male' male students (11.5%) are significantly more likely than female students (5.4%) to never or rarely use soap when washing their hands.

Hygiene in schools

National

In Maldives, 20.4% of students never or rarely washed their hands after using the toilet or latrine at school during the past 30 days. Female students (22.6%) are significantly more likely than male students (18.2%) to never or rarely wash their hands after using the toilet or latrine at school.

Overall, among students who had toilets or latrines at school during the past 30 days, 11.8% of students most of the time or always used the toilets or latrines at school. Among students who had toilets or latrines at school during the past 30 days, male students (14.4%) are significantly more likely than female students (9.0%) to have most of the time or always used the toilets or latrines at school.

Overall, among students who had toilets or latrines at school, 74.2% of students had separate toilets or latrines for boys and girls. Among students who had toilets or latrines at school, female students (77.2%) are significantly more likely than male students (71.2%) had separate toilets or latrines for boys and girls.

Among students who washed their hands at school during the past 30 days, 46.1% of students never or rarely used soap to wash their hands. Among students who washed their hands at school during the past 30 days, male students (47.9%) are significantly more likely than female students 43.8%) of students never or rarely used soap to wash their hands.

Sub national

Likewise, students (22.1%) from Atoll are significantly more likely than students (16.5%) from Male', never or rarely washed their hands after using the toilet or latrine at school. In the Atoll, female students (25.8%) are significantly more likely than male students (18.4%), never or rarely wash their hands after using the toilet or latrine at school. On the other hand in the Male', male students (17.6%) and female students (15.4%) are equally likely; never or rarely wash their hands after using the toilet or latrine at school.

Similarly, among students who had toilets or latrines at school, (11.2%) from Atoll and (13.2%) from Male', most of the time or always used the toilets or latrines at school. Among students who had toilets or latrines at school, male students (14.0%) from Atoll and (15.5%) from Male' are significantly more likely than female students (8.1%) from Atoll and (11.0%) from Male', most of the time or always used the toilets or latrines at school.

Likewise, among students who had toilets or latrines at school, (73.7%) from Atoll and (75.2%) from Male' are equally likely to had separate toilets or latrines for boys and girls. Among students who had toilets or latrines at school in Male', female students (84.1%) are significantly

more likely than male students (65.6%) had separate toilets or latrines for boys and girls. On the other among students who had toilets or latrines at school in the Atolls, female students (74.0%) and male students (73.6%) are equally likely to have separate toilets or latrines for boys and girls.

In comparison, among students who washed their hands at school during the past 30 days, (41.8%) from Atoll are significantly more likely than (55.1%) from Male', never or rarely used soap to wash their hands. Among students who washed their hands at school in the Atolls, female students (40.2%) and male students (42.5%) are equally likely never or rarely used soap to wash their hands. In contrast, among students who washed their hands at school in male', male students (60.7%) are significantly more likely than female students (50.1%) never or rarely used soap to wash their hands.

Water source

National

In Maldives, 38.7% of students did not have a water source of clean water for drinking at school. Female students (39.6%) and male students (37.8%) are equally likely to not have a water source of clean water for drinking at school.

Overall, 30.7% of students brought water from home to drink while they were at school. Female students (37.6%) are significantly more likely than male students (23.5%) brought water from home to drink while they were at school.

Overall, among student who had a water source at school, 17.6% most of the time or always drank water from the water source. Among student who had a water source at school, male students (22.1%) are significantly more likely than female students (13.3%) to drink water most of the time or always from the water source.

Sub national

Similarly, students (37.8%) from Atoll and (40.6%) from Male' are equally likely not having a water source of clean water for drinking at school. In the Atolls, female students (37.3%) and male students (38.5%) are equally likely to not have a water source of clean water for drinking at school. However, female students (44.8%) are significantly more likely than male students (36.0%) to not have a water source of clean water for drinking at school.

Similarly, students (27.2%) from Atoll and (39.0%) from Male' are equally likely to brought water from home to drink while they were at school. Female students (33.8%) from Atoll and (46.5%) from Male' are significantly more likely than male students (20.6%) from Atoll and (30.7%) from Male' brought water from home to drink while they were at school.

Likewise, among student who had a water source at school, (21.2%) from Male' are significantly more likely than (16.0%) from Atoll, most of the time or always drank water from the water

source. Among student who had a water source at school, male students (20.1%) from Atoll and (26.9%) from Male' are significantly more likely than female students (12.0%) from Atoll and (16.2%) from Male' to drink water most of the time or always from the water source.

Worm Infections

National

In Maldives, 14.2% of students were taught in any of their classes during the school year how to avoid worm infection. Female students (39.6%) and male students (37.8%) are equally likely to have taught in any of their classes during the school year how to avoid worm infection.

In Maldives, 13.4% of students were taught in any of their classes during the school year where to get treatment for a worm infection. Female students (13.8%) and male students (13.0%) are equally likely to have taught in any of their classes during the school year where to get treatment for a worm infection.

Sub national

In comparison, students (17.0%) from Atoll are significantly more likely than students (7.4%) from Male' to be taught in any of their classes during the school year how to avoid worm infection. Female students (15.9%) from Atoll and (6.1%) from Male' and male students (18.2%) from Atoll and (6.1%) from Male' are equally likely to have taught in any of their classes during the school year how to avoid worm infection.

In comparison, students (16.5%) from Atoll are significantly more likely than students (6.1%) from Male' to be taught in any of their classes during the school year where to get treatment for a worm infection. Female students (16.5%) from Atoll and (5.0%) from Male' and male students (16.5%) from Atoll and (7.5%) from Male' are equally likely to have taught in any of their classes during the school year where to get treatment for a worm infection.

Oral health

National

In Maldives, 70.9% of students described the health of their teeth and gums as good and very good. Female students (72.3%) and male students (69.6%) are equally likely to describe the health of their teeth and gums as good and very good.

In Maldives, 69.7% of students never or rarely had a toothache during the past 12 months. Female students (69.6%) and male students (69.9%) are equally likely to never or rarely have a toothache.

Sub national

In comparison, students (72.4%) from Atoll and (67.5%) from Male' are equally likely to describe the health of their teeth and gums as good and very good. Female students (73.9%) from Atoll and (68.7%) from Male' and male students (71.0%) from Atoll and (66.2%) from Male' are equally likely to describe the health of their teeth and gums as good and very good.

In comparison, students (82.8%) from Male' is significantly more likely than students (64.0%) from Atoll to never or rarely have a toothache. Female students (63.3%) from Atoll and (83.9%) from Male' and male students (64.8%) from Atoll and (81.9%) from Male' are equally likely to never or rarely have a toothache.

Violence and unintentional injury

Background

Unintentional injuries are a major cause of death and disability among young children (20). Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000 (21). For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment (22). Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours. Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour, and suicide attempts (23).

The world report on Violence and health stated that an average of 565 children, adolescents young adults between the age of 10-29 years die each day as a result of interpersonal violence across the world and a large number of these are from the South east Asia region. The Global Burden of Disease 2000 reported that over 16,000young people aged between 15-29 years die due to violence in the south East Asia region (24).

Violence especially gang violence is an escalating problem for Maldives. The situation has worsened and deaths on the street of Male' due to gang violence is a socially alarming fact to Maldivians. The Maldives Police Service statistics shows that the incidence of arrests related to violent crime increased by 19.8% in 2007 (25).

Accidental deaths in 2007 were 114 out of which 44 were Maldivians and 70 foreigners. In 2000 there were only 28 accidental death, the figures clearly shows an upward trend in accidental deaths (1). In 2007 123 cases of abuse were reported to the Ministry of Health and Family, out of which 68 cases were sexual abuse (6).

Results

Table 5: Violence and unintentional injury among students, by sex, 2009 Maldives GSHS.

Violence and Unintentional Injury	Sample	Total	Boys	Girls
Were physically attacked one or more times during the past 12 months	Male'	30.7 (27.2-34.3)	38.1 (33.2-43.2)	23.5 (19.8-27.7)
	Atoll	41.7 (36.5-47.2)	51.7 (46.7-56.6)	31.7 (25.0-39.2)
	Maldives	38.4 (34.7-42.2)	47.6 (44.0-51.3)	29.2 (24.5-34.4)
Were in a physical fight one or more times during the past 12 months	Male'	31.4 (27.8-35.1)	45.4 (40.2-50.7)	17.9 (14.6-21.8)
	Atoll	35.1 (30.7-39.8)	48.9 (43.7-54.1)	21.0 (14.7-29.0)
	Maldives	34.0 (30.8-37.3)	47.9 (44.0-51.7)	20.1 (15.6-25.4)
Were seriously injured one or more times during the past 12 months	Male'	39.5 (36.2-43.0)	44.7 (39.5-49.9)	34.6 (30.8-38.7)
	Atoll	44.7 (40.2-49.3)	50.8 (46.6-55.1)	38.2 (32.2-44.5)
	Maldives	43.2 (40.046.4)	49.0 (45.8-52.3)	37.1 (32.9-41.4)
Were bullied one or more times during the past 30 days	Male'	26.3 (22.8-30.1)	29.4 (25.0-34.3)	23.7 (19.1-29.0)
	Atoll	42.8 (37.3-48.5)	46.4 (40.9-52.0)	39.0 (32.6-45.8)
	Maldives	37.7 (33.8-41.8)	41.2 (37.2-45.3)	34.2 (29.6-39.2)
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	Male'	10.9 (8.1-14.7)	16.1 (11.9-21.4)	4.4 (2.1-9.2)
	Atoll	14.8 (11.6-18.7)	18.3 (13.1-25.1)	10.1 (5.7-17.4)
	Maldives	14.0 (11.4-17.0)	17.8 (13.7-22.9)	8.8 (5.4-14.2)
Were physically forced to have sexual intercourse when they did not want to	Male'	11.2 (9.0-13.8)	10.8 (6.9-16.4)	11.7 (9.4-14.5)
	Atoll	19.5 (14.4-25.9)	20.8 (16.3-26.2)	18.1 (12.0-26.4)
	Maldives	17.0 (13.4-21.3)	17.8 (14.6-21.6)	16.1 (11.8-21.6)
Among students who were seriously injured during the past 12 months, those who were riding bicycle or scooter when the most serious injury happened	Male'	4.0 (2.7-5.9)	6.1 (3.8-9.8)	1.0 (0.2-4.4)
	Atoll	7.4 (6.1-9.1)	9.3 (7.3-11.7)	4.8 (3.5-6.6)
	Maldives	6.5 (5.4-7.7)	8.5 (6.8-10.4)	3.7 (2.8-5.0)
Among students who were seriously injured during the past 12 months, those whose most serious	Male'	7.9 (5.2-11.9)	8.9 (4.9-15.7)	6.4 (3.8-10.5)

injury happened was caused by a motor vehicle accident or being hit by a motor vehicle	Atoll	10.2 (7.9-13.2)	11.6 (8.2-16.3)	8.5 (5.6-12.8)
	Maldives	9.6 (7.7-11.8)	10.9 (8.2-14.4)	7.9 (5.7-10.9)
Among students who were seriously injured during the past 12 months, those whose most serious injury happened to them when they hurt themselves by accidents	Male'	41.3 (35.9-46.8)	43.1- (36.0-50.4)	38.7 (30.6-47.5)
	Atoll	29.4 (26.8-32.2)	33.1 (28.8-37.6)	24.7 (20.5-29.5)
	Maldives	32.8 (30.5-35.2)	35.8 (32.4-39.4)	29.0 (25.2-33.2)
Among students who were seriously injured during the past 12 months, those whose most serious injury was a broken bone or dislocated joint	Male'	22.3 (18.3-27.0)	30.0 (24.3-36.4)	12.9 (9.0-18.2)
	Atoll	16.4 (13.4-19.9)	19.5 (16.4-23.0)	12.2 (8.6-16.9)
	Maldives	18.1 (15.6-20.9)	22.3 (19.6-25.4)	12.4 (9.7-15.8)
Did not go to school because they felt unsafe at school or on their way to or from school on one or more days during the past 30 days	Male'	11.9 (9.6-14.6)	11.1 (7.6-15.8)	12.5 (9.2-16.8)
	Atoll	27.1 (20.7-34.7)	28.7 (22.6-35.7)	25.3 (18.3-33.9)
	Maldives	22.6 (18.2-27.7)	23.5 (19.4-28.3)	21.4 (16.5-27.3)
Had someone threatened or injure them with a weapon on school property during the past 30 days	Male'	8.8 (6.3-12.0)	12.5 (8.8-17.5)	4.9 (3.1-7.6)
	Atoll	19.9 (14.5-26.7)	23.8 (18.5-30.1)	15.6 (9.9-23.6)
	Maldives	16.6 (12.8-21.2)	20.5 (16.7-24.9)	12.3 (8.4-17.7)
Had someone steal or deliberately damage their property on one or more days during the past 30 days	Male'	21.4 (18.9-24.1)	28.7 (24.9-32.8)	14.5 (11.7-17.8)
	Atoll	27.7 (23.0-32.9)	31.9 (27.3-37.0)	22.7 (16.9-29.9)
	Maldives	25.8 (22.5-29.4)	31.0 (27.6-34.6)	20.2 (16.1-25.1)

Serious injury

National

In Maldives, 38.4% of students were physically attacked one or more times during the past 12 months. Male students (47.6%) are significantly more likely than female students (29.2%) to have been physically attacked.

In Maldives, 34.0% of students were in a physical fight one or more times during the past 12 months. Male students (47.9%) are significantly more likely than female students (20.1%) to have been in a physical fight.

Overall, 43.2% of students were seriously injured one or more times during the past 12 months. Male students (49.0%) are significantly more likely than female students (37.1%) to have been seriously injured.

Sub national

In comparison, students (41.7%) from Atoll are significantly more likely than students (30.7%) from Male' to be physically attacked one or more times. Male students (51.7%) from Atoll and (38.1%) from Male' are significantly more likely than female students (31.7%) from Atoll and (23.5%) from Male' were physically attacked.

Likewise, students (35.1%) from Atoll and (31.4%) from Male' are equally likely in a physical fight one or more times. Male students (48.9%) from Atoll and (45.4%) from Male' are significantly more likely than female students (21.0%) from Atoll and (17.9%) from Male' to have been in a physical fight.

Similarly, students (44.7%) from Atoll and (39.5%) from Male' are equally likely to be seriously injured one or more times. Male students (50.8%) from Atoll and (44.7%) from Male' are significantly more likely than female students (38.2%) from Atoll and (34.6%) from Male' to have been seriously injured.

Bullying

National

Overall in Maldives, 37.7% of students were bullied on one or more days during the past 30 days. Male students (41.2%) and female students (34.2%) are equally likely to be bullied on one or more days.

Among students who were bullied during the past 30 days, 14.0% were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (17.8%) are significantly more likely than female students (8.8%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Sub national

In comparison, students (42.8%0 from Atoll and (26.3%) from Male' are equally likely to be bullied on one or more days. Male students (46.4%) from Atoll and (39.0%) from Male' are significantly more likely than female students (29.4%) from Atoll and (23.7%) from Male' to be bullied.

Similarly, among students who were bullied, (14.8%) from Atoll and (10.9%0 from Male' are equally likely to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (18.3%) from Atoll and (16.1%) from Male' are significantly more likely than female students (10.1%) from Atoll and (4.4%) from Male' to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Sexual abuse

National

In Maldives, 17% of students had ever been physically forced to have sexual intercourse when they did not want to. Male students (17.8%) and female students (16.1%) are equally likely to have ever been physically forced to have sexual intercourse when they did not want to.

Sub national

Similarly, students (19.5%) from Atoll and (11.2%) from Male' are equally likely to have ever been physically forced to have sexual intercourse when they did not want to. Male students (20.8%) from Atoll and (10.8%) from Male' are significantly more likely than female students (18.1%) from Atoll and (11.7%) from Male' to had ever been physically forced to have sexual intercourse when they did not want to.

Nature of injury

National

Among students who were seriously injured during the past 12 months, 6.5% were riding bicycle or scooter when the most serious injury happened to them, 9.6% was caused by a motor vehicle accident or being or being hit by a motor vehicle when the most serious injury happened to them, 32.8% had their most serious injury occur as a result of hurting themselves by accident, and 18.1% experienced a broken bone or dislocated joint as their most serious injury.

Male students (8.5%) and female students (3.7%) are equally likely riding bicycle or scooter when the most serious injury happened to them; Male students (10.9%) and female students (7.9%) are equally likely to cause by a motor vehicle accident or being or being hit by a motor vehicle when the most serious injury. Male students (35.8%) and female students (29.0%) are equally likely to have their most serious injury be as a result of hurting themselves by accident. Male students (22.3%) are significantly more likely than female students (12.4%) to experience a broken bone or dislocated joint as their most serious injury.

Sub national

Similarly, Among students who were seriously injured, (7.4%) from Atoll and (4.0%) from Male' were riding bicycle or scooter when the most serious injury happened to them, 10.2% from Atoll and 7.9% from Male' was caused by a motor vehicle accident or being hit by a motor vehicle when the most serious injury happened to them, 29.4% from Atoll and 41.3% from Male' had their most serious injury occur as a result of hurting themselves by accident, and 16.4% from Atoll and 22.3% from Male' experienced a broken bone or dislocated joint as their most serious injury.

Likewise, Male students 9.3% from Atoll and 6.1% from Male' are more likely than female 4.8% from Atoll and 1.0% from Male' to ride bicycle or scooter when the most serious injury

happened to them; Male students (11.6%) from Atoll and (8.9%) from Male' and female (8.5%) from Atoll and (6.4%) from Male' are equally likely to cause by a motor vehicle accident or being hit by a motor vehicle when the most serious injury. Male students (33.1%) from Atoll and (43.1%) from Male' are significantly more likely than female students (24.7%) from Atoll and (38.7%) from Male' to have their most serious injury be as a result of hurting themselves by accident. Male students (19.5%) from Atoll and (30.0%) from Male' are significantly more likely than female students (12.2%) from Atoll and (12.9%) from Male' to experience a broken bone or dislocated joint as their most serious injury.

Feeling unsafe

National

In Maldives, 22.6% of students did not go to school because they felt unsafe or on their way to or from school on one or more days during the past 30 days. Male students (23.5%) and female students (21.4%) are equally likely not to go to school because they felt unsafe or on their way to or from school on one or more days during the past 30 days.

Sub national

Similarly, students (27.1%) from Atoll are significantly more likely than students (11.9%) from Male' not to go to school because they felt unsafe or on their way to or from school on one or more days. Male students (28.7%) from Atoll and (11.1%) from Male' and female students (25.3%) from Atoll and (12.5%) from Male' are equally likely not to go to school because they felt unsafe or on their way to or from school on one or more days.

Damage to self and personal property

National

In Maldives, 16.6% of students had someone threatened or injure them with a weapon on school property during the past 30 days. Male students (20.5%) are significantly more likely female students (12.3%) had someone threatened or injure them with a weapon on school property.

In Maldives, 25.8% of students had someone steal or deliberately damaged their property on one or more times during the past 30 days. Male students (31.0%) are significantly more likely female students (20.2%) had someone steal or deliberately damaged their property on one or more times.

Sub national

In contrast, students (25.3%) from Atoll are significantly more likely than students (12.5%) from Male' to someone threatened or injure them with a weapon on school property. Male students (23.8%) from Atoll and (12.5%) from Male' are significantly more likely than female students (15.6%) from Atoll and (4.9%) from Male' had someone threatened or injure them with a weapon on school property.

Likewise, students (27.7%) from Atoll are significantly more likely than students (21.4%) from Male' had someone steal or deliberately damaged their property on one or more times. Male students (31.9%) from Atoll and (28.7%) from Male' are significantly more likely than female students (22.7%) from Atoll and (14.5%) from Male' had someone steal or deliberately damaged their property on one or more times.

Mental Health

Background

World-wide, approximately 20% of children and adolescents suffer from a disabling mental illness (26). Anxiety disorders, depression and other mood disorders, and behavioural and cognitive disorders are among the most common mental health problems among adolescents. Half of all lifetime cases of mental disorders start by age 14 (27).

Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviours. Each year, about 4 million adolescent's world-wide attempt suicide. Suicide is the third leading cause of death among adolescents (28, 29).

Out of the 114 accidental deaths in 2007, 20 were suicidal deaths and 12 of the suicide cases were Maldivians. In 2000 there were only 2 cases of suicide; showing a gradual increase in suicide rates in Maldives (6).

Results

Table 6: Mental Health issues among students, by age, 2009 Maldives GSHS.

Mental Health	Sample	Total	Boys	Girls
Most of the time or always felt lonely during the past 12 months	Male'	15.5 (13.6-17.6)	14.1 (11.8-16.8)	17.0 (14.3-20.1)
	Atoll	15.9 (14.3-17.6)	15.2 (12.2-18.9)	16.3 (14.0-18.9)
	Maldives	15.8 (14.5-17.1)	14.9 (12.7-17.4)	16.5 (14.8-18.4)
Most of the time or always were so worried about something that they could not sleep at night during the past 12 months	Male'	16.2 (14.1-18.4)	13.0 (11.0-15.3)	18.9 (15.7-22.6)
	Atoll	14.2 (11.6-17.3)	12.7 (9.5-16.8)	15.5 (12.7-18.8)
	Maldives	14.8 (12.9-16.9)	12.8 (10.5-15.5)	16.6 (14.5-18.9)
Among students who most of the time or always had been so worried about something that they	Male'	38.6 (30.4-47.4)	*	32.9 (23.7-43.5)

could not sleep at night during the past 12 months, those who were bullied one or more times during the past 30 days	Atoll	65.7 (57.6-72.9)	*	62.7 (52.8-71.6)
	Maldives	56.5 (503-62.6)	63.5 (5.2-71.9)	52.3 (44.8-59.6)
Seriously considered attempting suicide during the past 12 months	Male'	16.4 (13.8-19.3)	13.1 (10.3-16.6)	19.0 (15.3-23.4)
	Atoll	21.4 (18.3-24.9)	22.7 (19.8-26.0)	20.4 (16.2-25.3)
	Maldives	19.9 (17.7-22.3)	19.8 (17.6-22.2)	19.9 (16.9-23.4)
Made a plan about how they would attempt suicide during the past 12 months	Male'	18.1 (15.7-20.9)	15.6 (12.1-19.9)	20.1 (16.9-23.7)
	Atoll	24.0 (19.6-28.9)	24.7 (19.4-30.8)	23.1 (18.5-28.6)
	Maldives	22.2 (19.2-25.5)	21.9 (18.3-26.1)	22.2 (18.9-25.9)
Had no close friends	Male'	7.5 (5.9-9.4)	8.9 (6.7-11.7)	6.3 (4.6-8.5)
	Atoll	11.6 (9.6-13.9)	13.8 (10.5-17.9)	9.7 (7.7-12.1)
	Maldives	10.4 (8.9-12.0)	12.3 (10.0-15.2)	8.7 (7.2-10.4)
Most of the time or always were so worried about something that they could not eat or did not have an appetite during the past 12 months	Male'	8.9 (7.5-10.5)	5.3 (3.8-7.5)	12.1 (10.0-14.7)
	Atoll	8.5 (6.7-10.7)	6.0 (4.2-8.4)	11.1 (8.6-14.2)
	Maldives	8.6 (7.3-10.1)	5.8 (4.5-7.4)	11.4 (9.6-13.5)
Most of the time or always had a hard time staying focused on their home work or other things they had to do during the past 12 months	Male'	19.9 (17.8-22.3)	17.7 (14.9-20.9)	22.2 (18.7-26.1)
	Atoll	19.6 (16.7-22.8)	17.5 (13.7-22.2)	21.6 (17.0-27.0)
	Maldives	19.7 (17.6-21.9)	17.6 (14.8-20.7)	21.7 (18.5-25.4)
Felt so sad or hopeless almost every day for two weeks in or more in a row that they stopped doing the usual activities during the past 12 months	Male'	35.1 (31.9-38.5)	30.0 (25.4-35.1)	39.7 (35.1-44.5)
	Atoll	35.7 (31.9-39.6)	31.7 (26.9-37.0)	39.7 (34.5-45.1)
	Maldives	35.5 (32.8-38.3)	31.2 (27.7-35.0)	39.7 (36.0-43.5)
Taught in any of their classes during this school year how to handle stress in healthy ways	Male'	23.1 (18.5-28.4)	16.2 (12.7-20.5)	29.2 (21.3-38.6)
	Atoll	28.5 (26.3-30.8)	28.9 (25.8-32.3)	28.1 (24.7-31.7)
	Maldives	26.8 (24.8-29.0)	25.1 (22.6-27.8)	28.4 (25.0-32.1)

Loneliness/ depression

National

In Maldives, 15.8% of students most of the time or always felt lonely during the past 12 months. Male students (14.9%) and female students (16.5%) are equally likely to feel lonely most of the time or always.

Overall, 14.8% of students most of the time or always felt so worried about something that they could not sleep at night during the past 12 months. Male students (12.8) and female students (16.6%) are equally likely to most of the time or always feel so worried about something they can not sleep at night.

Among students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months 56.5% were bullied one or more time during the past 30 days. Among students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months male students (63.5) are significantly more likely than female students (52.3%) to be bullied one or more time.

Sub national

Similarly, students (15.9%) from Atoll and students (15.5%) from Male' are equally likely to feel lonely most of the time or always. Male students (15.2%) from Atoll and (14.1) from Male' and female students (16.3%) from Atoll and (17.0) from Male' are equally likely to feel lonely most of the time or always.

Likewise, students (14.2%) from Atoll and students (16.2%) from Male' are equally likely to feel so worried about something they cannot sleep at night most of the time or always. Male students (12.7%) from Atoll and (13.0) from Male' and female students (15.5%) from Atoll and (18.9) are equally likely feel so worried about something they can not sleep at night most of the time or always.

Among students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months (65.7%) from Atoll and (38.6%) from Male' were bullied one or more time during the past 30 days. Among students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months, female students (62.7%) from Atoll and (32.9%) from Male' were bullied one or more time.

Suicidal behaviour

National

In Maldives, 19.9% of students seriously considered attempting suicide during the past 12 months. Male students (19.8%) and also female students (19.9%) are equally likely to seriously consider attempting suicide.

In Maldives, 22.2% of students made a plan about how they would attempt suicide during the past 12 months. Male students (21.9%) and female students (22.2%) are equally likely to seriously consider attempting suicide.

In Maldives, 10.4% of students have no close friends. Male students (12.3%) and female students (8.7%) are equally likely to have no close friends. Male students (22.7%) and also female students (19.9%) are equally likely to have no close friends.

Sub national

Similarly, students (21.4%) from Atoll are significantly more likely than (16.4%) from Male' to seriously considered attempting suicide. In the Atoll, male students (22.7%) and also female students (20.4%) are equally likely to seriously considered attempting suicide. In Male', male students (13.1%) are significantly less likely than female students (19.0%) to seriously consider attempting suicide.

Similarly, students (24.0%) from Atoll are significantly more likely than students (18.1%) from Male' to made a plan about how they would attempt suicide. Male students (24.7%) from Atoll and (15.6%) from Male' and female students (23.1%) from Atoll and (20.1%) from Male' are equally likely to made a plan about how they would attempt suicide. In Male', male students (13.1%) are significantly less likely than female students (19.0%) to made a plan about how they would attempt suicide.

Likewise, students (11.6%) from Atoll are significantly more likely than students (7.5%) from Male' have no close friends. Male students (13.8%) from Atoll and (8.9%) from Male' and female students (9.7%) from Atoll and (6.3%) from Male' are equally likely to have no close friends.

Effects of loneliness/ depression

National

In Maldives, 8.6% of students most of the time or always were so worried about something that they could not eat or did not have an appetite during the past 12 months. Male students (5.8%) are significantly less likely than female students (11.4%) were so worried about something that they could not eat or did not have an appetite most of the time or always.

In Maldives, 19.7% of students most of the time or always had a hard time staying focused on their homework or other things they had to do during the past 12 months. Male students (17.6%) are significantly less likely than female students (21.7%) had a hard time staying focused on their homework or other things they had to do most of the time or always.

In Maldives, 35.5% of students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. Male students

(31.2%) are significantly less likely than female students (39.7%) to feel so sad or hopeless almost every day for two weeks or more in a row.

Sub national

Similarly, students (8.5%) from Atoll and (8.9%) from Male' were so worried about something that they could not eat or did not have an appetite most of the time or always. Male students (6.0%) from Atoll and (5.3%) from Male' are significantly less likely than female students (11.1%) from Atoll and (12.1%) from Male' were so worried about something that they could not eat or did not have an appetite most of the time or always.

Similarly, students (19.6%) from Atoll and (19.9%) from Male' had a hard time staying focused on their homework or other things they had to do most of the time or always. Male students (17.5%) from Atoll and (17.7%) from Male' are significantly less likely than female students (21.6%) from Atoll and (22.2%) from Male' had a hard time staying focused on their homework or other things they had to do most of the time or always.

Likewise, students (35.5%) from Atoll and (35.7%) from Male' felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities. Male students (31.2%) from Atoll and (31.7%) from Male' are significantly less likely than female students (39.7%) from Atoll and Male', felt so sad or hopeless almost every day for two weeks or more in a row.

Knowledge on stress management

National

In Maldives, 26.8% of students were taught in any of their classes during this school year how to handle stress in healthy ways. Male students (25.1%) are significantly less likely than female students (28.4%) were taught in any of their classes during this school year how to handle stress in healthy ways.

Sub national

Similarly, students (28.5%) from Atoll are significantly more likely than students (23.1%) from Male' were taught in any of their classes during this school year how to handle stress in healthy ways. Male students (28.9%) from Atoll and (16.2%) from Male' are significantly less likely than female students (28.1%) from Atoll and (29.2%) from Male' were taught in any of their classes during this school year how to handle stress in healthy ways.

Tobacco Use

Background

About 1.1 billion people worldwide smoke and the number of smokers continue to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020 (30). The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, strokes, emphysema and many other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. Children are at particular risk from adults' smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle ear disease, and possibly neuro-behavioural impairment and cardiovascular disease in adulthood. Many studies show that parental smoking is associated with higher youth smoking (31).

Maldives conducted the Global Youth Tobacco Survey (GYTS) in 2003 and 2007 in an effort to track tobacco use among adolescents. The GYTS data from 2003 and 2007 has shown that there is a reduction in youth tobacco consumption. Between 2003 and 2007, a significant reduction in the proportion of students currently smoked cigarettes is observed (a fall from overall prevalence among 13-15 year olds of 6.9% to 3.8%). Reported use of other tobacco products also decreased during the period from 8.3% to 3.5%. Over the period, peer cigarette smoking reduced significantly although exposure to SHS at home and in public places did not change and stayed significantly high. There is very high demand from these children to ban smoking in public places (almost 90% of the children expressed this desire in both years). The ability to purchase cigarettes in a store did not change significantly and in fact the proportion that were not refused purchase of cigarettes in store because of their age increased from 78.5% to 83.2% during the period (1,2).

The survey conducted in 2004 on the NCD Risk Factors also indicates that 24.7% of the studied population are smokers with most of them beginning smoking at the age of 18 years (10). Similarly, the Rapid Assessment Survey by National Narcotics Control Bureau in 2004 showed that 90% of drug smokers initiated tobacco smoking between the age of 10-19 years and 86% started with cigarettes (32).

Results

Table 7: Tobacco use among Students, by sex, 2009 Maldives GSHS.

Tobacco Use	Sample	Total	Boys	Girls
Among students who ever smoked cigarettes, those who first tried a cigarette before age 14 years	Male'	63.1 (57.0-68.8)	64.9 (58.3-71.0)	59.5 (47.6-70.4)
	Atoll	65.8 (57.5-73.3)	69.8 (60.4-77.7)	*
	Maldives	65.0 (59.2-70.3)	68.4 (62.0-74.1)	55.5 (46.9-63.7)
Smoked cigarette one or more times during the past 30 days	Male'	10.6 (7.9-13.9)	15.8 (11.5-21.2)	5.6 (3.7-8.4)
	Atoll	12.1 (9.4-15.5)	18.6 (13.4-25.2)	5.5 (3.2-9.2)
	Maldives	11.6 (9.6-14.0)	17.7 (13.9-22.3)	5.5 (3.8-7.9)
Used any tobacco products other than cigarette one or more times during the past 30 days	Male'	5.8 (3.7-9.0)	8.1 (4.9-13.1)	3.3 (2.0-5.4)
	Atoll	11.6 (7.6-17.3)	15.6 (11.1-20.6)	7.6 (3.5-15.7)
	Maldives	9.8 (7.0-13.6)	13.1 (10.1-16.9)	6.3 (3.4-11.4)
Used any tobacco one or more times during the past 30 days	Male'	12.0 (9.3-15.4)	17.5 (13.0-23.0)	6.8 (4.7-9.7)
	Atoll	15.9 (12.3-20.2)	23.1 (17.8-29.5)	8.5 (4.5-15.7)
	Maldives	14.7 (12.1-17.7)	21.4 (17.5-25.9)	8.0 (5.1-12.5)
Among students who smoked cigarettes, during the past 12 months , those who tried to stop smoking cigarettes during the past 12 months	Male'	61.6 (53.3-69.2)	60.8 (49.6-70.9)	*
	Atoll	60.0 (47.5-71.4)	66.5 (54.0-77.1)	*
	Maldives	60.5 (51.8-68.6)	64.8 (56.0-72.7)	51.9 (39.4-64.2)
People smoked in their presence one or more days during the past 7 days	Male'	60.5 (57.1-63.7)	61.8 (56.9-66.5)	59.1 (54.5-63.5)
	Atoll	56.3 (51.9-60.6)	60.8 (54.9-66.5)	51.8 (46.6-57.1)
	Maldives	57.5 (54.5-60.5)	61.1 (56.9-65.1)	54.1 (50.3-57.8)
Have a parents or guardians who used any form of tobacco	Male'	34.0 (31.1-37.0)	32.4 (28.0-37.2)	35.6 (31.5-39.8)
	Atoll	36.9 (33.5-40.5)	35.1 (29.9-40.7)	38.6 (35.8-41.5)
	Maldives	36.0 (33.6-38.5)	34.3 (30.5-38.3)	37.7 (35.4-40.0)

Prevalence of tobacco use

National

In Maldives, 11.6% students smoked cigarettes on one or more days during the past 30 days. Male students (17.7%) are significantly more likely than female students (5.5%) to smoke cigarettes on one or more.

Among students who smoked cigarettes during the past 30 days, 65.0% tried their first cigarette at age 14 or younger. Male students (68.4%) are significantly more likely than female students (55.5%) to have tried their first cigarette at age 14 or younger.

Overall, 9.8% of students used any tobacco product other than cigarettes on one or more days during the past 30 days. Male students (13.1%) are significantly more likely than female students (6.3%) to use any tobacco product other than cigarettes on one or more days.

Overall, 14.7% of students used any tobacco on one or more days during the past 30 days. Male students (21.4%) are significantly more likely than female students (8.0%) to use any tobacco product on one or more days.

Among students who smoked cigarettes during the past 12 months, 60.5% tried to stop smoking cigarettes. Among students who smoked cigarettes during the past 12 months, male students (64.8%) are significantly more likely than female students (51.9%) tried to stop smoking cigarettes.

Sub national

Similarly, students (12.1%) from Atoll and (10.6%) from Male' are equally likely to smoked cigarettes on one or more days. Male students (18.6%) from Atoll and (15.8%) from Male' and female students (5.5%) from Atoll and (5.6%) from Male' are equally likely to smoke cigarettes on one or more days.

Likewise, among students who smoked cigarettes during the past 30 days, 65.8% from Atoll and 63.1% from Male' are equally likely to tried their first cigarette at age 14 or younger. Male students (69.8%) from Atoll and 64.9% from Male' have tried their first cigarette at age 14 or younger.

Similarly, students (11.6%0 from Atoll are significantly more likely than students (5.8%) from Male' to used any tobacco product other than cigarettes on one or more days during the past 30 days. Male students (15.6%) from Atoll and (8.1%) are significantly more likely than female students (7.6%) from Atoll and (3.3%) to use any tobacco product other than cigarettes on one or more days.

Similarly, students (15.9%) from Atoll and (12.0%) from Male' are equally likely to use any tobacco product on one or more days. Male students (23.1%) from Atoll and (17.5%) are significantly more likely than female students (8.5%) from Atoll and (6.8%) to use any tobacco product on one or more days.

Among students who smoked cigarettes during the past 12 months, 60.0% from Atoll and 61.6% from Male' tried to stop smoking cigarettes. Among students who smoked cigarettes during the past 12 months, Male students (66.5%) from Atoll and (60.8%) from Male' tried to stop smoking cigarettes.

Expose to second hand smoking

National

Overall, 57.5% of students reported that people smoked in their presence on one or more days during the past seven days. Male students (61.1%) are significantly more likely than female students (54.1%) to report that people smoked in their presence on one or more days.

Sub national

Similarly, students (56.3%) from Atoll and (60.5%) from Male' are equally likely to report that people smoked in their presence on one or more days. Male students (60.8%) from Atoll are significantly more likely than female students (51.8%) from Atoll to report that people smoked in their presence on one or more days. Male students (61.8%) from Male' and female students (59.1%) from Male' are equally likely to report that people smoked in their presence on one or more days.

Parents or guardian tobacco use

National

Overall, 36.0% of students had a parent or guardian who uses any form of tobacco. Male students (34.3%) are significantly less likely than female students (37.7%) to have a parent or guardian who uses any form of tobacco.

Sub national

Similarly, students (36.9%) from Atoll and (34.0%0 from Male' are equally likely to have a parent or guardian who uses any form of tobacco. Male students (35.1%) from Atoll and (32.4%) from Male' are significantly less likely than female students (38.6%) from Atoll and (35.6%) from Male' to have a parent or guardian who uses any form of tobacco.

Alcohol Use

Background

Worldwide, alcohol use causes 3% of deaths (1.8 million) annually, which is equal to 4% of the global disease burden. Across sub-regions of the world, the proportion of disease burden attributable to alcohol use is greatest in the Americas and Europe ranging from 8% to 18% of total burden for males and 2% to 4% of total burden for females. Besides the direct effects of intoxication and addiction, alcohol use causes about 20% to 30% of each of oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, and motor vehicle accidents worldwide (33), and heavy alcohol use places one at greater risk for cardiovascular disease (34).

In most countries, alcohol-related mortality is highest among 45- to 54-year-olds, but the relationship between the age of initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important (35).

Intentional and unintentional injuries are far more common among youth and young adults. Unintentional injuries are the leading cause of death among 15- to 25-year-olds and many of these injuries are related to alcohol use (36).

Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behaviour, than those who do not drink (37, 38). Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively (39).

In Maldives alcohol consumption is strictly prohibited for Maldivians citizen under Islamic Shari'ah law. However, alcohol is permitted to be sold only to tourists in resorts (34). The Ministry of Justice recorded 6 offenses related to alcohol in 2007 compared to 30 cases in 2002 (6).

Results

Table 8: Alcohol use among students, 2009 Maldives GSHS.

Alcohol Use	Sample	Total	Boys	Girls
Among students who ever had a drink of alcohol(other than few sips), those who had their first drink of alcohol before age 14 years	Male'	*	*	*
	Atoll	76.5 (67.7-83.5)	*	*
	Maldives	71.5 (64.2-77.9)	73.5 (65.5-80.2)	*
Drank at least one drink containing alcohol on one or more of the past 30 days	Male'	4.1 (2.8-6.0)	6.4 (4.3-9.3)	2.0 (1.1-3.5)
	Atoll	7.9 (4.8-12.5)	10.2 (6.4-15.9)	5.2 (2.8-9.6)
	Maldives	6.7 (4.6-9.7)	9.1 (6.4-12.7)	4.2 (2.5-7.0)

Among students who had drank alcohol during the past 30 days, those who usually drank two or more drinks per day on the days they drank alcohol	Male'	*	*	*
	Atoll	44.0 (34.9-53.4)	*	*
	Maldives	41.1 (33.9-48.6)	43.7 (33.3-54.7)	*
Drank so much alcohol that they were really drunk one or more times during their life	Male'	3.9 (2.7-5.8)	6.3 (4.1-9.5)	1.6 (0.9-3.0)
	Atoll	7.3 (4.4-11.9)	8.9 (5.3-14.5)	5.4 (3.0-9.5)
	Maldives	6.3 (4.2-9.2)	8.1 (5.5-11.7)	4.2 (2.6-6.9)
Got into trouble with their family or friends , missed schools or got into fights one or more times during their life as a result of drinking alcohol	Male'	3.4 (2.1-5.4)	5.3 (3.2-8.6)	1.5 (0.7-3.2)
	Atoll	7.3 (4.3-12.2)	8.9 (5.5-14.0)	5.5 (2.7-10.7
	Maldives	6.1 (4.0-9.2)	7.8 (5.4-11.2)	4.2 (2.3-7.6)
Among students who drank alcohol during the past 30 days, those who usually got the alcohol they drinks from their friends	Male'	*	*	*
	Atoll	11.4 (7.5-17.0)	13.1 (7.6-21.4)	*
	Maldives	14.8 (10.6-20.2)	17.0 (11.4-24.5)	*
Among students who had had a drink alcohol, those who were at home or someone else home the first time they had a drink of alcohol	Male'	*	*	*
	Atoll	53.7 (43.7-63.4)	55.0 (42.3-67.1)	*
	Maldives	51.4 (43.2-59.4)	52.2 (43.2-62.1)	52.4 (42.8-61.7)
Among students who had had a drink alcohol, those who were at home or at someone else's home the last time they had a drink of alcohol	Male'	*	*	*
	Atoll	46.2 (34.1-58.7)	48.3 (32.3-64.6)	*
	Maldives	45.0 (35.4-55.1)	46.3 (33.9-59.1)	*
Parents or guardians drank alcohol	Male'	3.7 (2.5-5.3)	5.0 (3.1-7.9)	2.3 (1.4-3.9)
	Atoll	6.2 (4.1-9.4)	5.6 (3.7-8.4)	6.1 (3.6-10.3)
	Maldives	5.5 (3.9-7.5)	5.4 (4.0-7.4)	5.0 (3.2-7.7)

Prevalence of alcohol use

National

In Maldives, the prevalence of current alcohol use among students (i.e., drinking at least one drink containing alcohol on one or more of the past 30 days) is 6.7%. Male students (9.1%) are significantly more likely than female students (4.2%) to report current alcohol use.

Among students who ever had a drink of alcohol, 65.8% had their first drink of alcohol before age 14 years. Male students (73.5%) had their first drink of alcohol before age 14 years.

Among students who had drunk alcohol during the past 30 days, 41.1% drank two or more drinks per day on the days they drank alcohol. Male students (43.7%) drank two or more drinks per day on the days they drank alcohol.

Sub national

Similarly, the prevalence of current alcohol use among students is 7.9% from Atoll which is significantly more likely than 4.1 % from Male'. Male students (10.2%) from Atoll and (6.4%) from Male' are significantly more likely than female students (5.2%) from Atoll and (2.0%) from Male' to report current alcohol use.

Among students who ever had a drink of alcohol, 76.5% from Atoll had their first drink of alcohol before age 14 years.

Among students who had drunk alcohol during the past 30 days, 44.0% from Atoll drank two or more drinks per day on the days they drank alcohol.

Drunkenness and consequence of drinking

National

During their life 6.3% of students drank so much alcohol that they were really drunk one or more times. Male students (8.1%) are significantly more likely than female students (4.2%) to drink so much alcohol that they are really drunk one or more times.

Overall, 6.1% of students got into trouble with their family or friends, missed school, or got into fights one or more times as a result of drinking alcohol. Male students (7.8%) are significantly more likely than female students (4.2%) got into trouble with their family or friends, miss school or get into fights as a result of drinking alcohol.

Sub national

During their life, students (7.3%) from Atoll are significantly more likely than students (3.9%) from Male' to drink so much alcohol that they were really drunk one or more times. Male students (8.9%) from Atoll and (6.3%) from Male' are significantly more likely than female students (5.4%) from Atoll and (1.6%) from Male' to drink so much alcohol they are really drunk one or more times.

Similarly, students (7.3%) from Atoll are significantly more likely than students (3.4%) from Male' to get into trouble with their family or friends, missed school, or got into fights one or more times as a result of drinking alcohol. Male students (8.9%) from Atoll and (5.3%) from Male' are significantly more likely than female students (5.5%) from Atoll and (1.5%) from Male' got into trouble with their family or friends, miss school or get into fights as a result of drinking alcohol.

Access to alcohol products

National

Among students who had a drink alcohol during the past 30 days, 14.8% usually got the alcohol they drink from their friends. Male students (17.0%) usually got the alcohol they drink from their friends.

Sub national

Among students who had a drink alcohol during the past 30 days, 11.4% from Atoll usually got the alcohol they drink from their friends. Male students (13.1%) from Atoll usually got the alcohol they drink from their friends.

Place where they had their first and last drink

National

Among students who had had a drink alcohol, 54.1% were at home or someone else home first time they had a drink of alcohol. Male students (52.2%) and female students (52.4%) are equally likely were at home or someone else home first time they had a drink of alcohol.

Among students who had had a drink alcohol, 45.0% were at home or someone else home last time they had a drink of alcohol. Male students (46.3%) were at home or someone else home last time they had a drink of alcohol.

Sub national

Among students who had had a drink alcohol, 53.7% from Atoll were at home or someone else home first time they had a drink of alcohol. Male students (55.0%) from Atoll were at home or someone else home first time they had a drink of alcohol.

Among students who had had a drink alcohol, 46.2% from Atoll were at home or someone else home last time they had a drink of alcohol. Male students (48.3%) from Atoll were at home or someone else home last time they had a drink of alcohol.

Parents or guardian alcohol use

National

Overall, 5.5% of students had a parent or guardian who drank alcohol. Male students (5.4%) and female students (5.0%) are equally likely to have a parent or guardian who drank alcohol.

Sub national

Students 5.5% from Atoll are significantly more likely than students 3.7% from Male' to have a parent or guardian who drank alcohol. Male students (5.6%) from Atoll are significantly less likely than female students (6.1%) from Atoll to have a parent or guardian who drank alcohol. Male students (5.0%) from Male' and female students (2.3%) from Male' are equally likely to have a parent or guardian who drank alcohol.

Drug Use

Background

Drug abuse is a significant threat to health, social and economical structure of families, communities and nations. The extent of drug uses in the worldwide psychoactive substance use is estimated at 185 million (40). Drug abuse has been identified by the World Health Organization as one of the three major health risks that can lead to devasting health consequence for adolescents. Substance abuse can lead to illness and even death, and is also related to unsafe sex accident, violence and loss of productivity (41).

In the 2007on Health Care Trend Report the prevalence of illicit drug use in the USA shows the percent of persons 12 years of age and over with any illicit drug use in the past month was 8.0%, with marijuana use 5.8% and over with any nonmedical use of a psychotherapeutic drug was 2.8% (42).

Though the Asia and Pacific region have some of the toughest laws in against drug abuse and drug trafficking, the region is losing its war against drug abuse. Young people involved in drug use are escalating day by day. At the same time the age of drug initiations has declined as low as 12 years (43).

Drug abuse in Maldives is alarmingly high with an estimation of 30,00 drug users in the country (10% of the population) (44).According to the 2004 Rapid Situation Assessment Survey conducted in Maldives, 98% of the drug user were smokers and among them 48% initiated smoking between the ages of 10–14 years. The mean age for drug initiation, apart from tobacco was 16.8 years and 64% of them initiated drug use between 15 -19 years while 20% between 10-14 years. 81% of the respondent gained knowledge about drugs mainly from friends. The main reason for initiation was peer pressure at 38%. 67% of the respondents stated that the most common type of drug available is heroin and brown sugar. Drug injecting is also evident from the survey; 8 % of them had reported injecting drugs with more than half of them had reported

initiating injection prior to 17 years of age (32). A youth survey conducted in 2005 reported that 77% said that they knew what drug is, 25% said the main consequence of drugs would increase family problems (44).

Similarly a study conducted in 2006 by UNICEF and Maldivian NGO *Journey* to gain an in-depth understanding of the experiences, beliefs, practices and behaviors of drug addicts revealed that the age of first use has declined to 12-16 years and individual cases of drug use are being reported as young as 7 and 9 years. This study also showed an increase in the use of injecting drugs (28%) (45).

With the increase in number of drug users, crime rates related to drug incidents are also increasing disturbingly. According to the 2009 Maldives Police Service Report the total drug cases reported in 2008 were 2618 out of which 1326 cases were between the age of 16-24 and 24 cases below the age 16 were also reported. In comparison the total number of cases in 2001 was only 195 cases with 57 cases between the age 16-24 and only 5 cases below 16 years of age (46).

Results

Table 9: ***Drug use among students, by sex, 2009 Maldives GSHS.***

Drug Use	Sample	Total	Boys	Girls
Used drugs one or more times during their life	Male'	3.7 (2.6-5.2)	5.4 (3.7-7.9)	1.9 (1.1-3.5)
	Atoll	6.1 (3.8-9.7)	8.4 (5.1-13.5)	3.8 (2.1-6.8)
	Maldives	5.4 (3.7-7.7)	7.5 (5.2-10.8)	3.2 (2.0-5.1)
Among students who had tried drugs, those who were 13 years old or younger when they first tried drugs	Male'	*	*	*
	Atoll	*	*	*
	Maldives	67.7 (57.8-76.2)	*	*
Used marijuana most often	Male'	1.6 (1.0-2.6)	2.6 (1.5-4.3)	0.6 (0.2-1.5)
	Atoll	1.6 (1.0-2.7)	2.6 (1.5-4.4)	0.5 (0.2-1.3)
	Maldives	1.6 (1.1-2.3)	2.6 (1.8-3.8)	0.5 (0.2-1.0)
Shared needles or syringes to inject any drug into their body one or more times during their life	Male'	2.4 (1.5-3.9)	3.5 (2.1-5.7)	1.2 (0.6-2.5)
	Atoll	7.1 (4.2-12.0)	8.0 (4.6-13.4)	5.9 (3.3-10.4)
	Maldives	5.7 (3.6-8.8)	6.6 (4.3-10.1)	4.5 (2.7-7.5)
Had someone offer, sell, or give them a drug during the past 30 days	Male'	11.0 (9.3-12.9)	14.5 (11.9-17.6)	7.7 (6.1-9.8)
	Atoll	10.7 (8.3-13.6)	12.3 (9.9-15.2)	9.2 (6.5-12.8)

	Maldives	10.8 (9.1-12.7)	13.0 (11.2-15.0)	8.7 (6.8-11.1)
Offered, sold, or gave a drug to someone else during the past 30 days	Male'	8.7 (7.2-10.5)	10.6 (8.3-13.4)	6.9 (5.4-8.8)
	Atoll	11.1 (8.7-13.9)	12.7 (10.2-15.6)	9.4 (6.7-13.0)
	Maldives	10.3 (8.7-12.3)	12.1 (10.3-14.1)	8.6 (6.7-11.0)

Prevalence of drug use

National

In Maldives, the prevalence of lifetime drug use (using drugs, such as *ganja* or *theyo* , one or more times during their life) is 3.7%. Male students (7.5%) are significantly more likely than female students (3.2%) to report lifetime drug use.

Among students who ever had tried drugs, 67.7% were 13 years old or younger when they first tried drugs.

Overall, 1.6% used marijuana most often. Male students (3.5%) are significantly more likely than female students (1.2%) used marijuana most often.

Overall, 5.7% shared needles or syringes to inject drugs into their body one or more times during their life. Male students (6.6%) are significantly more likely than female students (4.5%) shared needles or syringes to inject drugs into their body one or more times during their life.

Sub national

Similarly, the prevalence of lifetime drug use is 6.1% in Atoll which is significantly more likely than 3.7% in Male'. Male students (8.4%) from Atoll and (5.4%) from Male' are significantly more likely than female students (3.8%) from Atoll and (1.9%) from Male' to report lifetime drug use.

Likewise, Students (1.6%) used marijuana in both Atoll and Male'. Male students (2.6%) in both atoll and Male' are significantly more likely than female students (0.5%) in Atoll and (0.6%) in Male' used marijuana most often.

Similarly, students (7.1%) in Atoll are significantly more likely than students (2.4%) in Male' to share needles or syringes to inject drugs into their body one or more times during their life. Male students (6.6%) from Atoll and (8.0%) from Male' are significantly more likely than female students (4.5%) from Atoll and (5.9%) from Male' shared needles or syringes to inject drugs into their body one or more times during their life.

Drug buying and selling

National

In Maldives, 10.8% had someone offer, sell or give them a drug during the past 30 days. Male students (13.0%) are significantly more likely than female students (8.7%) had someone offer, sold or give them a drug.

In Maldives, 10.3% offered, sold or gave a drug to someone else during the past 30 days. Male students (12.1%) are significantly more likely than female students (8.6%) had offered, sold or gave a drug to someone else.

Sub national

Similarly, students (11.1%) from Atoll and students (11.0) from Male' are equally likely to had someone offer, sell or give them a drug during the past 30 days. Male students (12.3%) from Atoll and (14.5%) from Male' are significantly more likely than female students (9.2%) from Atoll and (7.7%) from Male' had someone offer, sold or give them a drug.

Likewise, students (10.3%) from Atoll are significantly more likely than students (8.7%) from Male' to offer, sold or gave a drug to someone else during the past 30 days. Male students (12.1%) from Atoll and (12.7%) from Male' are significantly more likely than female students (9.4%) from Atoll and (6.9%) from Male' had offered, sold or gave a drug to someone else.

Sexual Behaviours

Background

AIDS has killed more than 25 million people since 1981. As of 2005, an estimated 40.3 million people were living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people became infected with HIV (47). Young people between the ages of 15 and 24 are the most threatened group, accounting for more than half of those newly infected with HIV. At the end of 2003, an estimated 10 million young people aged 15 to 24 were living with HIV. Studies show that adolescents who begin sexual activity early are likely to have sex with more partners and with partners who have been at risk of HIV exposure and are not likely to use condoms. In many countries, HIV infection and AIDS is reducing average life expectancy, threatening food security and nutrition, dissolving households, overloading the health care system, reducing economic growth and development, and reducing school enrolment and the availability of teachers (48).

STIs are among the most common causes of illness in the world and have far-reaching health consequences. They facilitate the transmission of HIV and, if left untreated, can lead to cervical cancer, pelvic inflammatory diseases, and ectopic pregnancies (49). Worldwide, the highest reported rates of STIs are found among people between 15 and 24 years; up to 60% of the new infections and half of all people living with HIV globally are in this age group (50).

In Maldives, the first case of HIV was identified in 1991. Since then a total of 14 Maldivian cases have been diagnosed. Apart from these, more than 230 expatriate HIV infected cases have been diagnosed. Out of the 14 Maldivians, 13 have developed AIDS and 10 of these have died. Though Maldives experiences low levels of HIV epidemics, the 2006 HIV/AIDS Situation Analysis in the Republic of Maldives highlighted several factors demonstrating its vulnerability to an increasing epidemic: increasing drug use, increase in injecting drug use, and the presence of hidden populations of commercial sex with men in the archipelago. At the same time, earlier marriage age is noted, serial monogamy is common, condom use is limited, non-emergency transfusions are common, and men are spend extended periods away from their home island (51).

An STI survey conducted among antenatal clinic attendees during 2002 found high prevalence of Candida (11.5%), Gonorrhea (4.1%), HVS2 (3.4%) and Chlamydia. This indicates the presence of risky sexual behavior patterns which have a high probability for spreading HIV (52). The 2004 Maldives Reproductive Health Survey revealed that more than 62% of sexually active youth reported they had had their first sexual experience before the age of 18 years. The results also show that 99% of the youth have heard about HIV/AIDS and 91% know of at least one way of transmission and prevention. 10% of the youth did not know that HIV could be avoided. A lack of knowledge indicated misperceptions on some important matters related to HIV: 34% of the them did not know that people with HIV can look healthy, 13% believed that you can contract HIV by having meals with someone who had AIDS, and 35% did not know if condoms could protect against HIV/AIDS (53).

Findings from the First Biological and Behavioral Survey (BBS) on HIV and AIDS in the Maldives (2008) revealed that 31% of the survey participants had permanent partners, and of these, 94% did not use protection. Overall, nearly half of the youth in the BBS sample said that they were sexually active, but only about a quarter were married. This mean for every married person there is another unmarried person who is sexually active. It was also noted there was some very high risk of sexual activity among youth, including sex work and group sex – often with drugs or alcohol. 19% of Male' youth and 23% of Laamu youth contacted in the BBS said they had had symptoms of STIs. About half of the youth said they didn't do anything about the STIs. The other half said they went to a medical practitioner for treatment (54, 55).

Results

Table 10: HIV-related knowledge, by sex, 2009 Maldives GSHS.

Sexual Behaviour	Sample	Total	Boys	Girls
Ever heard of HIV infections or the disease called AIDS	Male'	80.1 (76.3-83.5)	75.9 (68.8-81.9)	84.0 (79.4-87.7)
	Atoll	66.6 (61.2-71.6)	63.4 (58.6-67.9)	70.0 (62.1-76.8)
	Maldives	70.7 (67.0-74.2)	67.2 (63.5-70.6)	74.3 (68.9-79.1)
Taught in any of their classes during this school year about HIV infections or AIDS	Male'	31.0 (24.8-38.1)	30.6 (21.4-41.7)	31.6 (24.2-40.2)
	Atoll	32.2 (26.7-38.2)	31.6 (26.3-37.4)	33.3 (26.4-41.0)

	Maldives	31.8 (27.7-36.3)	31.3 (26.7-36.3)	32.8 (27.6-38.4)
Taught in any of their classes during this school year how to avoid HIV infections or AIDS	Male'	31.0 (24.9-37.9)	33.5 (24.3-44.1)	28.7 (20.8-38.0)
	Atoll	31.6 (25.8-38.1)	31.6 (25.4-38.5)	32.1 (25.0-40.0)
	Maldives	31.4 (27.1-36.1)	32.1 (27.1-37.6)	31.0 (25.7-36.9)
Believed people can protect themselves from HIV infections or AIDS by not having sexual intercourse	Male'	56.9 (53.0-60.6)	53.9 (46.9-60.8)	59.7 (54.8-64.4)
	Atoll	42.4 (36.2-48.8)	44.2 (37.0-51.6)	41.1 (34.8-47.7)
	Maldives	46.8 (42.4-51.2)	47.1 (41.9-52.4)	46.9 (42.3-51.5)
Knew how to tell someone that they do not want to have sexual intercourse with them	Male'	60.8 (56.6-64.9)	58.5 (51.7-65.0)	62.8 (57.6-67.8)
	Atoll	45.0 (41.2-48.8)	44.9 (41.1-48.6)	45.4 (39.2-51.7)
	Maldives	49.8 (47.0-52.6)	48.9 (45.8-52.0)	50.9 (46.4-55.3)
Ever talked about HIV infections or AIDS with their parents or guardians	Male'	23.4 (20.6-26.5)	19.4 (16.1-23.1)	27.0 (23.3-31.0)
	Atoll	23.1 (18.9-27.9)	20.1 (15.7-25.4)	26.0 (20.2-32.7)
	Maldives	23.2 (20.2-26.4)	19.9 (16.8-23.5)	26.3 (22.2-30.8)

Knowledge on HIV infection or AIDS

National

In Maldives, 70.7% had ever heard of HIV infections or the disease called AIDS. Male students (67.2%) are significantly less likely than female students (74.3%) to have ever heard of HIV infections or the disease called AIDS.

In Maldives, 31.8% were taught in any of their classes during the school year about of HIV infections or AIDS. Male students (31.3%) and female students (32.8%) are equally likely to have been taught in any of their classes during the school year about of HIV infections or AIDS.

In Maldives, 31.4% were taught in any of their classes during the school year how to avoid HIV infections or AIDS. Male students (32.1%) and female students (31.0%) are equally likely to have been taught in any of their classes during the school year how to avoid HIV infections or AIDS.

In Maldives, 46.8% believed people can protect from HIV infections or AIDS by not having sexual intercourse. Male students (47.1%) and female students (46.9%) are equally likely to believed people can protect from HIV infections or AIDS by not having sexual intercourse.

In Maldives, 49.8% of students knew how to tell someone that they do not want to have sexual intercourse with them. Male students (48.9%) and female students (50.9%) are equally likely to know how to tell someone that they do not want to have sexual intercourse with them

In Maldives, 23.2% of students ever talked about HIV infections or AIDS with their parents and guardians. Male students (19.9%) are significantly less likely than female students (26.3%) to ever talk about HIV infections or AIDS with their parents and guardians.

Sub national

Similarly, students (66.6%) from Atoll are significantly less likely than students (80.1%) from Male' to have ever heard of HIV infections or the disease called AIDS. Male students (63.4%) from Atoll and (75.9%) from Male' are significantly less likely than female students (70.0%) from Atoll and (84.0%) from Male' to have ever heard of HIV infections or the disease called AIDS.

Likewise, students (32.2%) from Atoll and 31.0% from Male' were taught in any of their classes during the school year about of HIV infections or AIDS. Male students (31.6%) from Atoll and (30.6%) from Male' and female students (33.3%) from Atoll and (31.6%) from Male' are equally likely to have been taught in any of their classes during the school year about of HIV infections or AIDS.

Similarly, students (31.6%) from Atoll and (31.0%) from Male' were taught in any of their classes during the school year how to avoid HIV infections or AIDS. Male students (31.6%) from Atoll and female students (32.1%) from Atoll are equally likely to have been taught in any of their classes during the school year how to avoid HIV infections or AIDS. Male students (33.5%) from Male' are significantly more likely than (28.7%) from Male' to have been taught in any of their classes during the school year how to avoid HIV infections or AIDS.

Likewise, students (42.4%) from Atoll are less likely than students (56.9%) from Male' to believe people can protect from HIV infections or AIDS by not having sexual intercourse. Male students (44.2%) from Atoll and female students (41.1%) from Atoll are equally likely to believed people can protect from HIV infections or AIDS by not having sexual intercourse. Male students (53.9%) from Male' are significantly less likely than (59.7%) from Male' to believed people can protect from HIV infections or AIDS by not having sexual intercourse.

Similarly, students (45.0%) from Atoll are less likely than students (60.8%) from Male' to know how to tell someone that they do not want to have sexual intercourse with them. Male students (44.9%) from Atoll and (58.5%) from Male' and female students (45.4%) from Atoll and (62.8%) from Male' are equally likely to know how to tell someone that they do not want to have sexual intercourse with them

Similarly, students (23.1%) from Atoll and (23.4%) from Male' ever talked about HIV infections or AIDS with their parents and guardians. Male students (20.1%) from Atoll and (19.4%) from Male' are significantly less likely than female students (26.0%) from Atoll and (27.0%) from Male' to ever talk about HIV infections or AIDS with their parents and guardians.

Physical Activity

Background

Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes (56).

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood (57). Participating in adequate physical activity also helps build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being (58).

Roughly 60% of the world's population is estimated to not get enough physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behaviour adopted at a young age is likely to persist (59).

In the Maldives more than 40% of the population are suffering from minor to moderate malnutrition. Although lower income is the major cause, it is noted that a small proportion of the nouveau riche in the capital are suffering also from disease – but it is linked to unhealthy habits of increased consumption of fast foods, insufficient physical activity, and insufficient time for relaxation (60).

According to the 2009 Maldives Health Statistics, the leading cause of death in 2007 and 2008 were related to the circulatory system (46). The Maldives 2004 NCD Risk Factors states that 0.2% of the population was physically inactive in all domains of physical activity. The overall prevalence of abdominal obesity was 40.0% with more than half the women being abdominally obese. The overall prevalence of high blood pressure was 31.5% (10).

Results

Table 11: Physical activity among students, by sex, 2009 Maldives GSHS.

Physical Activity	Sample	Total	Boys	Girls
Physically active for a total of at least 60 minutes per day on five or more days during the past seven days	Male'	27.1 (24.2-30.2)	29.4 (24.5-34.9)	25.0 (21.7-28.6)
	Atoll	24.8 (20.9-29.1)	29.3 (24.5-34.6)	20.4 (15.9-25.8)
	Maldives	25.5 (22.8-28.5)	29.3 (25.7-33.1)	21.9 (18.6-25.5)
Physically active for a total of at least 60 minutes per day on all seven days during the past seven days	Male'	19.8 (16.9-22.9)	21.7 (17.2-27.1)	17.9 (14.6-21.8)
	Atoll	20.6 (17.1-24.6)	24.2 (20.0-28.9)	17.1 (12.9-22.3)
	Maldives	20.3 (17.8-23.1)	23.5 (20.3-26.9)	17.4 (14.3-20.9)

Did not walk or ride bicycle to or from school during the past seven days	Male'	46.9 (43.1-50.7)	47.6 (42.4-52.9)	46.0 (40.6-51.4)
	Atoll	47.0 (41.2-53.0)	44.1 (37.4-51.1)	50.2 (44.4-56.0)
	Maldives	47.0 (43.0-51.1)	45.2 (40.4-50.0)	48.9 (44.7-53.1)
Spent three or more hours per day during a typical or usual day doing sitting activities	Male'	46.2 (42.7-49.8)	49.1 (43.6-54.5)	43.5 (39.3-47.8)
	Atoll	39.6 (35.8-43.3)	41.1 (36.5-45.9)	38.0 (34.4-41.7)
	Maldives	41.6 (38.9-44.4)	43.5 (39.9-47.1)	39.7 (37.0-42.4)
Percentage of students who were physically active for a total of at least 60 minutes per day on five or more days during a typical usual week	Male'	25.1 (22.3-28.0)	27.8 (23.3-32.8)	22.4 (19.1-26.2)
	Atoll	24.0 (21.1-27.1)	28.5 (24.0-33.6)	19.7 (16.6-23.3)
	Maldives	24.3 (22.2-26.5)	28.3 (25.0-31.9)	20.6 (18.2-23.2)
Did exercise to strengthen and tone their muscles on three or more days during the past seven days	Male'	22.6 (20.1-25.3)	31.0 (27.0-35.4)	14.8 (11.9-18.3)
	Atoll	23.9 (20.9-27.3)	34.0 (29.6-38.7)	13.9 (10.6-17.9)
	Maldives	23.5 (21.4-25.9)	33.1 (29.9-36.5)	14.2 (11.8-16.9)
Did stretching exercise on three or more days during the past seven days	Male'	29.1 (26.1-32.2)	35.4 (30.8-40.3)	23.5 (20.1-27.4)
	Atoll	22.2 (18.1-26.8)	30.8 (25.6-36.7)	13.7 (10.0-18.6)
	Maldives	24.3 (21.4-27.4)	32.2 (28.4-36.2)	16.8 (13.9-20.2)
Played on one or more sports teams during the past 12 months	Male'	44.4 (40.6-48.3)	61.2 (57.1-65.2)	29.1 (25.0-33.6)
	Atoll	57.8 (55.3-60.2)	68.2 (63.0-72.9)	47.4 (42.8-52.1)
	Maldives	53.7 (51.7-55.7)	66.1 (62.5-69.5)	41.7 (38.3-45.1)
usually took 20 minutes for them to get and to and from school each day during the past seven days	Male'	23.2 (20.7-25.9)	23.5 (19.9-27.6)	22.7 (19.3-26.6)
	Atoll	20.5 (16.2-25.6)	21.8 (18.4-25.7)	18.7 (13.5-25.2)
	Maldives	21.4 (18.4-24.7)	22.3 (19.7-25.1)	19.9 (16.3-24.2)

Physical Activity

National

In Maldives, 25.5% of students were physically active for a total of at least 60 minutes per day on five or more days during the past 7 days. Male students (29.3%) are significantly more likely than female students (21.9%) to be physically active for a total of at least 60 minutes per day on five or more days.

In Maldives, 20.3% of students were physically active all 7 days during the past 7 days for a total of at least 60 minutes per day. Male students (23.5%) are significantly more likely than female students (17.4%) to be physically active all 7 days.

In Maldives, 24.3% of students were physically active for a total of at least 60 minutes per day on five or more days during a typical usual week. Male students (28.3%) are significantly more likely than female students (20.6%) to be physically active for a total of at least 60 minutes per day on five or more days.

Sub national

Similarly, students (24.8%) from Atoll and (27.1%) from Male' are equally likely to be physically active for a total of at least 60 minutes per day on five or more days. Male students (29.3%) from Atoll and (29.4%) from Male' are significantly more likely than female students (20.4%) from Atoll and (25.0%) from Male' to be physically active for a total of at least 60 minutes per day on five or more days.

Similarly, students (20.6%) from Atoll and (19.8%) from Male' are equally likely to be physically active all 7 days during the past 7 days for a total of at least 60 minutes per day. Male students (24.2%) from Atoll and (21.7%) from Male' are significantly more likely than female students (17.4%) from Atoll and (17.1%) from Male' to be physically active all 7 days.

Likewise, students (24.0%) from Atoll and (25.1%) from Male' of students were physically active for a total of at least 60 minutes per day on five or more days during a typical usual week. Male students (28.5%) from Atoll and (27.8%) from Male' are significantly more likely than female students (19.7%) from Atoll and (22.4%) from Male' to be physically active for a total of at least 60 minutes per day on five or more.

Sedentary behaviour

National

Overall, 41.6% of students spent three or more hours per day doing sitting activities during a typical or usually. Male students (43.5%) are significantly more likely than female students (39.7%) to spend three or more hours per day doing sitting activities

Sub national

Likewise, students (39.6%) from Atoll are significantly less likely than students (46.2%) from Male' too spent three or more hours per day doing sitting activities during a typical or usually. Male students (41.1%) from Atoll and (49.1%) from Male are significantly more likely than female students Male students (38.0%) from Atoll and (43.5%) from Male to spend three or more hours per day doing sitting activities. .

Walk or bicycle to and from school

National

Overall, 47.0% of students did not walk or bicycle to and from school during the past 7 days. Male students (45.2%) and female students (48.9%) are equally likely to not walk or bicycle to and from school during the past 7 days.

Overall, 21.4% of students usually take 20 minutes to get to and from school each day during the past 7 days. Male students (22.3%) and female students (19.9%) are equally likely to usually take 20 minutes to get to and from school each day.

Sub national

Similarly, students (47.0%) Atoll and (46.9%) from Male' are equally likely to not walk or bicycle to and from school during the past 7 days. Male students (44.1%) from Atoll and (47.6%) from Male and female students Male students (50.2%) from Atoll and (46.0%) from Male' are equally likely to not walk or bicycle to and from school during the past 7 days.

Likewise, students (20.5% Atoll) and (23.2%) from Male' are equally likely to usually take 20 minutes to get to and from school each day during the past 7 days. Male students (21.8%) from Atoll and (23.5%) from Male and female students Male students (18.7%) from Atoll and (22.7%) from Male are equally likely to usually take 20 minutes to get to and from school each day.

Type of physical activity

National

Similarly, 23.5% of students did exercise to strengthen and tone their muscles on three or more days during the past 7 days. Male students (32.2%) are significantly more likely than female students (16.8%) did exercise to strengthen and tone their muscles on three or more days during the past 7 days.

In Maldives, 24.3% of students did stretching exercise on three or more days during the past 7 days. Male students (33.1%) are significantly more likely than female students (14.2%) did stretching exercise on three or more days during the past 7 days.

In Maldives, 53.7% of students played on one or more sports teams during the past 7 days. Male students (66.1%) are significantly more likely than female students (41.7%) played on one or more sports teams during the past 7 days.

Sub national

Likewise, students (23.9%) from Atoll and (22.6%) from Male' are equally likely to exercise to strengthen and tone their muscles on three or more days during the past 7 days. Male students (34.0%) from Atoll and (31.0%) from Male are significantly more likely than female students Male students (13.9%) from Atoll and (14.8%) from Male) did exercise to strengthen and tone their muscles on three or more days during the past 7 days.

Likewise, students (22.2%) from Atoll are significantly less likely than students (29.1%) from Male' did stretching exercise on three or more days during the past 7 days. Male students (30.8%) from Atoll and (35.4%) from Male are significantly more likely than female students Male students (13.7%) from Atoll and (23.5%) from Male did stretching exercise on three or more days during the past 7 days.

Likewise, students (57.8%) from Atoll are significantly more likely than students (44.4%) from Male' played on one or more sports teams during the past 7 days. Male students (68.2%) from Atoll and (61.2%) from Male are significantly more likely than female students Male students (47.4%) from Atoll and (29.1%) from Male played on one or more sports teams during the past 7 days.

Protective Factor

Background

For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviours including violence and sexual risk behaviours (61).

Adolescents who have a positive relationship with teachers, and who have positive attitudes towards school are less likely to initiate sexual activity early, less likely to use substances, and less likely to experience depression. Adolescents who live in a social environment which provides meaningful relationships, encourages self-expression, and also provides structure and boundaries, are less likely to initiate sex at a young age, less likely to experience depression, and less likely to use substances (62).

Being liked and accepted by peers is crucial to young people's health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to feelings of loneliness and psychological symptoms. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events (63).

Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours, and violence (64).

The 2005 Youth Voice Survey shows a strong family bond with 90% reporting that they receive emotional help and support from their families. At the same time, 86% of the surveyed youth live with either parents or relatives, of which 60% live with both parents. The survey also shows that 87% of the youth felt that the community respected their opinion (45).

Results

Table 12: Protective factors among students, by sex, 2009 Maldives GSHS.

Protective Factor	Sample	Total	Boys	Girls
Missed classes or school without permission on one or more of the past 30 days	Male'	26.4 (23.3-29.7)	29.7 (25.0-34.8)	23.1 (19.3-27.5)
	Atoll	32.1 (28.0-36.5)	36.6 (32.3-41.0)	27.5 (21.6-31.3)
	Maldives	30.3 (27.5-33.3)	34.5 (31.3-37.8)	26.1 (22.0-30.7)
Reported most of the students in their schools were kind and helpful most of time or always the past 30 days	Male'	58.0 (54.0-61.9)	49.9 (43.9-55.9)	65.4 (60.8-69.8)
	Atoll	46.0 (39.9-52.2)	40.8 (32.7-49.3)	51.3 (45.5-57.0)
	Maldives	49.6 (45.3-54.0)	43.5 (37.7-49.5)	55.7 (51.5-59.8)
Parents or guardians checked to see if their homework was done most of the time or always during the past 30 days	Male'	27.7 (24.3-31.5)	29.8 (25.3-34.7)	25.8 (21.0-31.2)
	Atoll	28.9 (25.3-32.7)	30.4 (26.2-35.0)	27.6 (23.3-32.3)
	Maldives	28.5 (25.9-31.3)	30.2 (27.1-33.5)	27.0 (23.8-30.4)
Parents or guardians understood their problems or worries most of the time or always during the past 30 days	Male'	35.4 (32.1-38.8)	34.2 (29.4-39.4)	36.3 (32.5-40.4)
	Atoll	32.9 (29.2-36.8)	28.8 (24.3-33.8)	37.0 (32.4-41.9)
	Maldives	33.7 (31.0-36.4)	30.4 (27.1-34.0)	36.8 (33.6-40.2)
Parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days	Male'	46.4 (43.2-49.6)	44.8 (39.8-49.9)	47.8 (44.2-51.5)
	Atoll	47.1 (41.8-52.5)	41.7 (35.9-47.8)	52.6 (46.9-58.2)
	Maldives	46.9 (43.2-50.6)	42.6 (38.5-46.9)	51.1 (47.3-54.9)

Missing classes

National

In Maldives, 30.3% of students missed classes or school without permission on one or more of the past 30 days. Male students (34.5%) are significantly more likely than female students (27.5%) to miss classes or school without permission.

Overall, 49.6% of students reported that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Male students (43.5%) are significantly less likely than female students (55.7%) to report that most of the students in their school are kind and helpful most of the time or always.

Overall, 28.5% of students reported their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Male students (30.2%) and female students (27.0%) are equally likely to report their parents or guardians check to see if their homework is done most of the time or always.

Overall, 33.7% of students reported their parents or guardians understood their problems and worries most of the time or always during the past 30 days. Male students (30.4%) are significantly less likely than female students (36.8%) to report their parents or guardians understand their problems and worries most of the time or always.

Overall, 46.9% of students reported their parents or guardians really know what they were doing with their free time most of the time or always during the past 30 days. Male students (42.6%) are significantly less likely than female students (51.1%) to report their parents or guardians really know what they are doing with their free time most of the time or always.

Sub-national

Similarly, students (32.1%) are significantly more likely than students (26.4%) from Male' to miss classes or school without permission on one or more of the past 30 days. Male students (36.6%) from Atoll and (29.7%) from Male' are significantly more likely than female students (27.5%) from Atoll and (23.1%) from Male' to miss classes or school without permission.

Likewise, students (46.0%) from Atoll are significantly less likely than students (58.0%) from Male to report that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Male students (40.8%) from Atoll and (49.9%) from Male' are significantly less likely than female students (51.3%) from Atoll and (65.4%) from Male' to report that most of the students in their school are kind and helpful most of the time or always.

Similarly, students (28.9%) from Atoll and (58.0%) from Male' are equally likely to report their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Male students (30.4%) from Atoll and (29.8%) from Male' and female students (27.6%) from Atoll and (25.8%) from Male' are equally likely to report their parents or guardians check to see if their homework is done most of the time or always.

Likewise, students (32.9%) from Atoll and (35.4%) from Male' reported their parents or guardians understood their problems and worries most of the time or always during the past 30 days. Male students (28.8%) from Atoll are significantly less likely than female students (37.0%) from Atoll to report their parents or guardians understand their problems and worries most of the time or always. Male students (34.6%) from Male' and female students (36.3%) from Male' are equally likely to report their parents or guardians understand their problems and worries most of the time or always.

Similarly, students (47.1%) from Atoll and (46.4%) from Male to report their parents or guardians really know what they were doing with their free time most of the time or always during the past 30 days. Male students (41.7%) from Atoll are significantly less likely than female students (52.6%) from Atoll to report their parents or guardians really know what they are doing with their free time most of the time or always. Male students (44.8%) from Atoll and female students (52.6%) from Atoll to report their parents or guardians really know what they are doing with their free time most of the time or always.

Part 3: Discussion

Attempting suicide rate is disturbingly high in Maldives. Among the five countries that measured mental health of students in the SEARO region, Maldives (19.9%) has the highest percentage of students who seriously consider attempting suicide during the past 12 months. Nationally, male students (19.8%) and also female students (19.9%) are equally likely to seriously consider attempting suicide. In Male', male students (13.1%) are significantly less likely than female students (19.0%) to seriously consider attempting suicide. The Atolls survey showed students reported higher percentage than that of the National and the Male surveys, by which male students (22.7%) and female students (20.4%) are equally likely to seriously, considered attempting suicide. These findings are supported by the statistics from the Department of National Planning of Maldives which state there were 20 cases of suicidal death in 2007. Further study on this issue could be considered.

Maldives being a 100% Muslim country the prevalence of substance abuse is staggeringly high. Drugs have become the most perilous social problem in the Maldives. Prevention of Narcotics Abuse and Trafficking is one of the five pledges of the current government strategic action plan. Among the four countries that measured drug use of students in the SEARO region, Maldives (5.4%) has the second highest prevalence of lifetime drug use. Male students (7.5%) are significantly more likely than female students (3.2%) to report lifetime drug use. Life time drug uses in the Atoll (6.1%) are much more than Male' (3.7%). Among students who ever had tried drugs, 67.7% were 13 years old or younger when they first tried drugs. Drug injecting is thrice more in the Atoll (7.1%) than in Male' (2.4%).These statistics show alarmingly high rates in our small society.

Among the four countries that measured alcohol use of students in the SEARO region, Maldives (6.7%) has the second highest prevalence of current alcohol use; male students (9.1%) are significantly more likely than female students (4.2%) to drink alcohol on one or more days during the past 30 days.

Among the five countries that measured tobacco use of students in the SEARO region, Maldives (11.6%) has the highest prevalence of current tobacco use; Male students (17.7%) are significantly more likely than female students (5.5%) to smoke cigarettes. The result shows an increase in tobacco use more than 6% than that of 2007 GYTS (5.2%). Even the current tobacco use among female students (5.5%) is higher than that of the both male and female users in 2007 GYTS (5.2%).

Among students who ever drank alcohol or smoked cigarette 71.5% of the students in Maldives national survey had their first drink of alcohol before the age of 14 years while 65% of students had their first tried of cigarette before the age of 14 years. In Male, the GSHS result shows that 63.1% of students first tried a cigarette before age of 14 years. In Atolls, 65.8% of students had their first tried of cigarette before age of 14 years.

Expose to second hand smoking is also high more than half (57.5%) of the students reported that people smoked in their presence one or more time during the past 7 days. Male students (61.1%) are significantly more likely than female students (54.1%) to report that people smoked in their

presence on one or more days. Overall, 36.0% of students had a parent or guardian who uses any form of tobacco.

Another heartbreaking phenomenon is gang violence that is now a growing tendency on the street of Maldives. Violence and unintentional injury are closely linked with substance abuse especially drugs. Results related to violence and unintended injuries showed that more than one-third of the students reported to experience bullies, physical fights, and serious injuries for one or more times in the past 12 months. Among the five countries that measured violence of students in the SEARO region, Maldives (38.4%) has the third highest incident of physically attacked. Male students (47.6%) are significantly more likely than female students (29.2%) to have been physically attacked. Students (41.7%) from Atoll are significantly more likely than students (30.7%) from Male' to be physically attacked. Nationwide 34.0% of students were in a physical fight one or more times during the past 12 months. Male students (47.9%) are significantly more likely than female students (20.1%) to have been in a physical fight. students (41.7%) from Atoll are significantly more likely than students (30.7%) from Male' to be in a physical fight.

Bullying is an issue that need high importance. Overall in Maldives, 37.7% of students were bullied on one or more days during the past 30 days. Male students (41.2%) and female students (34.2%) are equally likely to be bullied on one or more days. Students (42.8%) from Atoll and (26.3%) from Male' are equally likely to be bullied. The result of sexual abuse was astonishing. The national survey shows that it is not only female students (16.1%) who are victims but male students (17.8%) are equally affected to had ever been physically forced to have sexual intercourse when they did not want to.

Consumption of fruits and vegetables is a major concern in relation to dietary behaviour. The results indicate that 22.7% of students usually ate fruit such as banana two or more times per day during the past 30 days. Male students (26.4%) are significantly more likely than female students (19.3%) to eat fruit. Vegetable consumption is still lower, 10.1% of students usually ate vegetable such as pumpkin three or more times per day during the past 30 days. Male students (12.6%) are significantly more likely than female students (7.7%) to eat vegetables. Though Male' has the advantage of having more accessibility to fruits and vegetables than the Atolls, the consumption of fruit and vegetables in Male' is much lower compared to Atoll with fruit intakes 24.7% and vegetables intake 11.2% in Atoll and in Male' fruit intakes is 5.2% and vegetables intake is 7.5%. The results also revealed that one third of the students, on an average, drank carbonated drinks one or more time per day during the past 30 days. 33.0% of the students reported this behaviour in National survey, 36.2% in Male, and 31.7% in Atolls. Among the six countries that measured dietary behaviour of students in the SEARO region, Maldives (6.9%) has the highest prevalence of hunger; students (7.6%) from Atoll are slightly more likely than students (5.2%) from Male' to go hungry most of the time or always because there was not enough food in their home during the past 30 days.

Despite the fact that the majority of students observe good personal hygiene, the result is not pleasing in comparison to other SEARO countries. Among the six countries that measured hygiene of students in the SEARO region, Maldives (8.0%) has the highest percentage of students who did not clean or brush their teeth during the past 30 days. Male students (9.9%) are significantly more likely than female students (6.0%) not clean or brush their teeth. Likewise,

the percentage of students who did not clean or brush their teeth was (9.3%) in Atoll, this is significantly more likely than Male' (4.7%). Proper hand washing is related to prevention of communicable diseases. Sadly the study showed that 8.3% of students never or rarely washed their hands before eating during the past 30 days. Male students (10.7%) are more likely than female students (5.7%) to never or rarely wash their hands before eating. Among the six countries that measured hygiene of students in the SEARO region, Maldives is the second highest percentage of students who never or rarely washed their hands before eating. Similarly, among the six countries that measured hygiene of students in the SEARO region, Maldives (5.9%) is the highest percentage of students who never or rarely washed their hands after using the toilet or latrine. Male students (6.4%) and female students (5.2%) are equally likely to never or rarely wash their hands after using the toilet or latrine.

Access to clean water can reduce the spread of water related diseases. Unfortunately only 38.7% of students did not have a water source of clean water for drinking at school. Moreover, among student who had a water source at school, only 17.6% most of the time or always drank water from the water source. Male students (22.1%) are significantly more likely than female students (13.3%) to drink water most of the time or always from the water source at school. Overall, 30.7% of students brought water from home to drink while they were at school. Female students (37.6%) are significantly more likely than male students (23.5%) brought water from home to drink while they were at school. On the other hand, it is pleasing to find out that nationally, 70.9% of students described the health of their teeth and gums as good and very good and 69.7% of students never or rarely had a toothache during the past 12 months. 82.8% from Male' is significantly more likely than 64.0% from Atoll to never or rarely have a toothache during the past 12 months.

With the increase in substance use especially injecting drugs and hidden population of sex workers, Maldives is in a vulnerable situation of increasing to an HIV epidemic. The study showed that nationwide 70.7% had ever heard of HIV infections or the disease called AIDS. Students (66.6%) from Atoll are significantly less likely than students (80.1%) from Male' to have ever heard of HIV infections or the disease called AIDS. Male students (67.2%) are significantly less likely than female students (74.3%) to have ever heard of HIV infections or the disease called AIDS. However, only 31.8% were taught in any of their classes during the school year about of HIV infections or AIDS.

Adequate physical activity plays an important role in maintain normal weight and health. Forlornly the result from the national survey revealed that only one fourth (25.5%) of students were physically active for a total of at least 60 minutes per day on five or more days during the past 7 days. Male students (29.3%) are significantly more likely than female students (21.9%) to be physically active. Satisfactorily among the six countries that measured physical activities of students in the SEARO region, Maldives (20.3%) has the second highest percentage of students who were physically active all 7 days during the past 7 days for a total of at least 60 minutes per day. Male students (23.5%) are significantly more likely than female students (17.4%) to be physically active all 7 days during the past 7 days.

Sadly among the six countries that measured physical activities of students in the SEARO region, Maldives has the highest percentage (41.6%) of students who spent three or more hours

per day doing sitting activities during a typical or usually. Male students (43.5%) are significantly more likely than female students (39.7%) to spend three or more hours per day doing sitting activities. Likewise, students (39.6%) from Atoll are significantly less likely than students (46.2%) from Male' to be engaged in sedentary behaviour.

In terms of protective factors, high percentage 46.9% of students reported their parents or guardians really know what they were doing with their free time most of the time or always during the past 30 days. Male students (42.6%) are significantly less likely than female students (51.1%) to report their parents or guardians really know what they are doing with their free time most of the time or always. 28.5% of students reported their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Similarly one third 33.7% of students reported their parents or guardians understood their problems and worries most of the time or always during the past 30 days. Male students (30.4%) are significantly less likely than female students (36.8%) reported their parents or guardians understand their problems and worries.

Having a good peer relationship is associated with healthy development in adolescent. Nationally close to half (49.6%) of students reported that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Male students (43.5%) are significantly less likely than female students (55.7%) to report that most of the students in their school are kind and helpful. Students (46.0%) from Atoll are significantly less likely than students (58.0%) from Male' to report that most of the students in their school were kind and helpful.

On the other hand, more than a quarter (30.3%) of students in Maldives, missed classes or school without permission on one or more of the past 30 days. Male students (34.5%) are significantly more likely than female students (27.5%) to miss classes or school without permission. Students (32.1%) from Atoll are significantly more likely than students (26.4%) from Male to miss classes or school without permission

Part 4: Conclusion and Recommendations

Conclusion

The 2009 Maldives GSHS is the first comprehensive nationwide surveillance of adolescent health behaviours and protective factors among lower secondary schools. The results provide a baseline data on the prevalence of health behaviours and protective factors that would facilitate in organizing and establishing future adolescents and youth programs. The results will also benefit all organization including public and private sectors who are working in the field of adolescent and youth health. The survey results have identified the seriousness of health issues (suicidal thoughts, drugs, alcohol, tobacco, violence, dietary behaviour etc.) associated with our adolescent age school children. It is also evident that the problems are much greater among students in Atoll. In order to keep a GSHS surveillance system in place it is essential to repeat the survey every 2-3 years which will enable to identify trends in the prevalence of health risk behaviours and protective factors.

Recommendations

Overall recommendations

- Disseminating the results to all stake holders and create awareness among them in order to realize the seriousness of our students' health problems and take proper action to minimize and take proper action to minimize
- Review and revise the national curriculum to focus on the development of students capacity, competency and skills to enable them to lead a healthy productive kid s in the society
- Review and revise the school health policy in view of the findings of the survey and support schools to implement the policy
- Develop advocacy materials using this information in simple materials that target audience (school heads/senior management, teachers, public health workers and parents) would understand.
- Advocating "schools to implement concepts of health promoting school initiative" with the target to achieving the standards in health and family dimension of "Child Friendly Barabaru School Indicators" (CFBS). This dimension looks into the physical, social aspects of school children as well as the physical and social environment of the school which in turn have an impact on the students' performance and behaviour as a whole.
- Strengthen "skills based health education" in schools with a focus to develop communication, negotiation and interpersonal skills and competencies for health practices related to students' health.
- Develop a peer education programme for school health education for students.
- Develop synergy in different health programmes such as tobacco/drugs prevention and mental health promotion using life skilled based approaches.
- Continue with the GSHS surveillance in order to track the trends in the prevalence of health risk behaviours and protective factors.

Recommendation for dietary behaviour

- Encourage healthy eating practices in school and at home, especially school canteens should provide healthy meals for children.
- Develop and implement canteen guideline for school canteens.
- Conduct healthy eating Behaviour Change Communication (BCC) campaigns with the involvement of students as change makers/peer educators in school, especially encourage students to use more fruits and vegetables, importance of breakfast, avoiding junk food and carbonated soft drinks.
- Maintaining proper records of students' height and weight providing feedback on their BMI and advice on diet and maintain a healthy weight.
- Introduce micronutrient supplementation programme in consultation with MOHF

Recommendation for Hygiene

- Provide all school with clean water and sanitation facilities, including hand washing facilities with soap and conduct regular testing of water quality and inspection of toilet facilities for hygiene and availability of soap.
- Encourage hygienic practices in schools and home by displaying posters and such materials around the school especially in the school toilets, water taps, canteen and notice boards.
- Providing information and demonstration with student involvement on proper hand washing, health problems associated with unclean water and worm infections.

Recommendation for violence and unintentional injury

- Develop and implement safe school policy and anti-bullying policy in schools.
- Schools should regularly keep reminding the schools rules and regulation in order to make school a secure and safe place for all students.
- Schools should have a proper mechanism for handling destructive and violence behaviour of students. The penalty for violence should be of substantial weight to discourage student from getting in to destructive and violence activities.
- Develop and implement anti-bullying programme with support group of students in schools
- Establish safe and confidential way of reporting bullying to schools official. The penalty for bullying should be of substantial weight to deter students from initiating bullying.

Recommendation for mental health

- Establish a mechanism to motivate students to come forward and talk about their problems to counsellors or other such person who are assigned for such a role.
- Provide appropriate information on getting help outside the school such as counselling service centres, health centres etc. in times of emotional disturbances.
- Providing parenting skills for parents to develop a better bonding and connection with their children.

- Conduct life skills education programme and establish peer counselling/ peer mentoring services in schools
- Establish a peer counselling/ peer mentoring service in schools
- Conduct regular religious program to strengthen students beliefs and values
- Further research into situation of mental health issues related to suicide.

Recommendation for tobacco use

- Develop and advocate policies to endure strict enforcement of the tobacco law.
- Develop and implement anti-tobacco program in schools
- Create awareness among student, teachers and parents about factors contributing to initiation and use of tobacco and how to avoid peer pressure to initiate tobacco.
- Create awareness on school community on the effect of second hand smoking on health and its contribution to initiate smoking in children.
- Make school a tobacco free place including the staff canteens
- Tighten school regulations and the penalty for tobacco related misbehaviour should be of substantial weight to discourage student from getting engaged in such habits.

Recommendation for alcohol and drug use

- Develop and implement a drug (including alcohol and tobacco) education policy for schools
- Establish early intervention program for prevention of initiation
- Create awareness among student, teachers and parents about drugs and develop students skills and peer support group for students
- Preventive skilled based education training for counsellors, health assistants and teachers focusing drugs, alcohol and tobacco use.
- Develop a drug prevention education package focused on development of skills and competencies.

Recommendation for sexual behaviour

- Strengthen adolescent sexual health and reproductive health (ASRH) programs in schools focussing on developing positive attitudes and healthy practices.
- Conduct awareness program for parents and teachers on adolescent development

Recommendation for physical activity

- Ensure that schools provide a physical activity class for students on a frequent basis to all students linked to a fitness assessment every term.
- Strengthen school sports activities by providing opportunity for all students.
- Develop facilities and programs for physical exercise and activities during and outside school hours.
- Conduct "walk to school day" once a month.
- Promote students to have a physically active lifestyle by school heads and teachers leading by examples.

- Create awareness among students and parents on the effects of extended sedentary activities.

Recommendation for protective factor

- Provide awareness for parents and teachers on the psychological needs of adolescents.
- Encourage students to get counselling help when they have difficulties coping with problems
- Provide constant information to students and parents on the importance of regular school attendance
- Maintain proper records of truancy and establish a proper channel of communication and emphasis to attend school regularly

Recommendation for next research

- Conduct GSHS to compare situation between provincial levels
- Translate the questionnaire to the local language "Dhivehi"

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Part: 5
Appendiix A: 2009 Maldives GSHS Questionnaire

2009 MALDIVES AND MALE 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.  B C D E F G H

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?

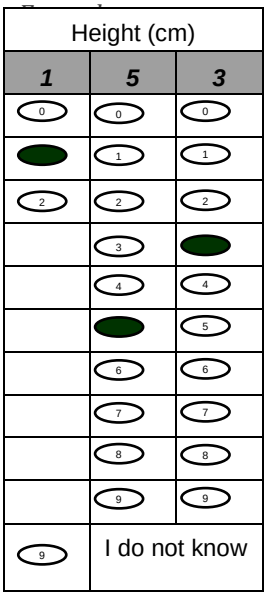
   A. Male
   B. Female

3. In what grade are you?

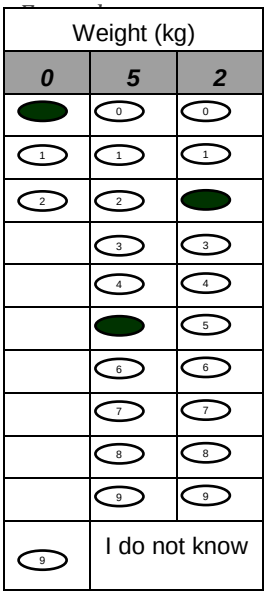
   A. Grade 8
   B. Grade 9
   C. Grade 10

The next 7 questions ask about your height, weight, 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.



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.



6. How do you describe your weight?

   A. Very underweight
   B. Slightly underweight
   C. About the right weight
   D. Slightly overweight
   E. Very overweight

7. Which of the following are you trying to do about your weight?

   A. I am **not trying to do anything** about my weight
   B. **Lose** weight
   C. **Gain** weight
   D. **Stay** the same weight

8. During the past 30 days, did you **exercise** to lose weight or to keep from gaining weight?

   A. Yes
   B. No

9. During the past 30 days, did you **eat less food, fewer calories, or foods low in fat** to lose weight or to keep from gaining weight?

   A. Yes
   B. No

10. 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

The next 2 questions ask about eating breakfast.

11. During the past 30 days, how often did you eat breakfast?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

12. 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

The next 2 questions ask about foods you might eat.

13. During the past 30 days, how many times per day did you **usually** eat fruit, such as bananas?

    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

14. During the past 30 days, how many times per day did you **usually** eat vegetables, such as pumpkin?

    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

The next 2 questions ask about drinking and eating habits.

15. During the past 30 days, how many times per day did you **usually** drink carbonated soft drinks, such as Coke?

    A. I did not drink carbonated soft drinks during the past 30 days
    B. Less than 1 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

16. During the past 7 days, on how many days did you eat at a fast food restaurant, such as Dine-more?

    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 8 questions ask about personal health activities.

17. During the past 30 days, how many times per day did you **usually** clean or brush your teeth?

    A. I did not clean or brush my teeth during the past 30 days
    B. Less than 1 time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 or more times per day

18. During the past 30 days, how often did you wash your hands before eating?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

19. During the past 30 days, how often did you wash your hands after using the toilet or latrine?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

20. During the past 30 days, how often did you wash your hands after using the toilet or latrines **at school**?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

21. During the past 30 days, how often did you use the toilets or latrines **at school**?

    A. There are no toilets or latrines at school
    B. Never
    C. Rarely
    D. Sometimes
    E. Most of the time
    F. Always

22. Are there separate toilets or latrines for boys and girls **at school**?

    A. There are no toilets or latrines at school
    B. Yes
    C. No

23. During the past 30 days, how often did you use soap when washing your hands?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

24. During the past 30 days, how often did you use soap when washing your hands **at school**?

    A. I did not wash my hands at school
    B. Never
    C. Rarely
    D. Sometimes
    E. Most of the time
    F. Always

The next 3 questions ask about your source of drinking water.

25. Is there a source of clean water for drinking **at school**?

    A. Yes
    B. No

26. Do you bring water from home to drink while you are **at school**?

    A. Yes
    B. No

27. How often do you drink water from the water source **at school**?

A. There is not a water source at school
B. Never
C. Rarely
D. Sometimes
E. Most of the time
F. Always

The next 2 questions ask about worm infections.

28. During this school year, were you taught in any of your classes how to avoid worm infections?

A. Yes
B. No
C. I do not know

29. During this school year, were you taught any of your classes where to get treatment for a worm infection?

A. Yes
B. No
C. I do not know
D.

The next 2 questions ask about your dental health.

30. How would you describe the health of your teeth and gums?

A. Very poor
B. Poor
C. Average
D. Good
E. Very good

31. During the past 12 months, how often did you have a tooth ache?

A. Never
B. Rarely
C. Sometimes
D. Most of the time
E. Always

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, iron rod, knife, or sword). It is not a physical attack when two students of about the same strength or power choose to fight each other.

32. 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

33. Have you ever been physically forced to have sexual intercourse when you did not want to?

A. Yes
B. No

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

34. 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 5 questions ask about the most serious injury that happened to you during the past 12 months. 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.

35. 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

36. During the past 12 months, **what were you doing** when the most serious injury happened to you?

    A. I was not seriously injured during the past 12 months
    B. Playing or training for a sport
    C. Walking or running, but not as part of playing or training for a sport
    D. Riding a bicycle or scooter
    E. Riding or driving in a car or other motor vehicle
    F. Doing any paid or unpaid work, including housework, yard work, or cooking
    G. Nothing
    H. Something else

37. 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 fighting with someone
    F. I was attacked, assaulted, or abused by someone
    G. I was in a fire or too near a flame or something hot
    H. Something else caused my injury

38. During the past 12 months, **how** did the most serious injury happen to you?

    A. I was not seriously injured during the past 12 months
    B. I hurt myself by accident
    C. Someone else hurt me by accident
    D. I hurt myself on purpose
    E. Someone else hurt me on purpose

39. 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, puncture, 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 lost all or part of a foot, leg, hand, or arm
    H. Something else happened to me

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.

40. 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 day

41. 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 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 3 questions ask about feeling safe and violence at school.

42. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?

A. 0 days
B. 1 day
C. 2 or 3 days
D. 4 or 5 day
E. 6 or more days

43. During the past 30 days, how many times has someone threatened or injured you with a weapon, such as a gun, knife, or club, **on school property**?

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

44. During the past 30 days, how many times has someone stolen or deliberately damaged your property, such as your car, clothing, or books, **on school property**?

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 9 questions ask about your feelings and friendships.

45. During the past 12 months, how often have you felt lonely?

A. Never
B. Rarely
C. Sometimes
D. Most of the time
E. Always

46. During the past 12 months, how often have you been so worried about something that you could not sleep at night?

A. Never
B. Rarely
C. Sometimes
D. Most of the time
E. Always

47. During the past 12 months, how often have you been so worried about something that you could not eat or did not have an appetite?

A. Never
B. Rarely
C. Sometimes
D. Most of the time
E. Always

48. During the past 12 months, how often have you had a hard time staying focused on your homework or other things you had to do?

A. Never
B. Rarely
C. Sometimes
D. Most of the time
E. Always

49. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing your usual activities?

A. Yes
B. No

50. During the past 12 months, did you ever **seriously** consider attempting suicide?

A. Yes
B. No

51. During the past 12 months, did you make a plan about how you would attempt suicide?

A. Yes
B. No

52. How many close friends do you have?

A. 0
B. 1
C. 2
D. 3 or more

53. During this school year, were you taught any of your classes how to handle stress in healthy ways?

A. Yes
B. No
C. I do not know

The next 6 questions ask about cigarette and other tobacco use.

54. 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

55. 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

56. During the past 30 days, on how many days did you use any other form of tobacco, such as chewing tobacco leaves?

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

57. 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

58. 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

59. 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

The next 9 questions ask about drinking alcohol.

60. How old were you when you had your first drink of alcohol?

A. I have never had a drink of alcohol
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

61. 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

62. 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

63. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink <u>per day</u>?

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

64. 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 home
F. I stole it
G. I made it myself
H. I got it some other way

65. Where were you the **last 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

66. 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

67. During your life, how many times have you ever had a hang-over, felt sick, 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

68. 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

The next 6 questions ask about drugs, such as marijuana, cocaine, or heroine.

69. During your life, how many times have you used drugs?

A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 or more times

70. How old were you when you tried drugs, for the first time?

A. I have never tried 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

71. Which one of the drugs listed below have you used most often? SELECT ONLY ONE RESPONSE.

A. I have never tried any of these drugs
B. Marijuana (also called Ganja or Fai) or hashish (also called Theyo)
C. Tranquilisers or sedatives, such as Tabs, without a doctor or nurse telling you to do so
D. Amphetamines and methamphetamine (also called crystal ice)
E. Crack or other forms of cocaine
F. Solvents or inhalants (also called Thinaru, Dunlop, or Cola water)
G. Heroine or brown sugar(also called hakuru)
H. Some other drug

72. During your life, how many times have you shared needles or syringes used to inject any drug into your body?

A. 0 times
B. 1 or 2 times
C. 3 to 5 times
D. 6 to 9 times
E. 10 to 19 times
F. 20 to 39 times
G. 40 or more times

73. During the past 30 days, has anyone offered, sold, or given you a drug?

A. Yes
B. No

74. During the past 30 days, have you offered, sold, or given a drug to someone else?

A. Yes
B. No

The next 6 questions ask about HIV infection and AIDS.

75. Have you ever heard of HIV infection or the disease called AIDS?

A. Yes
B. No

76. During this school year, were you taught in any of your classes about HIV infection or AIDS?

A. Yes
B. No
C. I do not know

77. During this school year, were you taught in any of your classes how to avoid HIV infection or AIDS?

A. Yes
B. No
C. I do not know

78. Can people protect themselves from HIV infection or AIDS by not having sexual intercourse?

    A. Yes
    B. No
    C. I do not know

79. Do you know how to tell someone you do not want to have sexual intercourse with them?

    A. Yes
    B. No
    C. I do not know

80. Have you ever talked about HIV infection or AIDS with your parents or guardians?

    A. Yes
    B. No

The next 5 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, and swimming.

ADD UP ALL THE TIME YOU SPEND IN PHYSICAL ACTIVITY EACH DAY. DO **NOT** INCLUDE YOUR PHYSICAL EDUCATION OR GYM CLASS.

81. During the past **7 days**, on how many days were you physically active for a total of at least 60 minutes per 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

82. During a **typical or usual** week, on how many days are you physically active for a total of at least 60 minutes per 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

83. During the past 7 days, on how many days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?

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

84. During the past 7 days, on how many days did you do stretching exercises, such as toe touching, knee bending, or leg stretching?

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

85. During the past 12 months, on how many sports team did you play?

    A. 0 teams
    B. 1 team
    C. 2 teams
    D. 3 or more teams

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

86. 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 chatting through the internet or browsing?

    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

The next 2 questions ask about going to and coming home from school.

87. During the past 7 days, on how many days did you walk or ride a bicycle to and 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

88. During the past 7 days, how long did it **usually** take for you to get to and from school each day? ADD UP THE TIME YOU SPEND GOING TO AND COMING HOME FROM SCHOOL.

    A. Less than 10 minutes per day
    B. 10 to 19 minutes per day
    C. 20 to 29 minutes per day
    D. 30 to 39 minutes per day
    E. 40 to 49 minutes per day
    F. 50 to 59 minutes per day
    G. 60 or more minutes per day

The next 5 questions ask about your experiences at school and at home.

89. During the past 30 days, on how many days did you miss classes or school without permission?

    A. 0 days
    B. 1 or 2 days
    C. 3 to 5 days
    D. 6 to 9 days
    E. 10 or more days

90. During the past 30 days, how often were most of the students in your school kind and helpful?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

91. During the past 30 days, how often did your parents or guardians check to see if your homework was done?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

92. During the past 30 days, how often did your parents or guardians understand your problems and worries?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

93. During the past 30 days, how often did your parents or guardians **really** know what you were doing with your free time?

    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

Appendix B: Steering Committee

Steering Committee 2008-2009

#	Name	Designation	Place of Work
1	Dr. Aishath Shehenaz Adam	Executive Director	Ministry of Education
2	Dr. Sheena Moosa	Executive Director	Ministry of Health
3	Mr. Ahmed Shafeeu	Director General	Ministry of Education
4	Ms. Maimoona Aboobakuru	Deputy Director	Ministry of Health
5	Ms. Aminath Shenalin	Temporary National Professional	World Health Organization
6	Mr. Hussain Rasheed Moosa	Assistant Director General	Ministry of Education
7	Ms. Fathmath Azza	Director	Ministry of Education
8	Ms. Aishath Shifa	Supervisor	Ministry of Education
9	Ms. Aminath Shakeela	Teacher Educator	Ministry of Education

Steering Committee 2010

#	Name	Designation	Place of Work
1	Dr. Sheena Moosa	Permanent Secretary	MOHF
2	Dr. Ibrahim Yasir Ahmed	Director General of Health Services	MOHF
3	Dr. Jamsheed Ahmed	Director General	CCHDC
4	Ms. Maimoona Aboobakuru	Deputy Director	MOHF
5	Ms. Mariyam Niyaf	Deputy Director General	Department of National Planning
6	Ms. Aminath Shenalin	Temporary National Professional	World Health Organization
7	Mr. Ahmed Shafeeu	Director General	MOE
8	Ms. Fathimath Azza	Director	MOE
9	Mr. Hussain Rasheed Moosa	Deputy Director General	MOE
10	Ms. Aishath Shifa	Educational Supervisor	MOE