GSHS

# Tanzania Mainland Global School-based Student Health Survey Country Report

## The United Republic of Tanzania


**Ministry of Health, Community Development, Gender, Elderly and Children**

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# Global School-based Health Surveillance System

A contribution to the WHO STEPwise approach to Surveillance

# Table of Contents

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# Executive Summary

## Purpose for this survey

The 2015 Tanzania Mainland (M) national Global School-based Student Health Survey (GSHS) is part of the WHO/CDC questionnaire survey conducted in different countries primarily among students aged 13-17 years. In Tanzania the first GSHS was conducted in 2006 in Dar es Salaam region (sub-nationally). The GSHS generally measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults: including alcohol and other drug use; dietary behaviours; hygiene; mental health; physical activity; protective factors; sexual behaviours, tobacco use; violence and unintentional injury. The data can help the countries to develop priorities, establish school health and youth health programmes, advocate for resources for implementing the programmes, evaluate the programmes, and to make comparisons with other countries.

## Methodology

This survey was conducted by the Ministry of Health and Social Welfare (MoHSW) in collaboration with the Ministry of Education and Vocational Training (MoEVT), under the National School Health Programme (NSHP) in the Health Promotion and Education Section (HPES), with financial and technical assistance from WHO and CDC. It was organized and supervised by the national GSHS Coordinator. While the 2006 Tanzania GSHS represented the Dar es Salaam Region alone, the 2015 Tanzania (M) GSHS is nationally representative. The survey followed the standard GSHS methodology. Two-stage cluster sampling was done to obtain a representative sample of students in primary schools grades (standards) 6-7 and in secondary schools form 1-3, who correspond with the current GSHS targetted students aged 13-17 years. The first-stage sampling involved selection of 50 schools (22 primary and 18 secondary schools) from a national sampling frame of 20,230 primary and secondary schools in all 165 Districts in all 25 Regions of Tanzania Mainland (M) containing any of grades 6-7 and forms 1-3. The 50 sampled schools were actually located in 43 Districts within 21 Regions. The second stage of sampling involved random selection of grades 6-7 and forms 1-3 classrooms (streams) in each selected school. All students in the sampled streams were eligible and invited to participate in the GSHS. Based on the WHO/CDC GSHS Standard English Questionnaire, a Country Questionnaire containing 76 questions was produced, translated into Swahili, pre-tested and used in the 2015 Tanzania GSHS. Data collection was conducted for 4 weeks during February to March 2015 by 4 trained survey administrators who worked in 3 teams each visiting 13-15 Districts in 6-8 Regions and collected data from 1-2 schools, while District School Health Coordinators and local teachers gave administrative and logistics support. The principles of anonymous and voluntary participation were followed. The school response rate was 100%, and student response rate was 87%. Overall, 3,797 of the 4,373 sampled students completed questionnaires, and 3,793 questionnaires were usable after data editing. All prevalence estimates were computed with 95% confidence intervals.

## Key results

Alcohol use among students was not rare; the prevalence of current alcohol users was 4.5% (3.3-5.9), and among students who ever had a drink of alcohol 91.2% (85.8-94.7) had taken a drink before age of 14 years. Some students (3.2%, 2.5-4.2) got into trouble with their family or friends, missed school, or got into fights one or more times during their life as a result of drinking alcohol. Among the current alcohol users, 14.8% (9.8-21.6) usually drank two or more drinks on the days they drank alcohol, and 20.5% (14.1-28.7) usually got the alcohol they drank from their friends. Some 2.9% (2.2-4.0) drank so much alcohol that they were really drunk one or more times during their life. Among students who rode in a motor vehicle driven by someone else, for 23.0% (20.2-26.1) the driver had drunk. Overall, 14.7 (12.3-17.4) of students almost daily or daily saw some alcohol advertisements.

Drug use among students was also reported; among students who ever used drugs, 95.7% (90.2-98.2) of students first used drugs before age 14 years. Overall, 3.1% (2.3-4.3) of students had ever used marijuana and 2.5% (1.8-3.5) of students currently used marijuana. Some 3.1% (2.2-4.3) of students had ever used amphetamines or methamphetamines during their life.

Dietary behaviours were poor. Some students (6.7%, 5.2-8.6) went hungry most of the time or always because there was not enough food in their home. Less than a half usually ate fruits (39.1%, 35.2-43.2) or vegetables (28.9%, 24.9-33.3) three or more times daily. About half (45.3%, 40.7-49.9) usually drank carbonated soft drinks one or more times daily; and 16.0% (12.8-19.9) usually ate food from a fast food restaurant on three or more days during a week. Some 16.0% (12.8-19.9) of students ate food from a fast food restaurant on three or more days per week.

Hygiene practices were poor. Although 84.2% (80.8-87.1) cleaned or brushed teeth daily. However, 8.1% (6.7-9.7) of students never or rarely washed their hands before eating, 19.1% (15.9-22.6 never or rarely washed their hands after using the toilet, 22.1% (19.6-24.9) never or rarely used soap when washing their hands, and 47.6% (38.4-56.9) lacked a clean water source at school.

Mental health problems were common in terms of loneliness/depression and suicidal behaviour. Overall 7.0% (5.6-8.6) of students most of the time or always felt lonely, 6.4% (5.3-7.6) felt so worried about something that they could not sleep at night. Some 13.9% (12.4-15.6) of students had seriously considered attempting suicide, 9.5% (7.9-11.4) had made a plan how they would do it, and 11.5% (9.6-13.7) actually had attempted suicide. Some 9.8% (8.3-11.4) of students had no close friends. Only 33.5% (29.6-37.7) of students slept at least 8 hours on an average school night.

Physical activity among students seems low; only 27.9% (24.8-31.2) were physically for a total of at least 60 minutes per day on 5 or more days, and 20.0% (17.1-23.2) were physically active for a total of at least 60 minutes per day on all seven days, during the past week. Sedentary behaviour was common, 20.0% (17.6-22.6) of students spent three or more hours per day during a typical or usual day doing sitting activities. Many students 50.3 (45.7-54.8) did not walk or ride a bicycle to or from school during the past 7 days.

However, 36.5% (32.2-41.1) went to physical education class on three or more days each week, and 23.9% (20.2-28.2) went to physical education class on five or more days each week, during this school year.

Protective factors to students were not adequate. Missing school or classes was not rare; 27.8% (24.0-31.2) of students missed classes or school without permission on one or more days during the past 30 days. Being kind and helpful was low, as 35.6 (32.0-39.3) reported that most of the students in their school were most of the time or always kind and helpful during the past 30 days. On parents or guardians, a moderate proportion of 57.0% (53.9-59.9) of students reported their parents or guardians checked to see if their homework was done, 37.8 (34.0-41.8) reported their parents or guardians understood their problems and worries, most of the time. Moreover, 38.4% (34.6-42.3) reported their parents or guardians never or rarely really knew what they were doing with their free time. However, 76.5 (74.0-78.9) reported that their parents or guardians usually went through their things without their approval.

Sexual behaviours contributing to HIV Infection, Other STIs and Unintended Pregnancy were common. Overall, 20.0% (17.3-23.0) of students had sexual intercourse in their life, among whom 76.5% (68.0-83.3) started before age 14 years, and 5.3% (4.5-6.3) had sexual intercourse with two or more partners during their life. Among students who ever had sexual intercourse, only 36.5% (29.4-44.4) used a condom, and 33.1% (29.1-37.2) used other method of birth control, at their last sexual intercourse.

Tobacco use was not very low. Overall, 4.5% (3.4-5.8) of students smoked cigarettes on one or more days during the past 30 days, but among students who ever smoked cigarettes, most (93.2%, 89.1-95.8) tried a cigarette before age 14 years. Other 5.1% (3.8-6.7) currently used tobacco products other than cigarettes, and 7.5% (6.0-9.5) of students currently used any tobacco. Among students who smoked cigarettes during the past 12 months, 77.4% (70.1 -83.3) tried to stop smoking during the past 12 months. Some 11.3% (9.4-13.5) of students had a parent or guardian who used some form of tobacco. Some 45.2% (40.7-49.8) of students reported that people smoked in their presence.

Violence and unintentional injury among students were surprisingly high. Serious injury was common; overall 53.1% (49.5-56.8) of students were physically attacked one or more times, 30.1% (26.2-34.2) were in a physical fight one or more times and 38.8% (34.7-42.9) were seriously injured one or more times, during the past 12 months. Among students who were seriously injured during the past 12 months, a motor vehicle accident or being hit by a motor vehicle was the cause of the most serious injury among 7.5% (5.2-10.8) of students. Bullying among students was also usual; Overall, 26.8% (23.7-30.2) of students were bullied on one or more days during the past 30 days, of whom 25.4% (20.3-31.3) of students were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Among students who were seriously injured during the past 12 months, a broken bone or dislocated joint was the most serious injury among 18.8% (15.9-22.0) of students. Half (56.2%, 50.9-61.4) of students who were bullied could not sleep at night.

Boys more often than girls practice sexual behaviours contributing to HIV infection and other STIs, and report low protective factors. Girls more often than boys use fruits and vegatables but drink carbonated drinks and eat at fast food resteurants. Primary school (grade 6-7) students more often than secondary school (form 1-3) students experience violence and bullying, mental health problems, miss protective factors, use alcohol and drugs, go hungry most of the time due to lack of food at home, drink carbonated soft drinks, and do not wash their hands before meals, after toilet or with soap. Secondary school students more often than primary school students; have awareness on HIV and AIDS, brush their teeth daily, but often encounter alcohol advertisemtns and people smoke in their presence.

## Recommendations

The Tanzania Mainland 2015 GSHS results generally seem better compared to most other GSHS results from the WHO Region of Africa and globally. However, it is strongly recommended that some improvements are needed to the National School Health Programme through the implementation of the newly revised National School Health Policy Guidelines and the current 5-year National School Health Strategic Plan. Schools play a critical role in promoting the health and safety of young people and helping them establish lifelong healthy behaviors. Appropriate school health interventions suggested above are needed in all Tanzanian schools. Primary schools seem to be the home of adolescents' risky health behaviours compared to secondary schools, hence the efforts towards establishing "health-promoting-schools" or comprehensive school health should start in primary schools and without delay. Appropriate training, advocacy, social mobilization and adequate resource allocation at all levels; are highly needed for success of the National School Health Programme. The Government should collaborate with different Stakeholders in the efforts to reach all adolescents including out of school children with youth friendly interventions. The GSHS results should be shared with all School Health Partners to guide their activities. It is important to repeat the Tanzania GSHS in the future to establish the trend of Tanzania adolescents' risk health behaviours and protective factors.

# Part 1: Introduction

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

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

To date, several countries have completed a GSHS. This report describes results from the second GSHS conducted nationally in Tanzania Mainland by the Ministry of Health and Social Welfare in collaboration with Ministry of Education and Vocational Training, through the National School Health Programme (NSHP), during February to March 2015.

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

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

The GSHS is a school-based survey conducted primarily among students aged 13-17 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults in Tanzania:

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

The Tanzania 2006 GSHS conducted among 2,176 students in Dar es Salaam Region i.e sub-nationally (Nyandindi 2008) provides comparable data on the above topics. There is also a report by UNICEF (2015) on the experiences of adolescents in Tanzania but it focuses mainly on sexual behaviours.

The Tanzania Mainland present (2015) GSHS national data may be used to improve the implementation of the national school health policy guidelines and program and other youth/adolescent health related policies and programs.

# Part 2: Methods

## Sampling

The 2015 Tanzania (M) GSHS employed a two-stage cluster sample design to produce a nationally representative sample of students aged 13-17 year olds; who correspond to grade 6-7 students in primary schools and form 1-3 students in secondary schools.

The first-stage sampling frame consisted of all 20,230 primary and secondary schools in all 165 Districts in all 25 Regions of Tanzania (M) containing any of grades 6-7 and forms 1-3. Schools were selected with probability proportional to school enrolment size. In total 50 schools (22 primary and 18 secondary schools) were selected from 43 Districts of 21 Regions of Tanzania to participate in the GSHS.

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

## Weighting

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. The sample description and weighing formula is presented in Appendices section.

## Response rates

For the 2015 Tanzania (M) GSHS, 3,797 questionnaires were completed in 50 schools, and 3,793 questionnaires were usable after data editing. The school response rate was 100%, the student response rate was 87%, and the overall response rate was 87%. The number of participating schools in each region and district by school level and school ownership is presented in Appendices section.

## The data set

The data was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending Grades 6-7, and Forms 1-3 in Tanzania Mainland.

## Administering the survey

Survey administration occurred from 09th February 2015 to 04th March 2015. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet. Four Survey Administrators, actually the National School Health Programme (NSHP) officers from Ministries of Health and Ministry of Education in Dar es Salaam, were specially trained to conduct the GSHS. Survey administration procedures in the 43 Districts of the 21 Regions took four weeks as the Survey Administrators worked in 3 teams (each comprising 1 or 2 Survey Administrators plus a driver) each travelling to 13-15 Districts in 6-8 Regions and visiting 1-2 schools daily to collect data. In each District, 2 District School Health Coordinators (from Health and Education departments) escorted the Survey Administrators to every school; where 2 teachers (head teacher and health teacher) helped to encourage and organize students to participate in the survey.

## GSHS Country Questionnaire

The GSHS Country Questionnaire was based on the WHO/CDC GSHS Generic English Questionnaire. It comprised 74 Questions that included Core Questions, Core Expanded Questions and Country Specific Questions. It was developed by the GSHS Coordinator (Dr. Ursuline Nyandindi) and Ms. Winfrida Rutaindurwa (MoEVT official who attended 2013 Nairobi WHO/CDC GSHS training) with the rest of NSHP members from Ministries of Health and Education. The questionnaire development process involved producing the final English Country Questionnaire, its translation into the national Language, Swahili, and pre-testing it.

# Part 3: Results

### Overview

The results presented here are the key findings from the responses of the students who completed the Tanzania GSHS 2015 Questionnaire. They are organized according to the core modules in the questionnaire. Each core module is used as the topic heading, under which are given the background and relevant results starting with a general frequency table followed by subtopics with descriptive results, as shown here:-

## Demographics

### Introduction

This Global School-based Student Health Survey (GSHS) was completed by 3,793 students in 50 schools in Tanzania Mainland during 2015. The school response rate was 100%, the student response rate was 87%, and the overall response rate was 87%. The results are representative of all students in the grades below.

### Results

The weighted demographic characteristics of the sample are as described in the table below:

***Table 1. Demographic characteristics of the sample, Tanzania Mainland, 2015***

| **Tanzania Mainland** | **Total** | **Sex** | | **Grade/Form** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Males | Females | Grade 6 | Grade 7 | Form 1 | Form 2 | Form 3 | Some other grade |
| | 3,793 | 49.1% | 50.9% | 30.1% | 27.8% | 15.7% | 17.3% | 0.9% | 0.1% |

| | **Age (years)** | Weighted percentage |
|---|---|---|
| | 12 or younger | 20.4% |
| | 13-15 | 60.8% |
| | 16 or 17 | 16.5% |
| | 13-17 | 77.3% |
| | 18 or older | 2.4% |
| | Missing | - |

# Alcohol Use

## Background

Worldwide, alcohol use causes almost 4% of deaths (2.5 million deaths) annually, and results in a net loss of life of 2.25 million. It is the leading risk factor for death in males ages 15–59. Globally, 6.2% of all male deaths are attributable to alcohol, compared to 1.1% of female deaths. Men also have far greater rates of total burden attributed to alcohol than women – 7.4% for men compared to 1.4% for women.[i] Besides the direct effects of intoxication and addiction, alcohol use causes oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, motor vehicle accidents[ii], and heavy alcohol use increase risk for cardiovascular disease.[iii] It also causes epilepsy, diabetes mellitus, violence, fetus and child development effects, infectious diseases (pneumonia and tuberculosis), STIs, HIV/AIDS and reduced patients' adherence to antiretroviral treatment.[i]

Age of initiation of alcohol use in adolescence is related to pattern of its use and abuse in adulthood.[iv] Unintentional injuries are the leading cause of death among young people and many of these injuries are related to alcohol use.[v]

Young drinkers are also more likely to use tobacco and other drugs and engage in risky sexual behaviour.[vi, vii] Alcohol use can impair adolescents' psychological development and schooling.[viii]

Age of initiation of alcohol use in adolescence is related to pattern of its use and abuse in adulthood.[v] Young people who drink are also more likely to use tobacco and other drugs and engage in risky sexual behavior.[vi,vii] Alcohol use can impair adolescents' psychological development and ruin their schooling.[viii]

## Results

The alcohol use characteristics of the sample are described in the following table.

***Table 2. Alcohol use among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Among students who ever had a drink of alcohol, those who had their first drink of alcohol before age 14 years | 91.2 (85.8-94.7) | 89.7 (83.7-93.7) | 92.4 (83.6-96.6) | No |

| | | | | |
|---|---|---|---|---|
| Drank at least one drink containing alcohol on one or more of the past 30 days | 4.5 (3.3-5.9) | 4.5 (3.3-6.2) | 4.0 (2.7-5.8) | No |
| Among students who drank alcohol during the past 30 days, those who usually drank two or more drinks per day on the days they drank alcohol | 14.8 (9.8-21.6) | 14.6 (8.1-24.9) | 15.0 (8.1-26.3) | No |
| Among students who drank alcohol during the past 30 days, the percentage who usually got the alcohol they drank from their friends | 20.5 (14.1-28.7) | - | - | NA |
| Drank so much alcohol that they were really drunk one or more times during their life | 2.9 (2.2-4.0) | 3.3 (2.4-4.5) | 2.3 (1.4-3.7) | No |
| Got into trouble with their family or friends, missed school, or got into fights one or more times during their life as a result of drinking alcohol. | 3.2 (2.5-4.2) | 3.2 (2.4-4.2) | 2.9 (1.9-4.5) | No |
| Rode in a car or other motor vehicle driven by someone who had been drinking alcohol (one or more times during the past 30 days, among students who rode in a motor vehicle driven by someone else). | 23.0 (20.2-26.1) | 22.0 (18.3-26.1) | 22.7 (19.1-26.8) | No |
| Almost daily or daily saw any alcohol advertisements (during the past 30 days). | 14.7 (12.3-17.4) | 13.4 (11.3-15.8) | 15.6 (12.4-19.6) | No |

*95% confidence interval.

- Fewer than 100 students in this subgroup

**Age of onset of alcohol use**

In TANZANIA (M), among students who ever had a drink of alcohol, 91.2% (85.8-94.7) had their first drink of alcohol before age of 14 years. The percentage for males is 89.7 (83.7-93.7). The percentage for females is 92.4 (83.6-96.6).

**Prevalence of current alcohol use**

Overall, 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) was 4.5% (3.3-5.9). The percentage for male students is 4.5 (3.3-6.2). The percentage for female students is 4.0 (2.7-5.8). The percentage for Grade 6 students is 5.5 (3.2-9.2). The percentage for Grade 7 students is 3.6 (2.6-4.9). The percentage for Form 1 students is 5.1 (2.9-8.7). The percentage for Form 2 students is 2.3 (1.0-5.0). The percentage for Form 3 students is 5.3 (3.5-8.0).

Among the current users, 14.8% (9.8-21.6) of students drank two or more drinks per day on the days they drank alcohol during the past 30 days. The percentage for males is 14.6 (8.1-24.9). The percentage for females is 15.0 (8.1-26.3).

**Drunkenness and consequencies of drinking**

During their life, 2.9% (2.2-4.0) of students drank so much alcohol that they were really drunk one or more times. The percentage for male students is 3.3 (2.4-4.5). The percentage for female students is 2.3 (1.4-3.7). The percentage for Grade 6 students is 4.0 (2.6-6.2). The percentage for Grade 7 students is 2.9 (1.9-4.5). The percentage for Form 1 students is 2.0 (0.8-5.0). The percentage for Form 2 students is 1.8 (0.8-3.9). The percentage for Form 3 students is 3.0 (1.8-4.8). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 3.2% (2.5-4.2) of students got into trouble with their family or friends, missed school, or got into fights one or more times during their life as a result of drinking alcohol. The percentage for male students is 3.2 (2.4-4.2). The percentage for female students is 2.9 (1.9-4.5). The percentage for Grade 6 students is 5.3 (3.7-7.4). The percentage for Grade 7 students is 2.5 (1.7-3.7). The percentage for Form 1 students is 2.9 (1.3-6.1). The percentage for Form 2 students is 1.7 (0.7-4.1). The percentage for Form 3 students is 1.2 (0.4-4.0). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

**Access to alcohol products**

Among students who drank alcohol during the past 30 days, 20.5% (14.1-28.7) of students usually got the alcohol they drank from their friends.

### Other alcohol related behaviours

The percentage of students who rode in a car or other motor vehicle driven by someone who had been drinking alcohol (one or more times during the past 30 days, among students who rode in a motor vehicle driven by someone else), is 23.0 (20.2-26.1). The percentage of males is 22.0 (18.3-26.1). The percentage of females is 22.7 (19.1-26.8). The percentage for Grade 6 students is 28.3 (22.3-35.2). The percentage for Grade 7 students is 23.6 (17.9-30.4). The percentage for Form 1 students is 17.9 (10.3-29.5). The percentage for Form 2 students is 19.7 (15.2-25.0). The percentage for Form 3 students is 17.2 (12.6-23.0). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 14.7 (12.3-17.4) of students almost daily or daily saw any alcohol advertisements (during the past 30 days). The percent of males is 13.4 (11.3-15.8). The percent of females is 15.6 (12.4-19.6). The percentage for Grade 6 students is 10.8 (8.7-13.4). The percentage for Grade 7 students is 11.7 (8.4-16.0). The percentage for Form 1 students is 15.1 (9.7-22.7). The percentage for Form 2 students is 20.9 (12.9-32.0). The percentage for Form 3 students is 24.2 (18.0-31.7). For this behavior, the prevalence for Form 2 students is significantly higher than for Grade 6 students. The prevalence for Form 3 students is significantly higher than for Grade 6 students and for Grade 7 students. (Based on t-test analysis, $p < 0.05$.).

# Drug Use

## Background

Drug use have short- and long-term, direct and indirect effects. Short-term effects range from changes in appetite, wakefulness, heart rate, blood pressure, and/or mood to heart attack, stroke, psychosis, overdose, and even death. These health effects may occur after just one use. Longer-term effects can include dependence, heart or lung disease, cancer, mental illness, HIV/AIDS, hepatitis, and others such as addiction and increased risk for trauma, violence, injury, communicable diseases and sometimes death.[ix]

Globally, daily marijuana use among college-aged young adults has been climbing in recent years. In fact, 11.8 percent of non-college youth (those 1 to 4 years beyond high school) were daily users in 2015—the highest since 1980. Students who smoke marijuana have a higher chance of using other drugs and attempting suicide. Marijuana is the illicit drug most frequently found in the blood of drivers involved in vehicle crashes. Broader negative outcomes of drug use such as heavy marijuana use include lower educational level, lower income, greater welfare dependence, unemployment, criminal behavior, and lower life satisfaction.[ix]

## Results

The drug use characteristics of the sample are described in the following table

***Table 3. Drug-use behaviours, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | Males Different Than Females (Yes or No) |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | |
| Among students who ever used drugs, those who first used drugs before age 14 years | 95.7 (90.2-98.2) | _ | _ | NA |
| Used marijuana one or more times during their life | 3.1 (2.3-4.3) | 2.5 (1.6-4.0) | 3.3 (2.4-4.6) | No |
| Used marijuana one or more times during the past 30 days | 2.5 (1.8-3.5) | 2.3 (1.5-3.5) | 2.5 (1.7-3.5) | No |
| Used amphetamines or methamphetamines one or more times during their life | 3.1 (2.2-4.3) | 2.5 (1.5-4.1) | 3.1 (2.3-4.3) | No |

*95% confidence interval.
- Fewer than 100 students in this subgroup

### Age of onset of drug use

In TANZANIA (M), among students who ever used drugs, 95.7% (90.2-98.2) of students first used drugs before age 14 years.

### Prevalence of lifetime drug use

Overall, 3.1% (2.8-4.3) of students used marijuana one or more times during their life. The percentage for male students is 2.5 (1.6-4.0). The percentage for female students is 3.3 (2.4-4.6). The percentage for Grade 6 students is 4.9 (3.3-7.2). The percentage for Grade 7 students is 2.8 (1.7-4.5). The percentage for Form 1 students is 1.9 (0.8-4.5). The percentage for Form 2 students is 1.6 (0.6-4.1). The percentage for Form 3 students is 1.8 (0.5-6.2). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 3.1% (2.2-4.3) of students used amphetamines or methamphetamines one or more times during their life. The percentage for male students is 2.5 (1.5-4.1). The percentage for female students is 3.1 (2.3-4.3). The percentage for Grade 6 students is 5.3 (3.8-7.4). The percentage for Grade 7 students is 2.8 (1.7-4.6). The percentage for Form 1 students is 1.6 (0.5-4.8). The percentage for Form 2 students is 0.4 (0.1-1.8). The percentage foe Form 3 students is 2.0 (0.6-6.3). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$.).

**Prevalence of current drug use**

Overall, 2.5% (1.8-3.5) of students used marijuana one or more times during the past 30 days. The percentage for male students is 2.3 (1.5-3.5). The percentage for female students is 2.5 (1.7-3.5). The percentage for Grade 6 students is 4.4 (2.9-6.5). The percentage for Grade 7 students is 2.2 (1.5-3.2). The percentage for Form 1 students is 1.0 (0.3-3.9). The percentage for Form 2 students is 1.3 (0.5-3.3). The percentage for Form 3 students is 1.3 (0.3-6.3). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.)

# Dietary Behaviours

## Background

During adolescence, overweight is associated with hyperlipidaemia, raised blood pressure, abnormal glucose tolerance, adverse psychological and social consequences.

Childhood overweight may persist and later in life it may increase their risk for coronary heart disease, diabetes, gall bladder disease, some types of cancer, and osteoarthritis. Nutritional deficiencies as a result of food insecurity (protein-energy malnutrition, iron, Vitamin A, and iodine deficiency) affect adolescents' school participation and learning.[x]

Dietary patterns that include higher intakes of fruits and vegetables are associated with several health benefits including a decreased risk of cancer[xi], and can boost adolescents' learning.

## Results

***Table 4. Dietary behaviours, by sex, TANZANIA (M), 2015.***

| Behaviour or Health Outcome | Total % (CI)* | Sex | | Males Different Than Females (Yes or No) |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | |
| Were weighed and measured height during 12 months before the survey | 48.6 (43.4-53.8) | 50.7 (45.1-56.4) | 46.4 (40.7-52.1) | No |
| Went hungry most of the time or always because there was not enough food in their home during the past 30 days | 6.7 (5.2-8.6) | 7.0 (5.2-9.3) | 6.1 (4.3-8.6) | No |
| Usually ate fruit two or more times per day during the past 30 days | 39.1 (35.2-43.2) | 35.0 (30.9-39.4) | 43.5 (39.2-48.0) | Yes (F>M) |
| Usually ate vegetables three or more times per day during the past 30 days | 28.9 (24.9-33.3) | 25.5 (21.5-29.9) | 32.1 (27.5-37.1) | Yes (F>M) |
| Usually drank carbonated soft drinks one or more times per day during the past 30 days | 45.3 (40.7-49.9) | 40.6 (35.2-46.2) | 49.7 (45.0-54.3) | Yes (F>M) |
| Ate food from a fast food restaurant on three or more days during the past 7 days | 16.0 (12.8-19.9) | 14.8 (11.2-19.2) | 16.8 (13.0-21.3) | No |

*95% confidence interval.
- Indicates data were not available

### Body Mass Index (BMI)

In TANZANIA (M), the students' BMI was not calculated because weight and height were not measured during this survey.

Overall, 48.6% (43.4-53.8) of students reported they were weighed and measured during the past 12 months. The precentage for male students is 50.7 (45.1-56.4). The percentage for female students is 46.4 (40.7-52.1). The percentage for Grade 6 students is 48.0 (38.0-58.1). The percentage for Grade 7 students is 47.8 (38.7-57.0). The percentage for Form 1 students is 50.1 (39.5-60.6). The percentage for Form 2 students is 47.0 (37.2-57.0). The percentage for Form 3 students is 51.4 (44.5-58.2).

**Prevalence of hunger**

Overall, 6.7% (5.2-8.6) of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. The percentage of male students is 7.0 (5.2-9.3). The percentage of female students is 6.1 (4.3-8.6). The percentage for Grade 6 students is 8.3 (6.0-11.4). The percentage for Grade 7 students is 7.8 (4.6-12.8). The percentage for Form 1 students is 4.6 (2.3-8.9). The percentage for Form 2 students is 4.2 (2.5-7.0). The percentage for Form 3 students is 5.2 (2.6-10.3). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$).

**Fruit and vegetable intake**

Overall, 39.1% (35.2-43.2) of students usually ate fruit, such as bananas, oranges, pawpaw, mangoes, or pineapples, two or more times per day during the past 30 days. The percentage of males is 35.0 (30.9-39.4). The percentage of females is 43.5 (39.2-48.0). The percentage for Grade 6 students is 43.6 (36.7-50.7). The percentage for Grade 7 students is 42.9 (37.1-48.9). The percentage for Form 1 students is 34.8 (29.2-40.9). The percentage for Form 2 students is 33.4 (25.2-42.8). The percentage for Form 3 students is 31.6 (26.7-36.9). For this behavior, the prevalence for female students is significantly higher than for male students. The prevalence for Grade 6 students is significantly higher than for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 1 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.)

Overall, 28.9% (24.9-33.3) of students usually ate vegetables, such as amaranth, cassava leaves, pumkin leaves, cabbage, spinach, okra, or carrots, three or more times per day during the past 30 days. The percentage of males is 25.5 (21.5-29.9). The percentage of females is 32.1 (27.5-37.1). The percentage for Grade 6 students is 31.8 (25.0-39.6). The percentage for Grade 7 students is 34.0 (28.9-39.4). The percentage for Form 1 students is 24.0 (21.0-27.3). The percentage for Form 2 students is 22.8 (17.5-29.2). The percentage for Form 3 students is 23.6 (19.4-28.4). For this behavior, the prevalence for female students is significantly higher than for male students. The prevalence for Grade 6 students is significantly higher than for Form 1 students. The prevalence for Grade 7 students is significantly higher than for Form 1 grade students and for Form 2 grade students and for Form 3 grade students. (Based on t-test analysis, $p < 0.05$.).

**Other dietary behaviours**

Overall, 45.3% (40.7-49.9) of students drank carbonated soft drinks, such as Coca-Cola, Pepsi, Fanta, Mirinda, or Azam-Cola, one or more times per day during the past 30 days. The percentage for male students is 40.6 (35.2-46.2). The percentage for female students is 49.7 (45.0-54.3). The percentage for Grade 6 students is 45.7 (38.5-53.1). The percentage for Grade 7 students is 50.4 (44.8-56.0). The percentage for Form 1 students is 38.8 (32.4-45.6). The percentage for Form 2 students is 43.9 (34.1-54.3). The percentage for

Form 3 students is 40.1 (33.3-47.3). For this behavior, the prevalence for female students is significantly higher than for male students. The prevalence for Grade 7 students is higher than for Form 1 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$).

Overall, 16.0% (12.8-19.9) of students ate food from a fast food restaurant, such as a hotel, bar, kiosk, or food vendor, on three or more days during the past 7 days. The percentage for male students is 14.8 (11.2-19.2). The percentage for female students is 16.8 (13.0-21.3). The percentage for Grade 6 students is 19.2 (14.7-24.6). The percentage for Grade 7 students is 17.2 (12.8-22.6). The percentage for Form 1 students is 15.1 (9.2-23.9). The percentage for Form 2 students is 11.6 (6.4-19.9). The percentage for Form 3 students is 10.9 (6.9-16.7). For this behavior, the prevalence for Grade 6 students is higher than for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

# Hygiene

## Background

Hygiene-related Diseases include: Athlete's Foot (tinea pedis), Body Lice, Chronic Diarrhea, Dental Caries (Tooth Decay), Head Lice, Hot Tub Rash, Lymphatic Filariasis, Pinworms, Pubic Lice ("Crabs"), Swimmer's Ear (otitis externa), Scabies, Trachoma.[xii]

Dental caries is the commonest oral disease globally and affect 60-90% of children in developing countries but many children lack professional dental care. In Africa, dental caries is rising due to increased sugar consumption and inadequate fluoride exposure.[xiii] In addition to causing pain and discomfort, poor oral health can hamper children's ability to communicate, learn and attend school.[xiv] Daily tooth brushing can help prevent dental disease.[xv]

Diarrhoeal diseases kill nearly 2 million children every year. Hygiene education and the promotion of hand-washing can reduce diarrhoeal cases by 45%.[xvi] About 400 million school-aged children are infected with worms worldwide. These parasites cause malnutrition and impair learning by slowing cognitive development.[xvii]

## Results

***Table 5. Hygiene-related behaviours, by sex, TANZANIA (M), 2015.***

| Question | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Usually cleaned or brushed their teeth less than one time | 84.2% (80.8-87.1) | 83.9 (80.1-87.1) | 85.3 (81.6-88.3) | No |

| | | | | |
|---|---|---|---|---|
| per day during the past 30 days | | | | |
| Never or rarely washed their hands before eating during the past 30 days | 8.1 (6.7-9.7) | 8.5 (6.6-10.7) | 7.2 (6.0-8.6) | No |
| Never or rarely washed their hands after using the toilet or latrine during the past 30 days | 19.1 (15.9-22.6) | 19.6-15.9-24.0) | 17.9 (14.4-22.1) | No |
| Never or rarely used soap when washing their hands during the past 30 days | 22.1 (19.6-24.9) | 23.2 (20.1-26.7) | 21.0 (17.6-24.8) | No |
| Reported there was no source of clean water for drinking at school | 47.6 (38.4-56.9) | 47.6 (37.8-57.6) | 47.9 (39.1-56.9) | No |

*95% confidence interval.

**Personal hygiene**

In TANZANIA (M), the percentage of students who usually cleaned or brushed their teeth one or more times per day during the past 30 days was 84.2% (80.8-87.1). The percentage for male students is 83.9 (80.1-87.1). The percentage for female students is 85.3 (81.6-88.3). The percentage for Grade 6 students is 76.7 (69.2-82.8). The percentage for Grade 7 students is 84.5 (81.5-87.1). The percentage for Form 1 students is 86.1 (79.6-90.7). The percentage for Form 2 students is 92.0 (88.5-94.5). The percentage for Form 3 students is 91.7 (89.1-93.7). For this behavior, the prevalence for Grade 7 students is significantly higher than for Grade 6 students. The prevalence for Form 1 students is significantly higher than for Grade 6. The prevalence for Form 2 students is significantly higher than for Grade 6 students and for Grade 7 students and for Form 1 students. The prevalence for Form 3 students is significantly higher than for Grade 6 students and for Grade 7 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 8.1% (6.7-9.7) of students never or rarely washed their hands before eating during the past 30 days. The percentage for male students is 8.5 (6.6-10.7). The percentage for female students is 7.2 (6.0-8.6). The percentage for Grade 6 students is 12.1 (9.4-15.5). The percentage for Grade 7 students is 6.5 (4.8-8.7). The percentage for Form 1 students is 7.3 (5.2-10.1). The percentage for Form 2 students is 5.1 (3.2-8.0). The percentage for Form 3 students is 6.6 (3.6-11.7). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 19.1% (15.9-22.6) of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. The percentage for male students is 19.6 (15.9-24.0). The percentage for female students is 17.9 (14.4-22.1). The percentage for Grade 6

students is 24.1 17.4-32.4). The percentage for Grade 7 students is 15.2 (12.3-18.6). The percentage for Form 1 students is 19.9 (12.7-29.8). The percentage for Form 2 students is 15.8 (11.7-21.1). The percentage for Form 3 students is 17.0 (12.9-22.0). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 22.1% (19.6-24.9) of students never or rarely used soap when washing their hands during the past 30 days. The percentage for male students is 23.2 (20.1-26.7). The percentage for female students is 21.0 (17.6-24.8). The percentage for Grade 6 students is 23.8 (18.3-30.8). The percentage for Grade 7 students is 19.0 (16.0-22.5). The percentage for Form 1 students is 24.0 (17.8-31.5). The percentage for Form 2 students is 22.2 (17.6-27.6). The percentage for Form 3 students is 22.9 (19.0-27.4).

**Other hygiene related behaviours**

Overall, 47.6% (38.4-56.9) reported that there was no source of clean water for drinking at school. The percentage of males is 47.6 (37.8-57.6). The percentage of females is 47.9 (39.1-56.9). The percentage for Grade 6 students is 44.3 (34.4-54.6). The percentage for Grade 7 students is 44.6 (33.2-56.6). The percentage for Form 1 students is 40.3 (24.2-58.7). The percentage for Form 2 students is 59.9 (37.7-78.6). The percentage for Form 3 students is 57.1 (41.6-71.3). For this behavior, the prevalence for Form 2 students is significantly higher than for Form 1 students. (Based on t-test analysis, $p < 0.05$.).

# Mental Health

## Background

World-wide, about 20% of children and adolescents suffer from mental illness[xviii], especially anxiety disorders, depression, other mood disorders, and behavioural & cognitive disorders. Half of mental disorders start by age 14.[xix]

Most affected youths lack appropriate support and treatment and remain at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, and other health-jeopardizing impulsive behaviours. About 4 million adolescents world-wide attempt suicide annually. Suicide is the third leading cause of death among adolescents.[xx, xxi]

## Results

***Table 6. Mental health issues among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | Males Different Than Females (Yes or No) |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | |
| Most of the time or always felt lonely during the past 12 months | 7.0 (5.6-8.6) | 6.4 (5.0-8.2) | 7.4 (5.5-9.8) | No |
| Most of the time or always were so worried about something that they could not sleep at night during the past 12 months | 6.4 (5.3-7.6) | 6.1 (4.7-7.9) | 6.2 (4.8-7.9) | No |
| Ever seriously considered attempting suicide during the past 12 months | 13.9 (12.4-15.6) | 14.5 (12.5-16.8) | 12.9 (11.1-14.9) | No |
| Made a plan about how they would attempt suicide during the past 12 months | 9.5 (7.9-11.4) | 9.2 (7.4-11.5) | 9.3 (7.6-11.4) | No |
| Actually attempted suicide one or more times during the past 12 months | 11.5 (9.6-13.7) | 10.3 (8.1-12.9) | 11.9 (9.7-14.4) | No |
| Had no close friends | 9.8 (8.3-11.4) | 9.7 (8.0-11.7) | 9.3 (7.4-11.8) | No |
| Slept 8 hours or more on an average school night | 33.5 (29.6-37.7) | 34.8 (29.4-40.5) | 32.5 (28.9-36.3) | No |

*95% confidence interval.

In TANZANIA (M), 7.0% (5.6-8.6) of students most of the time or always felt lonely during the last 12 months. The percentage for male students is 6.4 (5.0-8.2). The percentage for female students is 7.4 (5.5-9.8). The percentage for Grade 6 students is 7.0 (4.9-9.8). The percentage for Grade 7 students is 7.4 (4.6-11.7). The percentage for Form 1 students is 5.9 (4.4-7.8). The percentage for Form 2 students is 6.8 (5.0-9.2). The percentage for Form 3 students is 8.7 (6.4-11.7).

Overall, 6.4% (5.3-7.6) of students most of the time or always were so worried about something that they could not sleep at night during the past 12 months. The percentage for male students is 6.1 (4.7-7.9). The percentage for female students is 6.2 (4.8-7.9). The percentage for Grade 6 students is 8.7 (6.5-11.6). The percentage for Grade 7 students is 5.8 (4.6-7.3). The percentage for Form 1 students is 4.5 (2.8-7.1). The percentage for Form 2 students is 4.9 (2.8-8.4). The percentage for Form 3 students is 5.5 (4.4-6.8). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 3 grade students. (Based on t-test analysis, $p < 0.05$.).

Overall, 13.9% (12.4-15.6) of students ever seriously considered attempting suicide during the past 12 months. The percentage for male students is 14.5 (12.5-16.8). The percentage for female students is 12.9 (11.1-14.9). The percentage for Grade 6 students is 19.0 (15.7-22.8). The percentage for Grade 7 students is 11.1 (9.1-13.5). The percentage for Form 1 students is 12.7 (8.6-18.4). The percentage for Form 2 students is 10.4 (7.1-14.9). The percentage for Form 3 students is 13.6 (10.5-17.6). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 9.5% (7.9-11.4) of students made a plan about they would attempt suicide during the past 12 months. The percentage for male students is 9.2 (7.4-11.5). The percentage for female students is 9.3 (7.6-11.4). The percentage for Grade 6 students is 13.2 (9.7-17.7). The percentage for Grade 7 students is 9.3 (7.5-11.6). The percentage for Form 1 students is 8.2 (6.1-11.1). The percentage for Form 2 students is 3.9 (2.2-6.6). The percentage for Form 3 students is 9.5 (7.0-12.6). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 grade students and for Form 1 students and for Form 2 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students. The prevalence for Form 1 students is significantly higher than for Form 2 students. The prevalence for Form 3 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 11.5 (9.6-13.7) % of students actually attempted suicide one or more times during the past 12 months. The percentage for male students is 10.3 (8.1-12.9). The percentage for female students is 11.9 (9.7-14.4). The percentage for Grade 6 students is 16.0 (12.4-20.5). The percentage for Grade 7 students is 9.9 (7.6-12.8). The percentage for Form 1 students is 10.0 (6.6-14.9). The percentage for Form 2 students is 8.3 (5.5-12.3). The percentage for Form 3 students is 8.9 (7.5-10.5). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 9.8 (8.3-11.4) % of students had no close friends. The percentage for male students is 9.7 (8.0-11.7). The percentage for female students is 9.3 (7.4-11.8). The percentage for Grade 6 students is 9.3 (6.3-13.7). The percentage for Grade 7 students is 9.9 (8.0-12.2). The percentage for Form 1 students is 10.6 (8.1-13.6). The percentage for Form 2 students is 8.5 (6.1-11.8). The percentage for Form 3 students is 11.3 (9.4-13.5).

Overall, 33.5% (29.6-37.7) of students slept 8 hours or more on an average school night. The percentage for male students is 34.8 (29.4-40.5). The percentage for female students is 32.5 (28.9-36.3). The percentage for Grade 6 students is 39.2 (34.4-44.2). The percentage for Grade 7 students is 39.1 (34.2-44.2). The percentage for Form 1 students is 32.8 (23.3-43.9). The percentage for Form 2 students is 20.9 (14.1-29.8). The percentage for Form 3 students is 23.4 (18.3-29.3). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 2 students and for Form 3 students. The prevalence for Grade 7 students is significantly

higher than for Form 2 students and for Form 3 students. The prevalence for Form 1 students is significantly higher than for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$).

# Physical Activity

## Background

Participating in adequate physical activity throughout the life span is the best way to prevent many chronic diseases, including cardiovascular disease and diabetes that is increasingly occurring during adolescence and childhood.[xxii, xxiii]

Physical activities also help to build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being.[xxiv]

Roughly 60% of the world's population live sedentary lives. Patterns of physical activity acquired during childhood and adolescence usually last throughout the life span.[xxv]

Participating in regular and adequate physical activity – such as walking, cycling, or doing sports – has significant benefits for health. It helps to build and maintain healthy muscles and bones, cardiorespiratory fitness, reduce hypertension, coronary heart disease, stroke, diabetes, cancer, depression, falls and fractures, control weight and promote psychological well-being. People who are insufficiently active have a 20% to 30% increased risk of death compared to people who are sufficiently active.[xxvi]

WHO recommends that adolescents aged 5-17years should do at least 60 minutes of moderate to vigorous-intensity physical activity daily, and include activities that strengthen muscle and bone at least 3 times per week.[xxvi]

## Results

***Table 7. Physical activity among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Were physically active for a total of at least 60 minutes per day on **five or more** days during the past seven days | 27.9 (24.8-31.2) | 31.8 (27.0-36.9) | 24.0 (21.0-27.2) | Yes (M>F) |

| | | | | |
|---|---|---|---|---|
| Were physically active for a total of at least 60 minutes per day on **all seven** days during the past seven days | 20.0 (17.1-23.2) | 23.0 (18.6-28.1) | 17.2 (14.6-20.1) | Yes (M>F) |
| Did not walk or ride a bicycle to or from school during the past seven days | 50.3 (45.7-54.8) | 47.5 (42.1-53-0) | 52.7 (48.0-57.3) | Yes (F>M) |
| Went to physical education class on **three or more** days each week during this school year | 36.5 (32.2-41.1) | 40.7 (35.0-46.5) | 32.8 (28.9-37.0) | Yes (M>F) |
| Went to physical education class on **five or more** days each week during this school year | 23.9 (20.2-28.2) | 27.6 (22.2-33.4) | 20.8 (17.5-24.6) | Yes (M>F) |
| Spent three or more hours per day during a typical or usual day doing sitting activities | 20.0 (17.6-22.6) | 19.8 (16.7-23.3) | 20.3 (17.7-23.1) | No |

*95% confidence interval.

In TANZANIA (M), 27.9% (24.8-31.2) of students were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. The percentage for male students is 31.8 (27.0-36.9). The percentage for female students is 24.0 (21.0-27.2). The percentage for Grade 6 students is 26.9 (23.2-31.0). The percentage for Grade 7 students is 29.7 (25.9-33.8). The percentage for Form 1 students is 25.6 (17.3-36.0). The percentage for Form 2 students is 27.6 (20.9-35.5). The percentage for Form 3 students is 29.6 (24.2-35.5). ). For this behavior, the percentage for male students is significantly higher than for female students. (Based on t-test analysis, $p < 0.05$.).

Overall, 20.0% (17.1-23.2) of students were physically active for a total of at least 60 minutes on all seven days during the past seven days. The percentage for male students is 23.0 (18.6-28.1). The percentage for female students is 17.2 (14.6-20.1). The percentage for Grade 6 students is 19.5 (15.9-23.6). The percentage for Grade 7 students is 20.7 (17.8-23.9). The percentage for Form 1 students is 19.7 (12.7-29.1). The percentage for Form 2 students is 19.6 (13.6-27.3). The percentage for Form 3 students is 20.3 (16.8-24.3). For this behavior, the prevalence for male students is significantly higher than for female students. (Based on t-test analysis, $p < 0.05$.).

Overall, 50.3% (45.7-54.8) of students did not walk or ride a bicycle to or from school during the past seven days. The percentage for male students is 47.5 (42.1-53.0). The percentage for female students is 52.7(48.0-57.3). The percentage for Grade 6 students is 48.0 (41.8-54.2). The percentage for Grade 7 students is 48.3 (42.1-54.5). The percentage for Form 1 students is 59.3 (49.0-68.9). The percentage for Form 2 students is 50.7 (42.4-59.0). The percentage for Form 3 students is 46.6 (34.9-58.6). For this behavior, the prevalence for female students is significantly higher than for male students. (Based on t-test analysis, $p < 0.05$.).

Overall, 36.5% (32.2-41.1) of students attended physical education class on three or more days each week during this school year. The percentage for male students is 40.7 (35.0-46.5). The percentage for female students is 32.8 (28.9-37.0). The percentage for Grade 6 students is 36.3 (31.0-41.9). The percentage for Grade 7 students is 41.3 (36.8-46.0). The percentage for Form 1 students is 31.9 (20.4-46.0). The percentage for Form 2 students is 35.0 (26.0-45.3). The percentage for Form 3 students is 34.5 (28.6-41.0). For this behavior, the prevalence for male students is significantly higher than for female students. (Based on t-test analysis, $p < 0.05$.).

Overall, 23.9% (20.2-28.2) of students went to physical education class on five or more days each week during this school year. The percentage for male students is 27.6 (22.4-33.4). The percentage for female students is 20.8 (17.5-24.6). The percentage for Grade 6 students is 22.8 (18.9-27.3). The percentage for Grade 7 students is 26.1 (22.1-30.6). The percentage for Form 1 students is 22.3 (11.9-37.7). The percentage for Form 2 students is 24.7 (16.9-34.6). The percentage for Form 3 students is 23.7 (18.8-29.3). For this behavior, the prevalence for male students is significantly higher than for female students. (Based on t-test analysis, $p < 0.05$.).

Overall, 20.0% (17.6-22.6) of students spent three or more hours per day during a typical or usual day doing sitting activities, such as watching TV, playing computer games, talking with friends, playing cards, plaiting hair, or embroidery. The percentage for male students is 19.8 (16.7-23.3). The percentage for female students is 20.3 (17.7-23.1). The percentage for Grade 6 students is 18.5 (14.9-22.6). The percentage for Grade 7 students is 19.9 (16.1-24.4). The percentage for Form 1 students is 21.9 (14.9-31.1). The percentage for Form 2 students is 21.0 (16.9-25.9). The percentage for Form 3 students is 19.1 (16.2-22.4).

# Protective Factors

## Background

Efforts to improve child and adolescent health have typically addressed specific health risk behaviors, but greater health impact can be achieved by also enhancing protective factors that help children and adolescents avoid multiple behaviors that place them at risk for adverse health and educational outcomes.[xxvii]

For most adolescents, school is the most important setting outside of the family. School attendance can increase health risk behaviours including violence and sexual risk behaviours.[xxviii]

Adolescents who have positive relationship with teachers, and have positive attitudes towards school, are less likely to engage in early sexual activity, to use substances, and to experience depression.[xix]

Those isolated from peers exhibit loneliness and psychological symptoms. Interaction with friends tends to improve social skills and ability to cope with stressful events.[xxx]

Parental bonding and connection reduces depression and suicidal ideation, alcohol use, sexual risk behaviours, tobacco, alcohol, and other drug use and violence.[xxxi]

## Results

***Table 8. Protective factors among students, by sex, TANZANIA (M), 2015.***

| Protective Factor | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Missed classes or school without permission on one or more of the past 30 days | 27.8 (24.0-31.2) | 27.0 (22.6-31.8) | 27.9 (24.2-32.0) | No |
| Reported most of the students in their school were kind and helpful most of the time or always during the past 30 days | 35.6 (32.0-39.3) | 35.7 (31.8-39.9) | 35.8 (31.8-40.0) | No |
| Parents or guardians checked to see if their homework was done most of the time or always during the past 30 days | 57.0 (53.9-59.9) | 55.1 (51.4-58.7) | 59.3 (55.8-62.8) | Yes (F>M) |
| Parents or guardians understood their problems and worries most of the time or always during the past 30 days | 37.8 (34.0-41.8) | 37.2 (33.2-41.5) | 38.8 (34.4-43.3) | No |
| Parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days | 38.4 (34.6-42.3) | 35.8 (31.5-40.4) | 41.2 (36.3-46.3) | Yes (F>M) |
| Parents or guardians went through their things without their approval never or rarely during the past 30 days | 76.5 (74.0-78.9) | 77.6 (75.1-80.0) | 75.6 (71.8-79.0) | No |

*95% confidence interval.

In **TANZANIA (M)**, 27.8% (24.0-31.2) of students missed classes or school without permission on one or more of the past 30 days. The percentage for male students is 27.0 22.6-31.8). The percentage for female students is 27.9 (24.2-32.0). The percentage for Grade 6 students is 34.0 (27.6-41.0). The percentage for Grade 7 students is 27.0 (23.7-30.5). The percentage for Form 1 students is 17.4 (11.4-25.6). The percentage for Form 2 students is 26.7 (19.6-35.2). The percentage for Form 3 students is 28.0 (20.9-36.4). For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students. The prevalence for Grade 7 grade students is significantly higher than for Form 1 grade students. The prevalence for Form 2 grade students is significantly higher than for Form 1 grade students. The prevalence for Form 3 grade students is significantly higher than for Form 1 grade students. (Based on t-test analysis, $p < 0.05$.).

Overall, 35.6% (32.0-39.3) 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. The percentage for male students is 35.7 (31.8-39.9). The percentage for female students is 35.8 (31.8-40.0). The percentage for Grade 6 students is 32.7 (26.2-39.9). The percentage for Grade 7 students is 37.3 (31.8-43.1). The percentage for Form 1 students is 31.8 (23.4-41.6). The percentage for Form 2 students is 39.7 (31.6-48.3). The percentage for Form 3 students is 38.1 (29.8-47.1).

Overall, 57.0% (53.9-59.9) 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. The percentage for male students is 55.1 (51.4-58.7). The percentage for female students is 59.3 (55.8-62.8). The percentage for Grade 6 students is 50.9 (44.4-57.4). The percentage for Grade 7 students is 56.7 (50.9-62.3). The percentage for Form 1 students is 61.9 (55.1-68.2). The percentage for Form 2 students is 61.6 (55.5-67.3). The percentage for Form 3 students is 61.4 (55.0-67.3). For this behavior, the prevalence for female students is higher than for male students. The prevalence for Form 1 students is higher than for Grade 6 students. The prevalence for Form 2 students is higher than for Grade 6 students. The prevalence for Form 3 students is higher than for Grade 6 students. (Based on t-test analysis, $p < 0.05$.)

Overall, 37.8% (34.0-41.8) of students reported their parents or guardians understood their problems and worries most of the time or always during the past 30 days. The percentage for male students is 37.2 (33.2-41.5). The percentage for female students is 38.8 (34.4-43.3). The percentage for Grade 6 students is 29.1 (22.9-26.1). The percentage for Grade 7 students is 37.1 (32.3-42.2). The percentage for Form 1 students is 45.2 (39.2-51.2). The percentage for Form 2 students is 45.2 (41.5-49.0). The percentage for Form 3 students is 42.2 (36.8-47.9). For this behavior, the prevalence for Grade 7 grade students is significantly higher than for Grade 6 students. The prevalence for Form 1 students is significantly higher than for Grade 6 students. The prevalence for Form 2 students is significantly higher than for Grade 6 students and for Grade 7 grade students. The prevalence for Form 3 students is higher than for Grade 6 students. (Based on t-test analysis, $p < 0.05$.)

Overall, 38.4% (34.6-42.3) of students reported their parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days. The percentage for male students is 35.8 (31.5-40.4). The percentage for female students is 41.2 (36.3-46.3). The percentage for Grade 6 students is 30.6 (25.7-36.1). The percentage for Grade 7 students is 36.6 (31.3-42.3). The percentage for Form 1 students is 44.2 (36.4-52.2). The percentage for Form 2 students is 47.0 (42.6-51.4). The percentage for Form 3 students is 42.8 (36.1-49.8). For this behavior, the prevalence for female students is significantly higher than for male students. The prevalence for Form 1 students is significantly higher than for Grade 6 students. The prevalence for Form 2 students is significantly higher than for Grade 6 students and for Grade 7 students. The prevalence for Form 3 students is significantly higher than for Grade 6 students. (Based on t-test analysis, $p < 0.05$.)

Overall, 76.5% (74.0-78.9) of students reported their parents or guardians went through their things without their approval never or rarely during the past 30 days. The percentage for male students is 77.6 (75.1-80.0). The percentage for female students is 75.6 (71.8-79.0). The percentage for Grade 6 students is 77.2 (73.2-80.9). The percentage for Grade 7 students is 78.5 (73.6-82.7). The percentage for Form 1 students is 78.2 (73.1-82.6). The percentage for Form 2 students is 72.6 (67.2-77.4). The percentage for Form 3 students is 73.4 (67.4-78.6).

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

## Background

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

AIDS has killed over 25 million people since 1981. As of 2005, roughly 40.3 million people were living with HIV. In that year alone 3.1 million people died of HIV and another 4.9 million people became infected with HIV.[xxxii] Young people aged 15-24 years are the most threatened group, accounting for over half of those newly infected with HIV. As of 2003 roughly 10 million youths aged 15 to 24 were living with HIV. Adolescents who begin sexual activity early are likely to have multiple and infected sex partners and to unuse condoms. HIV/AIDS reduces life expectancy, threatens food security and nutrition, dissolves households, overloads health care system, reduce economic growth and development, and reduce school enrolment and availability of teachers.[xxxiii]

STIs are very common globally and facilitate HIV transmission, and can lead to cervical cancer, pelvic inflammatory diseases, and ectopic pregnancies. STIs commonly affect people aged 15-24 years; up to 60% of the new infections and half of all people living with HIV globally are in this age group.[xxxiii]

## Results

***Table 9. Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Ever had sexual intercourse | 20.0 (17.3-23.0) | 26.3 (22.5-30.5) | 13.4 (11.0-16-2) | Yes (M>F) |
| Among students who ever had sexual intercourse, those who had sexual intercourse for the first time before age 14 years | 76.5 (68.0-83.3) | 77.6 (68.6-84.7) | _ | NA |
| Had sexual intercourse with two or more people during their life | 5.3 (4.5-6.3) | 8.0 (6.4-9.8) | 2.4 (1.6-3.6) | Yes (M>F) |
| Among students who ever had sexual intercourse, those who used a condom the last time they had sexual intercourse | 36.5 (29.4-44.4) | 34.9 (27.8-42.9) | _ | NA |
| Among students who ever had sexual intercourse, those who used any other method of birth control the last time they had sexual intercourse | 33.1 (29.1-37.2) | 32.2 (27.0-37.9) | _ | NA |
| Ever heard of HIV infection or the disease called AIDS | 87.2 (85.0-89.2) | 87.7 (84.9-90.0) | 87.1 (84.7-89.2) | No |

*95% confidence interval.
- Fewer than 100 students in this subgroup

In **TANZANIA (M),** 20.0% (17.3-23.0) of students ever had sexual intercourse. The percentage or male students is 26.3. The percentage for female students is 13.4. The percentage for Grade 6 students is 25.7. The percentage for Grade 7 students is 17.2. The percentage for Form 1 students is 14.7. The percentage for Form 2 students is 18.9. The percentage for Form 3 students is 20.9. For this behavior, the prevalence for male students is significantly higher than for female students. The prevalence for Grade 6 grade students is significantly higher than for Grade 7 grade students. The prevalence for Grade 6 grade students is significantly higher than for Form 1 grade students. (Based on t-test analysis, $p < 0.05$.)

Among students who ever had sexual intercourse, 76.5% (68.0-83.3) of students had sexual intercourse for the first time before age 14 years. The percentage for all students is 76.5. The percentage for male students is 77.6 (68.6-84.7). The percentage for Form 3 students is 52.3 (45.3-59.2).

Overall, 5.3% (4.5-6.3) of students had sexual intercourse with two or more people during their life. The percentage for male students is 8.0 (6.4-9.8). The percentage for female students is 2.4 (1.6-3.6). The percentage for Grade 6 students is 4.8 (3.2-7.0). The percentage for Grade 7 students is 4.2 (2.9-6.2). The percentage for Form 1 students is 5.6 (3.5-9.0). The percentage for Form 2 students is 5.7 (4.3-7.4). The percentage for Form 3 students is 7.9 (5.9-10.5). For this behavior, the prevalence for male students is significantly higher than for female students. The prevalence for Form 3 students is higher than for Grade 6 students. The prevalence for Form 3 students is significantly higher than for Grade 7 students. (Based on t-test analysis, $p < 0.05$.).

Among students who ever had sexual intercourse, 36.5% (29.4-44.4) of students used a condom the last time they had sexual intercourse. The percentage for male students is 34.9 (27.8-42.9). The percentage for Form 3 students is 35.5 (22.4-51.2).

Among students who ever had sexual intercourse, 33.1 (29.1-37.2) of students used any other method of birth control (such as withdrawl, rhythm, or birth control pills to prevent pregnancy, the last time they had sexual intercourse. The percentage for male students is 32.2 (27.0-37.9). The percentage for Form 3 students is 32.2 (24.6-41.0).

Overall, 87.2% (85.0-89.2) of students had ever heard of HIV infection or the disease called AIDS. The percentage for male students is 87.7 (84.9-90.0). The percentage for female students is 87.1 (84.7-89.2). The percentage for Grade 6 students is 82.3 (78.9-85.3). The percentage for Grade 7 students is 86.3 (81.9-89.8). The percentage for Form 1 students is 90.3 (85.4-93.6). The percentage for Form 2 students is 92.2 (89.0-94.5). The percentage for Form 3 students is 92.9 (89.3-95.4). For this behavior, the prevalence for Form 1 students is significantly higher than for Grade 6 students. The prevalence for Form 2 students is significantly higher than for Grade 6 students and for Grade 7 students. The prevalence for Form 3 students is significantly higher than for Grade 6 students and for Grade 7 students. (Based on t-test analysis, $p < 0.05$.).

# Tobacco Use

## Background

About 1.1 billion people worldwide smoke, among whom, about 84% live in developing countries. Currently 5 million people die annually from tobacco consumption, the second leading cause of death worldwide.

Without interventions, estimated number of deaths from tobacco by 2020 will be 10 million people per year.[xxxiv] The majority of smokers begin tobacco use during adolescence; nearly one-quarter smoke their first cigarette before they reach the age of ten.

Smokers have high risk of multiple cancers particularly lung cancer, heart disease, stroke, emphysema and other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. 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. Parental smoking is associated with higher youth smoking.[xxxv]

The difference in current cigarette smoking between boys and girls is narrower than expected in many regions of the world. Use of tobacco products other than cigarettes by students is as high as cigarette smoking in many regions. Student exposure to secondhand smoke is high both at home and in public places.[xxxvi]

## Results

***Table 10. Tobacco use among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Among students who ever smoked cigarettes, those who first tried a cigarette before age 14 years | 93.2 (89.1-95.8) | 92.8 (86.8-96.2) | 94.9 (89.6-97.5) | No |
| Smoked cigarettes on one or more days during the past 30 days | 4.5 (3.4-5.8) | 4.9 (3.6-6.9) | 3.5 (2.4-5.1) | No |
| Used any tobacco products other than cigarettes on one or more days during the past 30 days | 5.1 (3.8-6.7) | 4.3 (3.0-6.2) | 5.1 (3.7-7.1) | No |
| Used any tobacco on one or more days during the past 30 days | 7.5 (6.0-9.5) | 7.5 (5.8-9.7) | 6.7 (5.0-8.9) | No |
| Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes during the past 12 months | 77.4 (70.1 - 83.3) | _ | _ | NA |
| Reported people smoked in their presence on one or more days during the past seven days | 45.2 (40.7-49.8) | 43.5 (37.9-49.3) | 46.3 (41.8-50.8) | No |

| | | | | |
|---|---|---|---|---|
| Had parents or guardians who used any form of tobacco | 11.3 (9.4-13.5) | 10.1 (7.9-12.9) | 11.7 (9.4-14.5) | No |

*95% confidence interval.

- Fewer than 100 students in this subgroup

In **TANZANIA (M**), among students who ever smoked cigarettes, 93.2% (89.1-95.8) of students first tried a cigarette before age 14 years. The percentage for male students is 92.8 (86.8-96.2. The percentage for female students is 94.9 (89.6-97.5).

Overall, 4.5% (3.4-5.8) of students smoked cigarettes on one or more days during the past 30 days. The percentage for male students is 4.9 (3.6-6.9). The percentage for female students is 3.5 (2.4-5.1). The percentage for Grade 6 students is 6.5 (4.6-9.2). The percentage for Grade 7 students is 4.3 (2.6-6.9). The percentage for Form 1 students is 2.0 (0.9-4.5). The percentage for Form 2 students is 3.3 (2.1-5.3). The percentage for Form 3 students is 2.8 (1.4-5.5). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 1 students and for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 5.1% (3.8-6.7) of students used any tobacco products other than cigarettes on one or more days during the past 30 days. The percentage for male students is 4.3 (3.0-6.2). The percentage for female students is 5.1 (3.7-7.1). The percentage for Grade 6 students is 7.2 (5.1-10.1). The percentage for Grade 7 students is 5.6 (3.8-8.1). The percentage for Form 1 students is 3.9 (1.8-8.2). The percentage for Form 2 students is 1.9 (0.8-4.2). The percentage for Form 3 students is 2.9 (1.2-7.0). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 2 students and for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 7.5% (6.0-9.5) of students currently used any tobacco (on one or more days during the past 30 days). The percentage for male students is 7.5. The percentage for female students is 6.7. The percentage for Grade 6 students is 10.7. The percentage for Grade 7 students is 7.9. The percentage for Form 1 students is 4.7. The percentage for Form 2 students is 4.2. The percentage for Form 3 students is 4.8. For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 1 students and for Form 2 grade students and for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students. (Based on t-test analysis, $p < 0.05$.)

Among students who smoked cigarettes during the past 12 months, 77.4% (70.1 -83.3) of students tried to quit cigarettes during the past 12 months.

Overall, 45.2% (40.7-49.8) of students reported that people smoked in their presence (on one or more days during the past seven days). The percentage for male students is 43.5 (37.9-49.3). The percentage for female students is 46.3 (41.8-50.8). The percentage for Grade 6 students is 41.8 (36.1-47.7). The percentage for Grade 7 students is 47.8 (42.6-53.2). The percentage for Form 1 students is

39.2 (27.6-52.3). The percentage for Form 2 students is 46.9 (38.3-55.8). The percentage for Form 3 students is 52.9 (45.8-59.9). For this behavior, the prevalence for Grade 7 students is significantly higher than for Grade 6 students. The prevalence for Form 2 students is significantly higher than for Form 1 students. The prevalence for Form 3 students is significantly higher than for Grade 6 students and for Form 1 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 11.3% (9.4-13.5) of students had parents or guardians who used any form of tobacco. The percentage for male students is 10.1 (7.9-12.9). The percentage for female students is 11.7 (9.4-14.5). The percentage for Grade 6 students is 11.1 (8.3-14.8). The percentage for Grade 7 students is 10.4 (7.2-14.8). The percentage for Form 1 students is 10.9 (7.3-16.0). The percentage for Form 2 students is 12.9 (9.2-17.9). The percentage for Form 3 students is 11.3 (8.7-14.5).

# Violence and Unintentional Injury

## Background

Uninentional injuries are a major killer of children under the age of 18 years throughout the world.[xxxvii, xxxviii] Each year, about 875,000 of the children die from injuries and 10 to 30 million have their lives affected by injury. 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.[xxxix] For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment.[xxxx] Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, financial loss, and other health risk behaviours.
Childhood exposure to violence is a risk factor for a range of risk behaviours and disorders (eg, smoking, obesity, high-risk sexual behaviour, and depression) that in turn, cause other major public health problems such as cancer, heart disease, STI and suicide. Early interventions can reduce violence expression by the children as they grow into adolescents and adults.[xxxxi]

Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk to substance abuse, aggressive behaviour, and suicide attempts.[xxxxii]

## Results

***Table 11. Violence and unintentional injury among students, by sex, TANZANIA (M), 2015.***

| Behaviour | Total % (CI)* | Sex | | |
|---|---|---|---|---|
| | | Male % (CI) | Female % (CI) | Males Different Than Females (Yes or No) |
| Were physically attacked one or more times during the past 12 months | 53.1 (49.5-56.8) | 54.4 (50.2-58.5) | 51.6 (47.6-55.7) | No |
| Were in a physical fight one or more times during the past 12 months | 30.1 (26.2-34.2) | 29.3 (25.4-33.7) | 29.7 (25.6-34.1) | No |
| Were seriously injured one or more times during the past 12 months | 38.8 (34.7-42.9) | 39.9 (35.1-45.0) | 36.7 (32.0-41.7) | No |
| Among students who were seriously injured during the past 12 months, those whose most serious injury was a broken bone or dislocated joint | 18.8 (15.9-22.0) | 22.0 (18.0-26.6) | 15.1 (11.3-20.0) | Yes (M>F) |
| Among students who were seriously injured during the past 12 months, those who most serious injury was caused by a motor vehicle accident or being hit by a motor vehicle | 7.5 (5.2-10.8) | 7.1 (5.0-10.1) | 7.1 (4.5-11.2) | No |
| Were bullied on one or more days during the past 30 days | 26.8 (23.7-30.2) | 25.3 (22.1-28.8) | 27.2 (23.2-31.7) | No |
| 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 | 25.4 (20.4-31.3) | 27.2 (20.8-34.8) | 22.7 (17.0-29.6) | No |

*95% confidence interval.

In **TANZANIA (M)**, 53.1% (49.5-56.8) of students were physically attacked one or more times during the past 12 months. The percentage for male students is 54.4 (50.2-58.5). The percentage for female students is 51.6 (47.6-55.7). The percentage for Grade 6

students is 48.8 (41.5-56.3). The percentage for Grade 7 students is 53.1 (47.9-58.3). The percentage for Form 1 students is 55.8 (51.4-60.2). The percentage for Form 2 students is 57.0 (52.1-61.8). The percentage for Form 3 students is 54.6 (49.6-59.5).

Overall, 30.1% (26.2-34.2) of students were in a physical fight one or more times during the past 12 months. The percentage for male students is 29.3. The percentage for female students is 29.7. The percentage for Grade 6 students is 41.3. The percentage for Grade 7 students is 30.6. The percentage for Form 1 students is 24.7. The percentage for Form 2 students is 20.3. The percentage for Form 3 students is 16.8. For this behavior, the prevalence for Grade 6 students is significantly higher than for Grade 7 students and for Form 1 students and for Form 2 students and for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students. The prevalence for Grade 7 students is significantly higher than for Form 3 students. The prevalence for Form 1 students is significantly higher than for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 38.8% (34.7-42.9) of students were seriously injured one or more times during the past 12 months. The percentage for male students is 39.9 (35.1-45.0). The percentage for female students is 36.7 (32.0-41.7). The percentage for Grade 6 students is 47.8 (39.8-55.8). The percentage for Grade 7 students is 41.3 (35.7-47.2). The percentage for Form 1 students is 34.0 (26.8-42.1). The percentage for Form 2 students is 28.9 (26.1-31.8). The percentage for Form 3 students is 28.8 (23.7-34.5). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 1 students and for Form 2 students and for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Among students who were seriously injured during the past 12 months, a broken bone or dislocated joint was the most serious injury among 18.8% (15.9-22.0) of students. The percentage for male students is 22.0 (18.0-26.6). The percentage for female students is 15.1 (11.3-20.0). The percentage for Grade 6 students is 19.8 (15.4-25.1). The percentage for Grade 7 students is 17.5 (13.0-23.2). The percentage for Form 2 students is 16.2 (10.1-25.0). The percentage for Form 3 students is 13.5 (7.5-23.1). For this behavior, the prevalence for male students is higher than for female students. (Based on t-test analysis, $p < 0.05$.).

Among students who were seriously injured during the past 12 months, a motor vehicle accident or being hit by a motor vehicle was the cause of the most serious injury among 7.5% (5.2-10.8) of students. The percentage for male students is 7.1 (5.0-10.1). The percentage for female students is 7.1 (4.5-11.2). The percentage for Grade 6 students is 10.6 (5.7-18.7). The percentage for Grade 7 students is 9.8 (5.7-16.1). The percentage for Form 2 students is 4.4 (2.2-8.7). The percentage for Form 3 students is 1.6 (0.4-6.0). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 3 grade students. The prevalence for Grade 7 students is significantly higher than for Form 2 students and for Form 3 students. (Based on t-test analysis, $p < 0.05$.).

Overall, 26.8% (23.7-30.2) of students were bullied on one or more days during the past 30 days.

The percentage for male students is 25.3 (22.1-28.8). The percentage for female students is 27.2 (23.2-31.7). The percentage for Grade 6 students is 30.8 (24.5-38.0). The percentage for Grade 7 students is 25.6 (21.3-30.6). The percentage for Form 1 students is 24.7 (19.8-30.3). The percentage for Form 2 students is 24.1 (20.4-28.3). The percentage for Form 3 students is 24.6 (19.1-31.2).

The percentage of students who were bullied and could not sleep at night (among students who most of the time or always had been so worried about something that they could not sleep at night during 12 months before the survey, on one or more days during the 30 days before the survey), was 56.2. The percentage for male students is 48.3.

Among students who were bullied during the past 30 days, being hit, kicked, pushed, shoved around, or locked indoors was the most common form of bullying among 25.4% (20.4-31.3) of students. The percentage for male students is 27.2 (20.8-34.8). The percentage for female students is 22.7 (17.0-29.6). The percentage for Grade 6 students is 30.6 (21.7-41.3). The percentage for Grade 7 students is 28.9 (22.1-36.8). The percentage for Form 2 students is 20.3 (13.5-29.4). The percentage for Form 3 students is 13.9 (6.9-26.1). For this behavior, the prevalence for Grade 6 students is significantly higher than for Form 3 students. The prevalence for Grade 7 students is significantly higher than for Form 3 students (Based on t-test analysis, $p < 0.05$.).

# Part 3: Conclusions and Recommendations

## 1. The most important Tanzania GSHS results

The 2015 Tanzania Mainland GSHS national date reveal that violence in the form of a physical attack or a physical fight is common. These often result in serious injuries including a broken bone or dislocated joint. Bullying by being hit, kicked, pushed, shoved around, or locked indoors is common. Mental health of some students is not stable in terms of loneliness/depression and suicidal behaviour. Some students lack close friends, feel lonely, are worried until they lack sleep at night, are sad or hopeless, or consider/plan to attempt suicide. Protective factors to students are not adequate; some students miss school or classes without permission, some students are not kind and helpful to others, and some parents or guardians do not check student's homework, problems, worries or how they spend free time. Sexual behaviours contributing to HIV infection, other STIs and unintended pregnancy are common. Sexual intercourse is common; some students start sexual intercourse before 13 years, and some have multiple partners. Many do not use condoms. However, awareness of HIV or AIDS among students is high. Use of alcohol drugs among students exist; and some start drinking before 14 years and some have parents who drink. Some students experienced a hang-over, felt sick, got into trouble, missed school, or got into fights as a result of drinking alcohol. Some had at times became really drunk. Some were driven by drunken drivers. Some students often encountered alcohol advertisements. Use of drugs in terms of marijuana, amphetamines and meta-amphetamines among students exist; and some start drugs before 14 years. Use of cigarettes and other form of tobacco also existed, and some started before 14 years. Some students have parents or guardians or friends who use tobacco. For many students people smoke in their presence. Dietary practices of students are moderate; slightly over half usually eat breakfast at home, However, some students go hungry most of the time due to lack of food at home. Fruits and vegetables seem to be part of daily diet to less than half of students. Drinking carbonated soft drinks and eating at fast food resteurants is a common habit. Hygiene practices are generally poor among students; although most students do clean teeth daily, some students do not always wash hands before meals or after attending toilet, and some do not always wash hands with soap. For many students there is no source of clean drinking water at school. Comparing boys and girls; boys more often than girls practice sexual behaviours contributing to HIV infection and other STIs, and report low protective factors; while girls more often than boys use fruits and vegatables but drink carbonated drinks and eat at fast food resteurants. Comparing primary school students (grade 6-7) and secondary school students (form 1-3); grade 6-7 students more often than form 1-3 students experience violence and bullying, mental health problems, miss protective factors, use alcohol and drugs, go hungry most of the time due to lack of food at home, drink carbonated soft drinks, and do not wash their hands before meals, after toilet or with soap. On the other hand form 1-3 students more often grade 6-7 students; have awareness on HIV and AIDS, brush their teeth daily, but often encounter alcohol advertisemtns and people smoke in their presence.

## 2. How do the Tanzania (M) 2015 GSHS results compare with results in Tanzania or other countries among young people

Based on the current availability of the WHO/CDC (2017) Multiple Fact Sheets on the Global School-based Student Health Survey conducted in 98 countries globally including Tanzania between 2002 and 2016, these current Tanzania 2015 GSHS National results are hereby firstly compared with the previous Tanzania 2006 GSHS Dar es Salaam/Sub-national Fact Sheet /2008 GSHS Country Report, and secondly with other recent WHO/CDC National Fact Sheets dating from 2010 to 2016 for GSHS conducted in 69 countries in the WHO Regions of Africa, America, South-East Asia, Eastern Medditeranean and Western Pacific. However, there is no recent GSHS Fact Sheet on the European Region. For most topics comparison is also made to the recent United States National Youth Risk Behavior Survey (YRBS) (CDC 2015). The GSHS standard themes/topics addressed and cross-nationally compared here are:- alcohol use; diet; drug use; hygiene; mental health; physical activity; protective factors; sexual behaviours; tobacco use; violence and unintentional injury. For sexual behavior comparison is also made to the 2015 Tanzania UNICEF Report. For alcohol comparioson is also made to the 2009/2010 WHO Collaborative Cross national study on Health Behaviour in school-aged Children (HBsc) in Europe. For hygiene comparison is also made to an Asian study.

**In summary**; Compared to the previous (2006) Tanzania Sub-national (Dar es Salaam) GSHS results[xxxxiii], the present (2015) Tanzania national GSHS results generally reveal higher prevalences of tobacco use, mental health problems, poorer diet and personal hygiene; but lower prevalences of alcohol use, drug use, violence and unintentional injury; and better physical activity; with no clear differences in sexual behaviours and protective factors among the students. Compared to other countries in the WHO Region of Africa (GSHS conducted between 2010-2016 in 10 other countries – Algeria, Benin, Ghana, Mauritania, Mauritius, Mauritania Rodrique, Mozambique, Namibia, Sychelles, Swaziland)[xxxxiv], the Tanzania 2015 GSHS generally show lower prevalences of alcohol use, drug use, tobacco use, mental health problems; with similar/mixed results in various aspects of hygiene, diet, physical activity, sexual behaviours, violence and unintentional injury, and protective factors. Compared to countries in the WHO Region of the Americas (GSHS conducted between 2010-2016 in 16 countries – Bahamas, Trinidad, St Knitt, Uruguay, Barbados, Belize, Chile, Curacao, El Salvado, Guatemala, Guyana, Honduras, Jamaica, Peru, Argentina, Bolivia [xxxxiv], the Tanzania 2015 GSHS generally indicate higher prevalences of starting sex and alcohol use before age of 14 years and poorer hygiene; but lower prevalences of alcohol, tobacco, drugs and carbonated soft drinks use, mental health problems, having sex and condom use; better/similar results on some aspects of physical activity, violence and unintentional injury, and protective factors. Similarly, compared to the 2015 US YRBS[xxxxv, xxxxvii-xxxxviii, xxxxx-xxxxxi, xxxxxiii-xxxxxiv], the present Tanzania 2015 GSHS showed lower prevalences of drinking, drug use, carbonated soft drinks, suicidal tendencies, sexual activity and condom use, protective factors; but higher prevalences of tobacco use, some aspects of physical activity, starting sex before 14 years, violence and injury. Compared to the 2009/2010 HBSC [xxxxvi], the present Tanzania 2015 GSHS show higher prevalence of starting to drink before 14 years, but less prevalence of current drinkers. Compared to countries in the WHO South-East Asia Region (GSHS conducted between 2010-2016 in 6 countries – Bangladesh, Maldives, Indonesia, Nepal, Thailand and Timor-Leste)[xxxxiv], the Tanzania 2015 GSHS generally show higher prevalences of starting sex and alcohol use before

age of 14 years and poorer hygiene and diet; but lower prevalences of alcohol, tobacco, drugs, mental health problems, having sex and condom use, violence and unintentional injury, and better/similar results on physical activity and protective factors. Compared to countries in the WHO Eastern Mediterranean Region (GSHS conducted between 2010-2016 in 14 countries – Afghanistan, Bahrain, Egypt, Iraq, Kuwait, Lebanon, Morocco, Gaza Strip, Oman, Qartar, Sudan, Syria, United Arab Emirates and Yemen)[xxxxiv], the Tanzania 2015 GSHS generally demonstrate similar prevalence of carbonated soft drinks intake, poorer toothbrushing but better handwashing, higher prevalence of physical activity and lower prevalence of sedentary life, lower prevalences of suicidal ideation and attempts but more often having close friends, and lower prevalences of violence and unintentional injury, and protective factors (Note that for those countries no data on sexual behaviours and too scanty data on alcohol and drug use is available for comparison). Compared to countries in the WHO Western Pacific Region (GSHS conducted between 2010-2016 in 20 countries – Brunei Darussalaam, Cambodia, Cook Islands, Fiji Islands, French Polynesia, Kiribati, Caos, Malaysia, Mongolia, Nauru, Niue, Phillipines, Solomon Islands, Samoa, Tokelau, Tonga, Tuvalu, Vanuatu, Vietnam, and Wallis & Futuna) [xxxxiv], the Tanzania 2015 GSHS generally potray higher prevalences of starting sex and alcohol use before age of 14 years and poorer hygiene; but lower prevalences of alcohol, tobacco, drugs and mental health problems, having sex and condom use, violence and unintentional injury; higher prevalences on physical activity and protective factors; and similar prevalence of carbonated soft drinks users.

**For detailed comparison;** the results of each of the above mentioned GSHS themes/topics are compared between the present Tanzania 2015 GSHS with the previous Tanzania/Dar es Salaam 2006 GSHS and with the other recent (2010 to 2016) GSHS results from the 69 countries within the five WHO Regions globally named above. The key differences and similarities are described below:-

**Alcohol use** among youths in the Tanzania 2015 GSHS seems slightly lower than in previous studies here. Worldwide, alcohol use among youths is common, and causes many deaths, intoxication and addiction, oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, motor vehicle accidents, and cardiovascular diseases. The 2006 Tanzania (Dar es Salaam) GSHS country report[xxxxiii], showed higher percentages of students who currently drank (5.8%) and students who drank so much alcohol (5.5%), compared to present 2015 Tanzania (National) figures of 3.8% and 2.2%. The WHO/CDC GSHS Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in 11 countries of the WHO Africa Region (including the present Tanzania 2015 GSHS)[xxxxiv], showed low to moderate prevalences of current drinkers ranging from 3.8% (Tanzania 2015) to 50.2% (Seychelles 2016) and heavy drinkes ranging from 2.2% (Tanzania 2015) to 45.8% (Seychelles 2016) but among the drinkers high prevalence of students who started before age of 14 years were alarming ranging from 61.6 (Namibia 2013) to 89.2% (Tanzania 2015). The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in 16 countries in the WHO Region of America[xxxxiv], show higher prevalences of current drinkers (15.1-52.5%, average 32.4%) and students who had ever been drunk (9.4-35.3%, average 19.8%) but lower prevalence of those who started drinking before age of 14 years (56.0-88.7%, average 77.0%) among US students; compared to Tanzania corresponding figures of 3.8%, 2.2% and 89.2%. Likewise, the 2015 US YRBS (CDC 2015)[xxxxv,] showed alcohol use had decreased between 1995-2015, but between 2013 and 2015 in

the US only heavy drinkers decreased; the alcohol users before age 14 were 2 times higher, current alcohol users were 6 times higher, and heavy drinkers were 1.5 times higher, compared to Tanzania present results. The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in 6 countries in the WHO Region of South East Asia[xxxxiv,] show higher prevalences of current drinkers (1.6-23.0%, average 10.0%) and those who had ever been drunk (1.3-24.9%, average 9.1%) but lower prevalence of those who started drinking before age of 14 years (54.3-74.7%, average 64.4%) among Asia students; compared to Tanzania corresponding figures of 3.8%, 2.2% and 89.2%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in 20 countries in the WHO Western Pacific Region[xxxxiv], potray higher percentages of students who currently drank (4.5-51.4%, average 22.1%) and those who drank so much (3.8-40.9%, average 19.4%) but lower percentage of students who drank before age 14 years among those who ever had a drink (27.3-86.9%, average 60.3%) among Pacific students compared to Tanzania corresponding figures of 3.8%, 2.2% and 89.2%. The 2009/2010 WHO Collaborative Cross national study on Health Behaviour in school-aged Children in 4 European countries (Australia, Wales, Norway and Portugal)[xxxxvi], showed 2-5 times more prevalent current drinkers but only 1% of drinkers started before 14 years of age among European school-age children; compared to Tanzania corresponding figures of 3.8% and 89.2%.

**Drug use** among youths in the Tanzania 2015 GSHS seems slightly less than previously reports here. Findings among US (Michigan) high school seniors during 2001-2011 underscore that marijuana use is associated with key indicators of dangerous driving. The 2006 Tanzania (Dar es Salaam) GSHS report[xxxxiii], showed higher percentages of students who had ever used marijuana (5.5%) compared to present 2015 Tanzania (National) figure of 2.1%. The WHO/CDC GSHS Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO Africa Region [xxxxiv,] showed low percentages of students who used marijuana/amphatamines, ranging from 1.2% in Tanzania (2015) to 13.3% in Seychelles (2015); high percentage of drug users who first used before age 14 years ranging from 52.8% in Swaziland (2013) to 92.4% in Tanzania (2015). The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 16 countries in the WHO Region of America [xxxxiv], show higher prevalence of marijuana users (2.5-18.8%, average 9.3%) but lower prevalence of those who started drug use before age of 14 years (35.5-83.8%, average 69.0%) among US students compared to Tanzania corresponding figures of 2.1% and 92.4%. Likewise, the US 2015 YRBS (CDC 2015)[xxxxvii], revealed adolescents drug use is high including drug use before age 14 and ever users of amphetamine; and in particular; percentage of ever and current users of marijuana among US adolescents was 10 times higher than found in present Tanzania GSHS. The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of South East Asia [xxxxiv], show higher prevalence of marijuana users (1.4-7.0%, average 3.9%) but lower prevalence of those who started drug use before age of 14 years (69.1-84.6%, average 77.8%) among Asia students compared to Tanzania corresponding figures of 2.1% and 92.4%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in the WHO Western Pacific Region [xxxxiv], potray higher percentages of students who currently drank (0.3-33.5%, 7.5%) but lower percentage of students who first used before age 14 years among those who

ever used drugs (37.4-77.5%, average 65.2%) among Pacific students compared to Tanzania corresponding figures of 2.1% and 92.4%.

**Dietary behaviours** among students in the Tanzania 2015 GSHS seemed poorer than in previous studies here; some lacked breakfast but majority did not usually take fruits and vegetables which has several health benefits including low risk of some types of cancers. In modern societies during adolescence overweight is a major problem, and is associated with high blood pressure, diabetes, psychological and social consequences. The 2006 Tanzania (Dar es Salaam) GSHS report[xxxxiii], lack comparable dietary figures to present 2015 Tanzania (National) figures. The WHO/CDC Fact Sheets on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO African Region[xxxxiv], show moderate to high percentage of students who usually drink carbonated soft drinks ranging from 29.5% (Mauritius Rotrigues 2011) to 76.8% (Algeria 2011); with moderate prevalence of 45.6% in Tanzania (2015). The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO Region of America [xxxxiv], show higher prevalence of drinking carbonated soft drinks (53.6-74.6, average 67.0%) among US students than the Tanzania corresponding figure of 45.6%. Although the 2015 YRBS (CDC 2015) indicates that among U.S. high school students prevalence of unhealthy dietary behaviors like not eating fruit or vegetables is 3 times lower[xxxxviii], but drinking soda or pop and not eating breakfast is 1.5 times higher compared to Tanzania (2015). On the reverse, the WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO Region of South East Asia [xxxxiv], show lower prevalence of drinking carbonated soft drinks (27.3-55.4%, average 39.8%) among Asia students than the Tanzania corresponding figure of 45.6%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region[xxxxiv], show a similar percentage students who took carbonated soft drinks (30.8-62.2%, average 46.1%) among Eastern Meditarranean students to the Tanzania corresponding figure of 45.6%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in 20 countries in the WHO Western Pacific Region[xxxxiv], potray show almost same prevalence of drinking carbonated soft drinks (22.3-77.3%, average 46.9%) among Pacific students as the Tanzania corresponding figure of 45.6%.

**Hygiene practices** of youths in the Tanzania 2015 GSHS were almost as in previous studies here is most aspects including toothbrushing, hand washing and sources of clean drinking water. This has remained common here and worldwide especially in Africa where many children lack access to clean and fluoridated water; thus get dental caries, diarrhoea diseases and worms. These impair their nutrition, cause abdominal pain and malfunction, and spoil their learning by reducing school attendance and cognitive development. The 2006 Tanzania (Dar es Salaam) GSHS[xxxxiii], showed lower percentages of students who usually cleaned or brushed their teeth less than one time per day (5.4%) or did not wash hands before eating (5.3%) or after attending toilet (11.3%), compared to present 2015 Tanzania (National) figures of 15.8%, 8.1% and 19.1%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO African Region[xxxxiv], reveal low to substantial proportions of students who clean/brush teeth less than once daily (4.6% in Swaziland 2013 – 20.4% in Algeria 2011) with 15.8% in

Tanzania (2015). The same GSHS surveys show not washing hands before eating or after attending toilet was lowest (3.2%) in Algeria (2011) but highest (19.1%) in Tanzania (2015). The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO Region of America[xxxxiv], show lower prevalences of both toothbrushing less than once daily (2.1-7.7%, average 4.4%) and never/rarely not washing hands before taking food or attending latrine/toilet (1.7-6.9%, average 4.4%) among US students compared to Tanzania corresponding figures of 15.8% and 8.1-19.1%. The WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 6 countries in the WHO Region of South East Asia [xxxxiv], give mixed results, higher prevalence of toothbrushing less than once daily (5.1-24.6%, average 24.6%) but lower prevalence of never/rarely washing hands before taking food or attending latrine/toilet (2.0-22.2%, average 7.5%) among Asia students compared to Tanzania corresponding figures of 15.8% and 8.1-19.1%. Another recent questionnaire among 13 to 15 year-old students in 4 Southeast Asian countries (India, Indonesia, Myanmar and Thailand) found much poorer personal hygiene in terms of students who did not brush teeth daily (22.4%), and students who did not always wash their hands before meals (45.2%) or after toileting (26.5%) or with soap (59.8%)[xxxxix]. Their figures were 7 times worse for not washing hands before meals and 3 times worse for not washing with soap, compared to Tanzania 2015 GSHS figures. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region [xxxxiv], show higher percentage of students who toothbrushed less than once daily (9.8-64.2%, average 24.5%) but lower percentage of students who never washed hands before eating or after attending toilet (2.4-14.1%, average 7.3%) among Mediteranean students compared to the Tanzania corresponding figures of 15.8% and 8.1-19.1%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students in the WHO Western Pacific Region [xxxxiv], potray show lower percentages of students who usually cleaned or brushed their teeth less than one time per day (2.2-23.9%, average 9.3%) and students who never or rarely washed hands before meals or using latrine or toilet (2.1-17.6%, average 7.0%), among Pacific students compared to the Tanzania corresponding figures of 15.8% and 8.1-19.1%.

**Mental health problems** among adolescents in the Tanzania 2015 GSHS were commoner than reported earlier here. World-wide, many children and adolescents suffer from mental illnesses, usually from 14 years of age, and these youths are at high risk to abuse and neglect, suicide, alcohol and drug use, school failure, violent and criminal acts, mental illnesses in adulthood, and other health-harmful practices. Suicidal behaviours include ideation (thinking about killing oneself), planning suicide, attempting suicide and suicide itself. Suicidal ideation often emerges in adolescence and is prevalent among this age group, particularly among females. Given that suicide ideation strongly and prospectively relates to suicide attempts and suicide identifying potentially modifiable risk factors is essential for preventing these deaths. The 2006 Tanzania (Dar es Salaam) GSHS report[xxxxiii], showed slightly lower percentages of students who ever seriously considered attempting suicide 10.5% and almost same eercentage of students who had no close friends (9.4%), compared to present 2015 Tanzania (National) figures of 12.1% and 9.1%. The WHO/CDC Fact Sheets on GSHS conducted from 2010 to 2016 among 13-15 and 13-17 year old students in the WHO Region of Africa [xxxxiv], showed an alarming situation; students who seriously considered attempting suicide ranged from 12.1-20.5% and students who actually attempted

suicide ranged from 10.2-25.9%, and both behaviours were least common in Tanzania (2015) and most common in Namibia (2013). WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of America [xxxxiv], show higher prevalences of students who had considered suicide (11.4-23.2%, average 17.2%) and those who had attempted suicide (9.2-22.0%, average 15.2%) but lower prevalence of students who had no close friend (3.3-11.0%, average 7.4%) among US students compared to Tanzania corresponding figures of 12.1%, 10.2% and 9.1%. The 2015 US YRBS (CDC 2015)[xxxxx], show that in the US adolescents' suicide-related behaviors decreased between 1991-2015; but still 1.5 times more youths seriously considered attempting suicide or planned how they would do it, compared to Tanzania (2015). WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of South East Asia[xxxxiv], also show a mixed pattern, lower prevalences of students who had considered suicide (3.9-13.3%, average 9.4%) and students who had no close friend (3.0-8.8%, average 5.9%) but almost same percent of students who had attempted suicide (3.9-13.3%, average 9.4%) among Asia students compared to Tanzania corresponding figures of 12.1%, 9.1% and 10.2%. The WHO/CDC Fact Sheets on GSHS conducted from 2010 to 2016 among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region[xxxxiv], show higher percentage of students who ever seriously considered attempting suicide (15.0-19.2%, average 16.6%), those who actually attempted suicide (10.3-20.5%, average14.4%), but lower percentage of students who had no close friends (3.4-12.7%, average 7.5%) among Mediteranean students compared to the Tanzania corresponding figures of 12.1%, 10.2% and 9.1%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in the WHO Western Pacific Region[xxxxiv], potray higher percentages of students who ever seriously considered attempting suicide (2.8-34.6%, average 17.5%), those who actually attempted suicide (5.1-60.2%, average 17.0%), but lower percentage of students who had no close friends (2.5-16.0%, average 7.5%), among Pacific students compared to the Tanzania corresponding figures of 12.1%, 10.2% and 9.1%.

**Physical activity** among students in the Tanzania 2015 GSHS was found more common and sedentary life less perhaps than recognized earlier here. Low physical activity and sedentary behaviour is a universal behavioural problem acquired in childhood and adolescence usually persist into adulthood, and are associated with many chronic diseases including heart diseases, diabetes and psychological disorders. The 2006 Tanzania (Dar es Salaam) GSHS report [xxxxiii], showed higher percentages of students who were physically active for a total of at least 60 minutes per day (25.4%) and students who spent 3/more hours per typical day doing sitting activities (25.7%), compared to present 2015 Tanzania (National) GSHS figures of 20.3 and 20.0%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO African Region [xxxxiv], showed low to moderate prevalence of students who participated in at least 60 minutes of physical activity, with a range of 13.3% (Mozambique 2015) – 32.7% (Mauritius 2011), with 20.3% in Tanzania (2015). Students who had attended physical education (PE) classes were highest (37.4%) in Tanzania (2015) and lowest (11.8%) in Benin 2016. Students who spent 3/more hours daily doing sitting activities ranged from 19.0% (Ghana 2012) – 54.1% (Seychelles 2015), with 20.0% in Tanzania (2015). WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of America

[xxxxiv], show almost same prevalence of students who were physically active (10.5-29.2%, average 21.8%, lower prevalence of students attended PE classes (2.4-37.6, average 27.4%), but twice as much lived a sedentary life (22.5-64.9%, average 44.3%) among US students compared to Tanzania corresponding figures of 20.3%, 37.4% and 20.0%. The 2015 national US YRBS[xxxxxi], indicates that among U.S. high school students physical activity is more common in some aspects but not in others; prevalence of youths who were physically active was 4 times higher, but those who missed physical education classes or lived sedentary life were slightly higher, compared to Tanzania 2015 results. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 6 countries in the WHO Region of South East Asia [xxxxiv], also show near same prevalences of students who were physically active (9.8-41.4%, average 18.2%), less proportion of students who attended PE classes (10.4-49.4%, average 28.4%) but higher prevalence of those who lived a sedentary life (11.0-58.3%, average 25.8%) among Asia students compared to Tanzania corresponding figures of 20.3%, 37.4% and 20.0%. The WHO/CDC Fact Sheets on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region [xxxxiv], show lower percentage of students who were physically active (9.3-34.6%, average 17.8%) and those who attended physical education (PE) class (14.7-49.4%, average 28.6%) but slightly higher percentage of students who spent 3/more hours per typical day doing sitting activities (19.8-65.0%, average 38.1%) among Eastern Mediteranean students compared to the Tanzania corresponding figures of 20.3%, 37.4% and 20.0%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in the WHO Western Pacific Region [xxxxiv], potray similar percentage of students who were physically active for a total of at least 60 minutes per day (9.8-46.0%, average 21.3%), lower percentage of students who went to physical education (PE) class (4.5-45.5%, average 24.2%) but higher percentage of students who spent 3/more hours per typical day doing sitting activities (11.8-56.3%, average 33.6%) among Pacific students compared to the Tanzania corresponding figures of 20.3%, 37.4% and 20.0%.

**Sexual behaviours contributing to HIV, other STIs and Unintended pregnancies** among students in the Tanzania 2015 GSHS seemed common as unveiled earlier; in particular low age of starting sexual intercourse, multiple sex partners, low use of condoms despite high awareness on HIV/AIDS. Worldwide young people are the most threatened group and account for over half of people newly infected with HIV; and HIV/AIDS reduce life expectancy, reduce social and economic development, overload health care system, and reduce school enrolment and availability of teachers. The 2006 Tanzania (Dar es Salaam) GSHS report[xxxxiii], showed lower percentages of students who ever had sexual intercourse (9.3%), compared to present 2015 Tanzania (National) GSHS figures of 18.5%. A report by UNICEF et al. (2015) on "The Adolescent Experience in Tanzania (2009-2012)" [xxxxxii], also show about 50% of adolescents and young people start sexual activity before 18 years, especially females than males; multiple sexual partnerships increase with age from 7% for ages 15-19 to 22% for ages 20-24, and condom use is low (less than 50%) and lesser among older youths. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 or 13-17 year old students in the WHO African Region [xxxxiv], showed moderate prevalences of students who ever had sexual intercourse, ranging from 20.6% (Swaziland 2013) – 51.3% (Mozambique 2015), with lowest prevalence of 18.5% in Tanzania (2015). Among students who ever had sex, those who started it before age 14 years ranged between 40.8 (Benin 2016) – 74.7% (Tanzania 2015) with Tanzania

leading. Among students who ever had sex, those who used condoms were least (33.6%) in Tanzania and highest (73.7%) in Mozambique 2015. Among students who ever had sex, those with multiple sex partners were less than 10% regardless of country. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 16 countries in the WHO Region of America [xxxxiv], show higher prevalences of students who ever had sex (16.9-36.9, average 26.1%) and among them those who used condom (51.2-84.4%, average 63.4%) but lower prevalence of students who had started sex before age 14 years (32.8-82.0%, average 58.8%) among US students compared to Tanzania corresponding figures of 18.5%, 33.6% and 74.7%. According to the national YRBS (CDC 2015)[xxxxxiii], among US adolescents risky sexual behaviours generally decreased between 1991-2015 in terms of ever had sexual intercourse, had sexual intercourse before age 13 years, had sexual intercourse with four or more persons, were currently active but between 2013-2015 there was no change in use of condom. However, 2 times more US youths ever had sex and/or with multiple partners, although on contrary 10 times more use condoms and 2 times less start sex before 13 years of age, compared to Tanzania present results. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 6 countries in the WHO Region of South East Asia [xxxxiv], different from US, show lower prevalences of students who ever had sex (5.2-23.0%, average 15.2%) and among them those who started sex at 14 years (41.7- 69.0%, average 53.0%) but higher percent used condom (32.5-63.1%, average 52.8%) among Asia students compared to Tanzania corresponding figures of 18.5%, 74.7% and 33.6%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in 20 countries in the WHO Western Pacific Region [xxxxiv], potray higher prevalence of students who ever had sex (5.7-55.6%, average 21.9%), lower percentage of those who started sex at 14 years (16.2-82.3%, average 48.1%) and higher percent used condom (25.5-63.5%, average 47.6%) among Pacific students compared to Tanzania corresponding figures of 18.5%, 74.7% and 33.6%

**Tobacco use** among youths in the Tanzania 2015 GSHS was higher than previously reported here, for whatever reason. Worldwide and especially in other developing countries the number of smokers continue to increase, with majority starting to smoke before reaching adulthood, hence markedly increasing their risk to cancer, heart diseases and other fatal and non-fatal diseases. Tanzania results. The 2006 Tanzania (Dar es Salaam) GSHS report[xxxxiii], showed almost same percentages of students who smoked cigarettes on one or more days during the past 30 days (3.8%) but slightly lower percentage of students who used any tobacco (4.7%) and higher percentage of students who reported people smoked in their presence on one or more days (58.8%); compared to present 2015 Tanzania (National) GSHS figures of 3.6%, 6.0% and 45.7%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted from 2010 to 2016 among 13-15 and 13-17 year old students in the WHO African Region [xxxxiv], showed prevalences of current cigarette smokers ranging from 2.3% (Mozambique 2015) -17.3% (Sychelles 2015) with 2nd lowest prevalence of 3.6% in Tanzania. However, among smokers, students who tried smoking before 14 years of age were alarming, from 76.5% (Mauritius 2011) to 93.2% in Tanzania (2015), and students who reported people smoked in their presence were too many, from 45.7% (Algeria 2011) to 78.7% (Rotrigue Mauritius 2011). WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of America [xxxxiv], show higher prevalences of students who currently smoked cigarettes (5.2-23%,

average 13.7%%) and studentse who reported people smoked in their presence (46.7-73.4%, average 59.2%) among US students compared to Tanzania corresponding figures of 3.6% and 45.7%. The US national YRBS [xxxxxiv], indicate that between 1991-2015 tobacco use has decreased in terms of youths who ever tried cigarette smoking, smoked a cigarette before age 13 years and currently smoked cigarettes, but between 2013-2015 there was no change in prevalence of youths who tried to quit smoking cigarettes. However the US prevalence of current smokers is at least 2 times higher than in present Tanzania GSHS. Likewise, WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students in the WHO Region of South East Asia[xxxxiv], show higher prevalence of both students who currently smoked cigarettes (7.7%) and students who reported people smoked in their presence (35.0-80.0%, average 59.2%) among Asia students compared to Tanzania corresponding figures of 3.6% and 45.7%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region[xxxxiv], show higher percentages of current cigarette smokers (3.7-20.8%, average 10.1%) and students who reported people smoked in their presence (25.5-66.7%, average 50.1%) among Eastern Mediteranean students compared to the Tanzania corresponding figures of 3.6% and 45.7%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in the WHO Western Pacific Region[xxxxiv], potray higher percentages of current cigarette smokers (2.4-55.3%, average 18.5%) and students who reported people smoked in their presence on one or more days (4.6-81.9%, 58.1%) among Pacific students compared to Tanzania corresponding figures of 3.6% and 45.7%.

**Violence and unintentional injury** among students in the Tanzania 2015 GSHS were more prevalent than documented before here. Globally these problems are very common. Victims of violence e.g. bullying have increased stress, reduced ability to concentrate, and are increased risk to substance abuse, aggressive behaviour and suicide that is the third leading cause of death among adolescents. Unintentional injuries are a major cause of death and disability among children under 18 years, and many such injuries lead to permanent disability and brain damage, depression, substance abuse, suicidal attempts, and adoption of various health risk behaviours. The 2006 Tanzania (Dar es Salaam) GSHS report [xxxxiii], showed higher percent of of students who were in a physical fight one or more times during the past 12 months (39.9%), students who were seriously injured one or more times during the past 12 months (39.9%) and students who were bullied on one or more days during the past 30 days (27.8%); compared to present 2015 Tanzania (National) GSHS figures of 27.9%, 37.0% and 26.0%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO African Region[xxxxiv], showed disturbing levels of violence and unintentional injury among students. Prevalence of students who were in a physical fight ranged from 18.9% (Swaziland 2013) to 57.8% (Mauritania 2010), with Tanzania (2015) midway (27.9%). Students who were seriously injured were 32.0% (Algeria 2011) to 72.6 (Ghana Junior High 2012), with Tanzania midway (37.0%). Students who were bullied were lowest in Tanzania (26.0%) and highest (61.6%) in Ghana. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of America [xxxxiv], show higher prevalences of students who had been in a physical fight (20.6-50.1, average 33.2%) and those who consequently had serious injury (32.3%-59.6%, average 40.8%) but similar prevalence of students who had been bullied at school 13.3-47.4%, average 26.6% among US students compared to Tanzania corresponding figures of 27.0%,

37.0% and 26.0%. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in 6 WHO Region of South East Asia [xxxxiv], show almost same prevalence of students who had been in a physical fight (22.3-39.9%, average 28.1%) but more students who suffered serious injury (29.4-70.5%, average 49.4%) and students who had been bullied at school (20.6-51.0%, average 30.2%) among Asia students compared to Tanzania corresponding figures of 27.0%, 37.0% and 26.0%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region [xxxxiv], show higher percentages of students who were in a physical fight (37.1-50.6%, average 43.2%), those who were seriously injured (29.5-54.8%, average 40.8%) and students who were bullied (19.0-70.0%, average 37.5%) among Eastern Mediteranean students compared to the Tanzania corresponding figures of 27.0%, 37.0% and 26.0%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in 20 countries in the WHO Western Pacific Region [xxxxiv], potray higher percentages of students who were in a physical fight (7.1-71.1%, average 37.6%), those who were seriously injured (16.8-83.2%, average 45.8%) and students who were bullied (11.9-74.0%, average 35.3%) among Pacific students compared to the Tanzania corresponding figures of 27.0%, 37.0% and 26.0%.

**Protective factors** from parents/guardians to youths in the Tanzania 2015 GSHS were more inadequate, than reveals existing records on low upbringing and guidance of children by parents/guardians and communities here. Parental bonding and connection seem eroded everywhere, exposing children to depression, suicidal ideation, alcohol and drug use, sexual risky behaviours, and violence. The 2006 Tanzania (Dar es Salaam) GSHS [xxxxiii], showed higher percent of of students who missed classes or school without permission on one or more of the past 30 days (33.3%); students whose parents or guardians understood their problems and worries most of the time or always (59.6%) and students whose parents or guardians really knew what they were doing with their free time most of the time or always (52.4%); compared to present 2015 Tanzania (National) GSHS figures of 27.4%, 40.0% and 39.9%. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted from 2010 to 2016 among 13-15 and 13-17 year old students in the WHO African Region[xxxxiv], showed unsatisfactory protective factors to students, with Tanzania 2015 figures midway or leading depending on aspect. Students who missed classes without permission from teachers/parents ranged from 14.1% (Swaziland 2013) - 42.2 (Ghana 2012), with Tanzania midway (27.4%); who had parents who understood their problems were 29.9% (Seychelles 2015) - 47.5 (Mozambique 2015), with Tanzania 3rd highest (40.0%); and whose parents knew what they did at free time ranged from 33.8% (Swaziland 2013) - 39.9% (Tanzania 2015). WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living in the WHO Region of America[xxxxiv], show similar prevalences of students who missed classes without permission (13.2-38.3%, average 27.1%) and those whose parents understood their problems (25.8-62.3%, average 40.9%) but higher prevalence of students whose parents knew how they spent their free time after school (33.8-72.0%, average 48.5%) among US students compared to Tanzania corresponding figures of 27.4%, 40.0% and 39.9%. WHO/CDC Fact Sheets on GSHS conducted between 2010 and 2016 among 13-15 and 13-17 year old students living the WHO Region of South East Asia [xxxxiv], show near same prevalences of students who missed classes without permission (120.3-34.7%, average 28.0%) and those whose parents knew how they spent their free time after school (23.5-50.7%, average 41.2%) but lower prevalence of students whose parents understood their

problems (11.4-53.5%, average 34.6%) among Asia students compared to Tanzania corresponding figures of 27.4%, 39.9% and 40.0%. %. The WHO/CDC Fact Sheets (WHO 2017) on GSHS conducted recently (from 2010 to 2016) among 13-15 and 13-17 year old students in the WHO Eastern Mediterranean Region[xxxxiv], show higher percentages of students who missed classes or school without permission (17.5-52.4%, average 35.7%) but lower percentage of students whose parents or guardians understood their problems and worries most of the time or always (23.0-51.0%, average 37.2) and students whose parents or guardians really knew what they were doing with their free time most of the time or always (27.0-54.3, average 43.3%) among Eastern Mediteranean students compared to the Tanzania corresponding figures of 27.4%, 40.0% and 39.9%. The WHO/CDC Fact Sheets on GSHS conducted between 2010-2016 among 13-15 and 13-17 year old students living in the WHO Western Pacific Region[xxxxiv], potray higher percentages of students who missed classes or school without permission (17.9-54.3%, average 35.6%) but lower percentages of students whose parents or guardians understood their problems and worries (15.1-47.2%, average 27.9%) and those whose parents or guardians really knew what they were doing with their free time (20.5-56.0%, average 35.9%) among Pacific compared to the Tanzania corresponding figures of 27.4%, 40.0% and 39.9%.

## 3. Implications of the Tanzania (M) GSHS results on school health and youth health policies and programmes

These results have direct implications for the existing Tanzania (M) National School Health Programme that is being implemented by Health and Education Sectors with Local Governments and other Partners. The findings show there is great need to strengthen anti-violence and injury education in the national curriculum especially of primary schools, in attempt to reduce physical attacks/fights, and bullying among students. There is also need to support physical education and physical activities among students by equiping schools with proper and safe sports facilities to increase ther physical activity and reduce sedentary life. It is also essential to revitalize first aid education and services in schools by health workers training teachers on first aid measures for serious injuries including broken bones and joint dislocations. It is also crucial to promote youth mental health through regular mental health checkups, education and to keep students stable, and creating school health clubs, to reduce depression and suicidal behaviour, increase kindness and helpfulness, and reduce loneliness, worries, sadness, or suicide attempts. Family life education in school should be linked to local communities to encourage parents to protect children by caring on their schooling, problems and social life. Appropriate HIV/AIDS education is needed in school to reduce sexual behaviours contributing to HIV infection, other STIs and unintended pregnancy by reduced pre-mature sex and multiple sex partners, and condom use. It is also crucial for schools to provide health education against alcohol, tobacco and drug use to control use of these substances among students, and enforce the public law that declare all schools as ‘alcohol, tobacco and drug free environments’. Schools should also maintain nutrition education and practice school feeding that encourage balanced diet including eating of fruits and vegetables available locally. The schools should also strengthen education on hygiene and sanitation but need to provide the facilities for hand-washing and construct source of clean drinking water, at school. Schools must also provide worm control education and where possible worm treatment to students in line with the national school

deworming initiative. Comparatively, the primary schools need special and strong efforts to address violence and bullying, mental health problems, low child protection, use of alcohol, use of drugs, short-term hunger, carbonated soft drinks, poor handwashing, HIV and AIDS awareness, and toothbrushing; while secondary schools need to pay special attention to curb alcohol advertisements and public smoking. The proposed school-based interventions provide equal and gender balanced opportunities for students to gain better health behaviours and health protection; and ultimately improved health. To track how the health risk behaviours and protective factors change over time, it will be important to repeat the GSHS in Tanzania Mainland in the future.

## Conclusions

Based on the key findings from the Tanzania 2015 GSHS, it can be generally concluded that among primary and secondary school students nationwide; tobacco use and mental health problems seem more common; dietary and hygiene practices seem poorer; alcohol use, drug use, violence, unintentional injury, and sedentary life seem less common; and no change in risky sexual behaviours and protective factors to adolescents; compared to earlier findings in Dar es Salaam region. Boys more often than girls practice risky sexual behaviours and report low protective factors; while girls more often than boys use fruits and vegatables but drink carbonated drinks and eat at fast food resteurants. Primary school (younger) students more often than secondary school (older) students experience violence and bullying, mental health problems, miss protective factors, use alcohol and drugs, go hungry most of the time due to lack of food at home, drink carbonated soft drinks, and do not wash their hands before meals, after toilet or with soap; while older students more often than younger students have awareness on HIV and AIDS, brush their teeth daily, but often encounter alcohol advertisemtns and people smoke in their presence. Compared to global figures, Tanzanian adolescents have lower alcohol use, drug use, mental health problems and tobacco use; but poorer diet and hygiene; with almost similar physical activity, protective factors, sexual behaviors, violence and unintentional injury. Age and gender variations are generally similar. Therefore, there is a need for strengthening school-based anti-tobacco education, mental health promotion, nutrition education and school feeding; hygiene and sanitation; family life education and HIV/AIDS education. It is also important to maintain school-based anti-violence and anti-injury education; physical education and first aid education; and health education against alcohol and drug use.

## Recommendations

The basic needs of the adolescents including out of school children can be grouped into thematic areas namely information and advice; services; rights, providers' competence; policies and management systems; organization of service delivery points (SDPs), and community and parental support. It is strongly recommended that the Tanzania 2015 GSHS results call for making improvements through the implementation of the recently revised National School Health Policy Guidelines and the current 5-year National School Health Strategic Plan. Adolescents (10-19 years) have been recognized as one of the groups most vulnerable to risky health behaviours, and comprise 23% of the Tanzanian population. Unhealthy behaviors, or risk behaviors, are often established during

childhood and persist into adulthood. However, they are largely preventable. Schools play a critical role in promoting the health and safety of young people and helping them establish lifelong healthy behaviors. Tanzanian primary and secondary schools are attended daily by nearly 10 million students, who could learn about the dangers of unhealthy behaviors and practice skills and develop a healthy lifestyle. Unhealthy behaviors, or risk behaviors, are often established during childhood and persist into adulthood. However, they are largely preventable. Therefore, policies and programs meant to improve their well-being and life opportunities are highly needed. Appropriate school health interventions suggested above are needed without delay in all Tanzanian schools. Primary schools seem to be the home of adolescents' risky health behaviours compared to secondary schools, hence the efforts towards establishing "health-promoting-schools" or comprehensive school health should start in primary schools and without delay. The existing School Health Coordinators (health and education officials) at the national, regional and district levels should be provided appropriate training; and they should cascade the training to teachers and health workers at the community level. Advocacy, social mobilization and adequate resource allocation at all levels; are highly needed for success of the National School Health Programme. The Government Ministries, Agencies and Departments (MDAs) in collaboration with different Stakeholders including the NGOs and the Private Sector, should make efforts to reach all the adolescents including the in and out of school children with youth friendly interventions. The GSHS results should be shared with all Partners dealing with youth health programmes in the country to guide their activities. To track how health risk behaviours and protective factors change over time, it will be very important to repeat the Tanzania GSHS in the future.

# Part 4:

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# Appendices

## Overview

This section include a copy of the GSHS Country questionnaires, and more details about sample selection and weighting procedures. In addition, it includes the number of Schools that were Sampled and all Participated in the 43 Districts of 21 Regions, by School Level and School Ownership, in Tanzania Mainland.

## Appendix 1: Sample Description and Weighing procedures

### Sample Description and Weighting Procedures

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**Sample Description:**

**School Level -** All schools containing Grades 6-7, and Forms 1-3 were included in the sample. Schools were selected systematically with probability proportional to enrollment in Grades 6-7, and Forms 1-3 using a random start. 50 schools were sampled.

**Class Level -** All classes with the majority of students in Grades 6-7, and Forms 1-3 were included in the sampling frame. Systematic equal probability sampling with a random start was used to select classes from each school that participated in the survey.

**Response Rates:**

**Schools -** 100% 50 of the 50 sampled schools participated.

**Students -** 87% 3,797 of the 4,373 sampled students completed questionnaires.
3,793 questionnaires were usable after data editing.

**Overall response rate -**100% * 87% = 87%

**Weighting:**

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used 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 nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools.

f2 = a student-level nonresponse adjustment factor calculated by class.

f3 = a post stratification adjustment factor calculated by grade.

**Use of the Weighted Results:**

The weighted results can be used to make important inferences about the priority health-risk behaviors and protective factors of all students in Grades 6-7, and Forms 1-3.

## Appendix 2: Schools that Participated in the 21 Regions and 43 Districts, in Tanzania Mainland

The following table presents the number of Schools that were Sampled and all Participated in the 43 Districts of 21 Regions, by School Level and School Ownership, in Tanzania Mainland.

***Table 12: Number of Schools that participated in each Region and District by School Level and Ownership, TANZANIA M, 2015.***

| Region | District | Number of Participating Schools per District | School Level and Ownership |
|---|---|---|---|
| | | | |
| 1. Arusha | 1. Karatu DC | 1 | 1. Secondary - Private |
| | 2. Meru DC | 1 | 2. Primary – Public |
| 2. Dodoma | 3. Chemba DC | 2 | 3. Primary – Public |
| | | | 4. Primary – Public |
| | 4. Dodoma MC | 1 | 5. Primary – Public |
| 3. D'Salaam | 5. Ilala MC | 1 | 6. Secondary - Private |
| | 6. Kinondoni MC | 1 | 7. Secondary - Public |
| | 7. Temeke MC | 1 | 8. Secondary - Public |
| 4. Geita | 8. Bukombe DC | 1 | 9. Secondary - Public |
| | 9. Chato DC | 2 | 10. Primary - Public |
| | | | 11. Secondary - Public |
| | 10. Nyanhwale DC | 1 | 12. Primary - Public |
| 5. Iringa | 11. Mufindi DC | 1 | 13. Primary - Public |
| 6. Kagera | 12. Muleba DC | 3 | 14. Primary - Public |
| | | | 15. Primary - Public |
| | | | 16. Secondary - Public |
| 7. Kigoma | 13. Kasulu DC | 1 | 17. Secondary - Public |
| | 14. KigomaUjiji/MC | 1 | 18. Secondary - Public |
| 8. Lindi | 15. Kilwa DC | 1 | 19. Secondary - Public |
| 9. Manyara | 16. Babati | 1 | 20. Primary - Public |
| | 17. Babati DC | 1 | 21. Primary - Public |
| | 18. Hanang DC | 1 | 22. Primary - Public |
| 10. Mara | 19. Rorya DC | 1 | 23. Primary - Public |

| | | | |
|---|---|---|---|
| 11. Mbeya | 20. Kyela DC | 1 | 24. Primary - Public |
| | 21. Mbarali DC | 1 | 25. Secondary - Public |
| | 22. Mbeya DC | 1 | 26. Primary - Public |
| | 23. Mbozi DC | 1 | 27. Primary - Public |
| 12. Morogoro | 24. Kilosa DC | 2 | 28. Secondary - Public |
| | | | 29. Secondary - Private |
| | 25. Mvomero DC | 1 | 30. Secondary - Public |
| 13. Mwanza | 26. Kwimba DC | 1 | 31. Primary - Public |
| 14. Njombe | 27. Ludewa DC | 1 | 32. Secondary - Public |
| | 28. Makete DC | 1 | 33. Primary - Public |
| | 29. Njombe TC | 1 | 34. Primary - Public |
| | 30. Waging'ombe DC | 1 | 35. Primary - Public |
| 15. Pwani | 31. Bagamoyo DC | 1 | 36. Secondary - Public |
| | 32. Kibaha DC | 1 | 37. Primary - Public |
| | 33. Mkuranga DC | 1 | 38. Primary - Public |
| 16. Ruvuma | 34. Tunduru DC | 1 | 39. Primary - Public |
| 17. Shinyanga | 35. Shinyanga MC | 1 | 40. Primary - Public |
| 18. Simiyu | 36. Busega DC | 1 | 41. Primary - Public |
| | 37. Itilima DC | 1 | 42. Secondary - Public |
| | 38. Maswa DC | 1 | 43. Primary - Public |
| 19. Singida | 39. Manyoni DC | 3 | 44. Primary - Public |
| | | | 45. Secondary - Public |
| | | | 46. Secondary - Public |
| 20. Tabora | 40. Igunga DC | 1 | 47. Secondary - Public |
| | 41. Tabora MC | 1 | 48. Secondary - Public |
| 21. Tanga | 42. Korogwe TC | 1 | 49. Primary - Public |
| | 43. Muheza DC | 1 | 50. Secondary - Public |

## Appendix 3: The GSHS Country Questionnaire

***TANZANIA MAINLAND 2015 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 is 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
G. 17 years old
H. 18 years old or older

2. What is your sex?

A. Male
B. Female

3. In what grade or form are you?

A. Grade 6 - Primary School
B. Grade 7 - Primary School
C. Form 1 - Secondary School
D. Form 2 - Secondary School
E. Form 3 - Secondary School
F. Some other grade or form

**The next 5 questions ask about your height and weight, going hungry, and eating breakfast.**

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.

Example

| Height (cm) | | |
|---|---|---|
| ***1*** | ***5*** | ***3*** |
| 0 | 0 | 0 |
| ● | 1 | 1 |
| 2 | 2 | 2 |
| | 3 | ● |
| | 4 | 4 |
| | ● | 5 |
| | 6 | 6 |
| | 7 | 7 |
| | 8 | 8 |
| | 9 | 9 |
| 9 | I do not know | |

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

**Example**

| Weight (kg) | | |
|---|---|---|
| ***0*** | ***5*** | ***2*** |
| ● | 0 | 0 |
| 1 | 1 | 1 |
| 2 | 2 | ● |
| | 3 | 3 |
| | 4 | 4 |
| | ● | 5 |
| | 6 | 6 |
| | 7 | 7 |
| | 8 | 8 |
| | 9 | 9 |
| 9 | I do not know | |

6. During the past 12 months, have you been weighed or measured?

A. Yes
B. No

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

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

8. 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 4 questions ask about what you might eat or drink.**

9. During the past 30 days, how many times per day did you **usually** eat fruit, such as bananas, oranges, pawpaw, mangoes, or pineapples?

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

10. During the past 30 days, how many times per day did you **usually** eat vegetables, such as amaranth, cassava leaves, pumpkin leaves, cabbage, spinach, okra, or carrots?

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

11. During the past 30 days, how many times per day did you **usually** drink carbonated soft drinks, such as Coca-Cola, Pepsi, Fanta, Mirinda, or Azam-Cola? (Do **not** include diet soft drinks.)

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

12. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as a hotel, bar, kiosk, or food vendor?

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 6 questions ask about cleaning your teeth and washing your hands.**

13. 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

14. 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

15. During the past 30 days, how did you **usually** wash your hands before eating?

A. I did not wash my hands before eating during the past 30 days
B. In a dish of water used by others
C. In a dish of water used only by me
D. Under running water
E. Some other way

16. During the past 30 days, how often did you wash your hands before eating **at school**?

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

17. 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

18. 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

**The next question asks about drinking water.**

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

A. Yes
B. No

**The next 2 questions asks about worm infections**

20. During this school year, were you taught in any of your classes how to avoid intestinal worms or schistosomiasis?

A. Yes
B. No
C. Not sure

21. During this school year, were you treated at school for intestinal worms or schistosomiasis?

A. Yes
B. No
C. Not sure

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

22. 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

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

23. During the past 12 months, how many times were you in a physical fight?

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

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

24. 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

25. During the past 12 months, what was the most serious injury that happened to you?

A. I was not seriously injured during the past 12 months
B. I had a broken bone or a dislocated joint
C. I had a cut or stab wound
D. I had a concussion or other head or neck injury, was knocked out, or could not breathe
E. I had a gunshot wound
F. I had a bad burn
G. I was poisoned or took too much of a drug
H. Something else happened to me

26. 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 in past 12 months
B. I was in a motor vehicle accident or hit by car
C. I fell
D. Something fell on me or hit me
E. I was fighting with someone
F. I was attacked, assaulted, or abused
G. I was in a fire or too near a flame or something hot
H. I inhaled or swallowed something bad for me
I. Something else caused my injury

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

27. During the past 30 days, on how many days were you bullied?

A. 0 days
B. 1 or 2 days
C. 3 to 5 days
D. 6 to 9 days
E. 10 to 19 days
F. 20 to 29 days
G. All 30 days

28. During the past 30 days, how were you bullied **most often**?

A. I was not bullied during the past 30 days
B. I was hit, kicked, pushed, shoved around, or locked indoors
C. I was made fun of because of my race, nationality, or color
D. I was made fun of because of my religion
E. I was made fun of with sexual jokes, comments, or gestures
F. I was left out of activities on purpose or completely ignored
G. I was made fun of because of how my body or face looks
H. I was bullied in some other way

**The next question asks about feeling safe or unsafe.**

29. 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

**The next question asks about riding in a car**

**driven by someone else.**

30. During the past 30 days, how often did you ride in a car or other motor vehicle **driven by someone who had been drinking alcohol**?

A. I did not ride in motor vehicle driven by someone else
B. 0 times
C. 1 time
D. 2 or 3 times
E. 4 or 5 times
F. 6 or more times

**The next 6 questions ask about your feelings and friendships.**

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

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

32. 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

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

A. Yes
B. No

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

A. Yes
B. No

35. During the past 12 months, how many times did you actually attempt suicide?

A. 0 times
B. 1 time
C. 2 or 3 times
D. 4 or 5 times
E. 6 or more times

36. How many close friends do you have?

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

**The next 7 questions ask about cigarette and other tobacco use.**

37. 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 or 17 years old
H. 18 years old or older

38. 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

39. During the past 30 days, on how many days did you use any tobacco products other than cigarettes, such as tobacco roll, snuff, or chew tobacco?

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

40. 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

41. 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

42. 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

43. If one of your best friends offered you a cigarette,

would you smoke it?

A. Definitely not
B. Probably not
C. Probably yes
D. Definitely yes

**The next 7 questions ask about drinking alcohol. This includes drinking a glass of wine, a bottle of beer, a small glass of liquor, or a mixed drink. It also includes drinking local brews such as komoni, mbege, kimpumu, mnazi, dengerua, or ulanzi. Drinking alcohol does not include drinking a few sips of wine for religious purposes.**

44. How old were you when you had your first drink of alcohol other than a few sips?

A. I have never had a drink of alcohol other than a few sips
B. 7 years old or younger
C. 8 or 9 years old
D. 10 or 11 years old
E. 12 or 13 years old
F. 14 or 15 years old
G. 16 or 17 years old
H. 18 years old or older

45. 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

46. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink per day?

A. I did not drink alcohol during the past 30 days
B. Less than one drink
C. 1 drink
D. 2 drinks
E. 3 drinks
F. 4 drinks
G. 5 or more drinks

47. During the past 30 days, how did you **usually** get the alcohol you drank? SELECT ONLY ONE RESPONSE.

A. I did not drink alcohol during the past 30 days
B. I bought it in a store, shop, or from a street vendor
C. I gave someone else money to buy it for me
D. I got it from my friends
E. I got it from my family
F. I stole it or got it without permission
G. I got it some other way

48. What type of alcohol do you **usually** drink? SELECT ONLY ONE RESPONSE.

A. I do not drink alcohol
B. Beer, lager, or stout
C. Wine
D. Spirits, such as konyagi, viroba, valuu, whisk, gongo, nipa, or pingu
E. Local brew such as komoni, mbege, kimpumu, mnazi, dengerua, or ulanzi
F. Any type of alcohol I get
G. Some other type

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

49. 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

50. During your life, how many times have you got into trouble with your family or friends, missed school, or got into fights, as a result of drinking alcohol?

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

**The next question asks about how often you see alcohol advertisements on videos, magazines, or the internet or at movie theaters, sports events, or music concerts.**

51. During the past 30 days, how often did you see any alcohol advertisements?

A. Never
B. Rarely
C. Sometimes
D. Almost daily
E. Daily

**The next 5 questions ask about drug use. This includes using marijuana, amphetamines, cocaine, inhalants, and other local drugs such as bangi or mirungi.**

52. How old were you when you first used drugs?

A. I have never used drugs
B. 7 years old or younger
C. 8 or 9 years old
D. 10 or 11 years old
E. 12 or 13 years old
F. 14 or 15 years old
G. 16 or 17 years old
H. 18 years old or older

53. During your life, how many times have you used marijuana (also called bangi)?

A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 or more times

54. During the past 30 days, how many times have you used marijuana (also called bangi)?

A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 or more times

55. During your life, how many times have you used amphetamines or methamphetamines (also called dawa za usingizi/kulevya)?

A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 or more times

56. During the past 30 days, how many times have you taken a prescription drug (such as anti-malarials or antibiotics) without a doctor's prescription?

A. 0 times
B. 1 or 2 times
C. 3 to 9 times
D. 10 to 19 times
E. 20 or more times

**The next 5 questions ask about sexual intercourse.**

57. Have you ever had sexual intercourse?

A. Yes
B. No

58. How old were you when you had sexual intercourse for the first time?

A. I have never had sexual intercourse
B. 11 years old or younger
C. 12 years old
D. 13 years old
E. 14 years old
F. 15 years old
G. 16 or 17 years old
H. 18 year old or older

59. During your life, with how many people have you had sexual intercourse?

A. I have never had sexual intercourse
B. 1 person
C. 2 people
D. 3 people
E. 4 people
F. 5 people
G. 6 or more people

60. The **last time** you had sexual intercourse; did you or your partner use a condom or mpira wa kiume/kike?

A. I have never had sexual intercourse
B. Yes
C. No

61. The **last time** you had sexual intercourse, did you or your partner use any other method of birth control, such as withdrawal, rhythm (safe time), birth control pills, or any other method to prevent pregnancy?

A. I have never had sexual intercourse
B. Yes
C. No
D. I do not know

**The next question asks about HIV infection or AIDS.**

62. Have you ever heard of HIV infection or AIDS?

A. Yes
B. No

**The next 4 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, netball, rope jumping, and swimming.**

63. During the past **7 days**, on how many days were you physically active for a total of at least 60 minutes per day? ADD UP ALL THE TIME YOU SPENT IN ANY KIND OF PHYSICAL ACTIVITY EACH DAY.

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

64. During the past 7 days, on how many days did you walk or ride a bicycle to or from school?

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

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

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

66. During the past 12 months, on how many sports teams did you play?

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

**The next question asks about hours of sleep.**

67. On an average school night, how many hours of sleep do you get?

A. 4 or less hours
B. 5 hours
C. 6 hours
D. 7 hours
E. 8 hours
F. 9 hours
G. 10 or more hours

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

68. 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 playing cards, plaiting hair, or embroidery?

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 8 questions ask about your experiences at school and at home.**

69. 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

70. 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

71. 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

72. 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
D. Most of the time
E. Always

73. 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

74. During the past 30 days, how often did your parents or guardians go through your things without your approval?

A. Never
B. Rarely
C. Sometimes

## GSHS International Coordinators: