

GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY (GSHS) 2008

GHANA REPORT

SENIOR HIGH SCHOOLS



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Executive Summary

Background

In 2001, the World Health Organization (WHO), in collaboration with UNAIDS, UNESCO, and UNICEF, with technical assistance from the US Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS). The GSHS is a part of the WHO STEPwise approach to Surveillance (STEPS). STEPS is a simple, standardized method for collecting, analyzing and disseminating data in WHO member countries (1). The GSHS is a survey conducted in different countries primarily among students aged 13-15 years.

The 2007 Ghana GSHS which was administered to junior high school students was adapted for use with senior high school students. The adapted instrument was called the 2008 Ghana GSHS. The purpose of the 2008 Ghana GSHS is to: 1) help Ghana develop priorities, establish programs, and advocate for resources for school health and youth health programs and policies, 2) to monitor trends in the prevalence of health risk behaviors and factors that influence those behaviors among senior high school students and 3) to allow other WHO member countries, international agencies, and others to make comparisons (same age group) across countries regarding the prevalence of health behaviors and protective factors.

Methodology

Data collection for the 2008 Ghana GSHS was organized and supervised by the country coordinator Dr. Andrew Owusu in close consultation with Mrs. Cynthia Bosumtwi-Sam, former director of the School Health Education Programmes (SHEP) unit. Financial assistance was provided by Middle Tennessee State University (MTSU), World Health Organization (WHO), Ghana Education Service (GES) and Maria Tsakos Foundation. Technical assistance was provided by the US Centers for Disease Control and Prevention (CDC). The 2008 Ghana GSHS employed a two-stage cluster sample designed to produce a representative sample of students in senior high school (SHS) levels 1-3. The country was divided into 3 geographic zones (South, Central and North). There were 25 sampled schools per zone. The 2008 Ghana GSHS was developed over a 3 month period (November 2007 – January 2008) and contained a total of 84 questions. Training of field administrators and data collection occurred between September and October 2008.

Key Results

The school response rate was 97%, and student response rate was 84%. Overall response rate

81%. A total of, 7137 students completed the survey. Of the latter number, 56.2% were male and 43.8% were female. Students between ages 16 - 18 (65.5%) made up the largest portion of the sample, followed by students 19 years old or older (22.7%) and 15 years or younger (11.8%).

Demographic Characteristics

65.4% of students describe their health as very good or excellent. 40.9% of students were boarding students during the last school term. 62.6% of students reported that their father and mother were most responsible for taking care of their needs or being their guardian. 73.7% of students have 4 or more children living in their household when including themselves. Among students who have a mother or female guardian, 15.7% reported that their mother or female guardian did not complete primary school. Among students who have a father or male guardian, 8.6% reported that their father or male guardian did not complete primary school.

Alcohol and Other Drug Use

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 15.3%. For those students who had at least one drink containing alcohol during the past 30 days, 14.6% reported usually drinking two or more drinks per day on the days they drank alcohol during the past 30 days. For those students who had at least one drink containing alcohol during the past 30 days, 28.4% usually got the alcohol they drank by buying it in a store, shop, or from a street vendor. 6.9% of students drank so much alcohol during the past 30 days that they were really drunk one or more times. 11.5% of students drank so much alcohol that they were really drunk one or more times during their life. 15.1% of students had a hang-over, felt sick, got into trouble with their family or friends, missed school, or got into fights, as a result of drinking alcohol one or more times during their life. 2.0% of students report most or all of their friends drink alcohol. 4.3% of students report that their parents both drink alcohol. 57.9% of students thought it would be fairly difficult or very difficult for them to get alcohol, such as beer, akpeteshie (locally brewed gin), palm wine, pito, gin, brandy, or guinness if they wanted. 3.6% of students who used drugs, such as wee (marijuana), cocaine, LSD, or heroine one or more times during their life. Among students who have ever used any drugs, 40.2% used marijuana or hashish most often. 79.9% of students were taught in any of their classes during the school year the dangers of using drugs, such as wee, cocaine, LSD, or heroine.

Tobacco Use

Of students who smoked cigarettes on one or more of the past 30 days, 45.4% tried their first cigarette at age 13 or younger. 1.5% of students smoked cigarettes on one or more days during

the past 30 days. 5.1% of students had used any other form of tobacco, such as tawa, snuff powder, chewing tobacco, paper rolled tobacco, dip, cigars, or pipe on one or more days during the past 30 days. 4.7% of students used any tobacco on one or more of the past 30 days. Among students who smoked cigarettes during the past 12 months, 42.1% tried to stop smoking cigarettes. 28.8% of students reported people smoking in their presence on one or more days during the past 7 days. 6.7% of students have a parent or guardian who uses any form of tobacco.

Dietary Practices:

6.6% of students are overweight. 1.2% of students are obese. 10.2% of students reported being hungry most of the time or always because there was not enough food in their home during the past 30 days. 76.8% of students were taught in any of the classes during the school year the benefits of eating more fruits and vegetables. 65.1% and 78.8% of students usually ate fruits and vegetables respectively one or more times per day during the preceding 30 days. 20.0% of students ate fruits and vegetables five or more times per day during the past 30 days. 57.0% of students reported eating breakfast most of the time or always during the past 30 days.

Hygiene Practices

3.1 % of students brushed their teeth less than 1 time per day in the preceding 30 days. 2.9% of students never or rarely washed their hands before eating during the past 30 days. 3.9% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. 7.9% of students never or rarely used soap when washing their hands during the past 30 days.

Malaria

38.0% of students were told one or more times by a doctor or nurse that they were sick with malaria during the last school term. Among students who were sick with malaria during the last school term, 56.8% missed school or classes one or more days because they were sick with malaria. 20.2% of students regularly took medicine to avoid getting malaria during the last school term. 37.5% of students slept in a mosquito net most of the time or always during the last school term. Among students who slept in a mosquito net, 57.6% slept in a mosquito net treated with insecticide during the last school term. 46.2% of students had mosquito netting on the windows in the room in which they normally slept during the last school term.

Physical Activity

18.7% were physically active on all 7 days during the past 7 days for a total of at least 60 minutes per day. 14.8% of students went to physical education class 4 or more days each week during the school year. 58.1% of students spent any of their free time outside doing non-sport

physical activities after school or on the weekends during the past 30 days. 21.8% of students went outside on 3 or more days during the past 7 days doing non-sport physical activities when they were not in school. 54.6% of students would like to spend more free time outdoors doing non-sport physical activities after school or on weekends. 51.1% of students thought it was important or very important to spend time outside doing non-sport physical activities after school or on weekends. 39.8% of students reported having parents or guardians who thought it was important or very important for them to spend time outside doing non-sport physical activities after school or on weekends. 46.2% of students walked or jogged as their most frequent outdoor non-sports physical activity. 68.1% of students were interested in trying a new outdoor non-sport physical activity.

Mental Health

15.2% of students felt lonely most of the time or always during the past 12 months. 13.3% of students reported most of the time or always feeling so worried about something that they could not sleep at night during the past 12 months. 37.5% of students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. 14.6% of students seriously considered attempting suicide during the past 12 months. 15.4% of students made a plan about how they would attempt suicide during the past 12 months.

Protective Factors

28.4% of students reported missing classes or school without permission in the 30 days prior to the survey. In addition, 55.1% of students reported that their parents or guardians most of the time or always understood their problems and worries in the preceding 12 months. 12.8% of students had no close friends. 13.9% of students reported that most of the students in their school were never or rarely kind and helpful during the past 30 days.

Sexual Behaviour

21.7% of students have had sexual intercourse. 48.2% of students reported their main reason for not having sexual intercourse as wanting to wait until they were married. 10.7% of students reported most or all of their friends have had sexual intercourse. 5.4% reported initiating sexual activity prior to age 13 years. 17.9% reported being currently (past 12 months) sexual active. Of the latter number, 53.0% used a condom during their last sexual intercourse. 13.2% of students have had sexual intercourse with two or more people during their life. 4.9% of students have been pregnant or gotten someone pregnant one or more times. 6.5% of students have been told by a doctor or nurse that they had a sexually transmitted infection such as HIV, AIDS, syphilis, gonorrhoea, Chlamydia, or trichomoniasis.

HIV related knowledge

68.3 % of students correctly indicated that people can protect themselves from HIV infection or AIDS by not having sexual intercourse. 64.0% indicated that people can protect themselves from HIV infection or AIDS by using a condom correctly every time they have sexual intercourse. 82.0% (80.1 -- 83.9) reported being taught in any of their classes during the school year about how HIV infection passes from one person to another. 63.2% reported ever talking to their parents or guardians about HIV infection or AIDS.

Violence and Unintentional Injury

30.8% of students were physically attacked one or more times during the preceding 12 months. 27.1% of students reported being involved in a physical fight one or more times during the preceding 12 months. 46.8% reported being seriously injured one or more times in the preceding 12 months. Of those students who reported being seriously injured one or more times in the preceding 12 months, 32.6% reported that the most serious injury occurred while they were playing or training for a sport, while 25.7% reported that the most serious injury occurred as a result of a fall. Of the those students who reported being seriously injured one or more times in the preceding 12 months, 35.7% reported that the most serious injury occurred as a result of them hurting themselves by accident. Of the those students who reported being seriously injured one or more times in the preceding 12 months, 25.2% reported that their most serious injury was breaking a bone or dislocating a joint.

40.1%, reported being bullied one or more times during the past 30 days. Among students who were bullied, 24.1% were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Recommendations

It is recommended that Ghana continues with GSHS surveillance in senior high schools in order to track trends in health risk behaviours and protective factors among students. In addition, where relevant, GSHS surveillance data should serve as the basis for policy making and revision, health-related curriculum development and revision, intervention design and evaluation.

Introduction

In 2001, WHO, in collaboration with UNAIDS, UNESCO, and UNICEF, and with technical assistance from the US Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS). Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students.

To date, 43 countries have completed a GSHS. This report describes results from the 2nd phase of the Ghana GSHS conducted in Ghana by Ghana Education Service (GES) and Middle Tennessee State University (MTSU) under the auspices of the Ministry of Education during September - October, 2008.

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

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

The 2008 Ghana GSHS was a school-based survey conducted among senior high school students. It measured health behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults in Ghana:

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

School Health in Ghana: Current Focus Areas

The School Health Education Programme (SHEP) Unit under the Ghana Education Service carries out interventions in the underlisted areas primarily in pre-tertiary institutions which include kindergarten, primary and junior high schools, senior high school, technical and vocational schools. The current areas of focus are:

- ❖ School Sanitation & Hygiene Education
- ❖ Disease control:
 - Diarrhoea
 - Deworming: Intestinal, Guinea worm, Bilharzias and others
 - STIs, HIV & AIDS
 - Malaria
- ❖ Food & Nutrition
- ❖ Substance & Drug abuse
- ❖ (Road) Safety & Security
- ❖ First Aid, Physical Education etc.

Apart from HIV prevention education, there are very few health interventions in senior high schools. With the implementation of a GSHS surveillance system, the SHEP unit of the Ghana Education Service will be able evaluate and monitor trends in all focal areas among senior high school students. The baseline data should form the foundation for comprehensive health programmes in senior high schools.

The 2008 Ghana GSHS is the second national school health survey to comprehensively assess a range of health behaviours and protective factors among adolescent subgroups. The first was the 2007 Ghana GSHS (junior high school). Another national level survey known as the Ghana Global Youth Tobacco Survey (GYTS) was administered in Ghana in 2000 and 2006. The GYTS is a school based survey designed to assess behaviour, knowledge and attitudes of youth as they relate to tobacco. The 2003 Ghana Demographic and Health Survey (DHS) is another national health survey however, it does not focus on school health and covers age groups from 15 – 59 years. The main aim of the 2003 Ghana Demographic and Health Survey (DHS) is to monitor overall population and health situation in Ghana (2).

Methods

The 2008 Ghana GSHS employed a two-stage cluster sample design to produce a representative

sample of students in senior high school (SHS) levels one, two and three. The first-stage sampling frame consisted of all schools containing any SHS class level. Schools were selected with probability proportional to school enrolment size. For sampling, Ghana was divided into 3 zones representing all 10 geographic regions. The geographic regions within each zone are:

- ❖ **South Zone:** Greater Accra, Central, Volta, Eastern
- ❖ **Central Zone:** Brong Ahafo, Ashanti, Western
- ❖ **North Zone:** Northern, Upper East And Upper West

Twenty five schools were selected from each zone. Therefore a total of 75 schools were selected for the Ghana survey. The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All classrooms in each selected school were included in the sampling frame. All students in the sampled classrooms were eligible to participate in the GSHS.

Weighting

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. This was done to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weighting formula applied was:

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

- ❖ **W1** = the inverse of the probability of selecting the school;
- ❖ **W2** = the inverse of the probability of selecting the classroom within the school;
- ❖ **f1** = a school-level non-response adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrolment instead of number of schools.
- ❖ **f2** = a student-level non-response adjustment factor calculated by class.
- ❖ **f3** = a post stratification adjustment factor calculated by Class Standard.

The 2008 Ghana GSHS had 84 questions and was administered in 73 schools. The response rates are as shown in Table 1.

Table 1: Survey Response Rates, 2008 Ghana GSHS

	School Response Rate %	Student Response Rate %	Overall Response Rate %
Ghana	97	84	81
South Zone	100	79	79
Central Zone	96	82	79
North Zone	96	90	87

The data set 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 for Ghana are representative of all students attending SHS level 1, 2 and 3.

After the selection of schools, the respective head masters and mistress received a formal invitation to participate from Ghana Education Service. They were informed of any possible risk associated with participation and the right of participants to withdraw from the study at any given point. Survey administration occurred from September – October 2008. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. In addition, the survey was approved by the Institutional Review Board at Middle Tennessee State University. Approximately 20 Survey Administrators were specially trained to conduct the GSHS. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet.

Questionnaire

The 2008 Ghana GSHS is a modification of the generic GSHS. It was developed by school health personnel from School Health Education Programme (SHEP) at GES. It contained 84 questions representing 9 of 10 GSHS core modules. The WHO requires participating member countries to use at least 6 of the 10 core modules. The 9 core areas included in the 2008 Ghana GSHS were: 1) respondent demographics, 2) sexual behaviors that contribute to HIV infection, other STIs and unintended pregnancy, hygiene, 3) dietary behaviors, 4) alcohol and other drug use, 5) physical activity, 6) tobacco, 7) protective factors, 8) violence and unintentional injury and, 9) mental health. Twenty-three of the 84 questions were country specific questions on topics of interest for Ghanaian school health authorities. These questions fell under areas of family dynamics, general health, non-sport physical activity, protective factors and malaria.

Pilot Testing

The Ghana 2008 GSHS was pilot tested on approximately 20 SHS students. They completed the questionnaire and provide feedback for the following questions:

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

Procedures

GSHS data collection procedures focused on 3 principles; student privacy, quality of data and minimization of burden on schools.

Student privacy was ensured through the following:

- ❖ protection of privacy at all times during the survey including height and weight check
- ❖ no names on the answer sheets
- ❖ data not collected if anonymity and privacy cannot be assured
- ❖ survey administrators did not look at answer sheets prior to students placing them in collection boxes.

Quality of data was ensured through the following:

- ❖ administering the Ghana GSHS in a consistent manner in each school and carefully completing all documentation forms
- ❖ encouraging students to answer the questions honestly

Minimization of burden on school through the following:

- ❖ minimizing the burden on schools by ensuring as little disruption to regular school activities as possible

Based on these 3 principles, survey administrators met with headmasters and mistresses of each selected school and were introduced to each class prior to survey administration. Class teachers excused themselves prior to the start of the survey administration to enhance privacy. Completed surveys were collected, labeled and packed according to WHO/CDC guidelines. Packaged materials were shipped to CDC for processing.

Results

Demographics

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

Table 2. Demographic characteristics of 2008 Ghana GSHS sample.

Characteristic	N	%
Ghana Sample	7,137	100.0
South zone	2,413	33.8
Central zone	2,258	31.6
North zone	2,466	34.6
Age		
15 years old or younger	529	7.4
16 years old	1154	16.2
17 years old	1512	21.2
18 years old	1914	26.8
19 years old	1154	16.2
20 years old or older	856	12.0
Missing	18	
Gender		
Male	4,017	56.2
Female	3,107	43.8
Missing	13	
Grade Level		
SHS1	1,726	34.9
SHS2	2,794	33.8
SHS3	2,562	31.3
Missing	55	

Table 2 Demographic characteristics of 2008 Ghana GSHS sample.

Questions	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Describe their health as very good or excellent	65.4 (63.2 - 67.6)	64.8 (62.4 - 67.1)	66.1 (63.1 - 69.0)
Boarding students during the last school term	40.9 (36.5 - 45.3)	39.2 (35.2 - 43.2)	43.1 (36.6 - 49.5)
Father and mother were most responsible for taking care of their needs or being their guardian	62.6 (60.6 - 64.5)	62.3 (59.5 - 65.0)	62.9 (60.7 - 65.2)
Have 4 or more children living in their household when including themselves	73.7 (72.2 - 75.1)	75.4 (73.5 - 77.4)	71.5 (69.0 - 74.1)
Mother or female guardian did not complete primary school	15.7 (14.2 - 17.2)	17.9 (16.1 - 19.7)	12.9 (10.9 - 14.8)
Father or male guardian did not complete primary school	8.6 (7.7 - 9.6)	10.7 (9.5 - 11.9)	5.9 (4.6 - 7.2)

*95% confidence interval.

In Ghana, 65.4% of students describe their health as very good or excellent. Male students were equally as likely as female students to describe their health as very good or excellent.

Overall, 40.9% of students were boarding students during the last school term. Male students were equally as likely as female students to be boarding students during the last school term.

Overall, 62.6% of students reported that their father and mother were most responsible for taking care of their needs or being their guardian. Male students were equally as likely as female students to report that their father and mother were most responsible for taking care of their needs or being their guardian.

Overall, 73.7% of students have 4 or more children living in their household when including themselves. Male students were equally as likely as female students to have 4 or more children living in their household when including themselves.

Among students who have a mother or female guardian, 15.7% reported that their mother or female guardian did not complete primary school. Of these students, males (17.9%) were significantly more likely than females (12.9%) to report that their mother or female guardian

did not complete primary school. Among students who have a father or male guardian, 8.6% reported that their father or male guardian did not complete primary school. Male students (10.7%) were significantly more likely than female students (5.9%) to report that their father or male guardian did not complete primary school.

Introduction: Alcohol and Other Drug Use

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

In most countries, alcohol-related mortality is highest among 45- to 54-year-olds, but the relationship between the age of initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important (5).

Intentional and unintentional injuries are far more common among youth and young adults. Unintentional injuries are the leading cause of death among 15- to 25-year-olds and many of these injuries are related to alcohol use (6).

In the upper western region of Ghana, use of distilled alcoholic beverages is on the rise in both men and women. This has been linked to a rise in sexual abuse and rape (39). Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behaviour, than those who do not drink (7, 8). Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively (9).

Table 3. Alcohol use and other drug use among students, by sex, 2008 Ghana GSHS.

Questions	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Drank at least one drink containing alcohol on one or more of the past 30 days	15.3 (13.5 - 17.0)	17.4 (15.4 - 19.4)	12.6 (10.1 - 15.1)
Usually drank two or more drinks per day on the days they drank alcohol during the past 30 days	14.6 (11.3 - 18.0)	16.2 (11.5 - 21.0)	11.8 (8.6 - 15.0)
Thought it would be fairly difficult or very difficult for them to get alcohol, such as beer, akpeteshie, palm wine, pito, gin, brandy, or guinness, if they wanted	57.9 (56.2 - 59.5)	54.4 (52.5 - 56.4)	62.2 (60.0 - 64.4)
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days.	28.4 (25.3 - 31.5)	31.5 (27.3 - 35.7)	23.0 (17.3 - 28.7)
Drank so much alcohol they were really drunk one or more times during their life	11.5 (10.2 - 12.8)	13.7 (12.0 - 15.5)	8.7 (7.0 - 10.4)
Drank so much alcohol they were really drunk one or more times during the past 30 days	6.9 (5.9 - 7.9)	8.1 (6.9 - 9.3)	5.3 (3.7 - 7.0)
Had a hang-over, felt sick, got into trouble, missed school, or got into fights as a result of drinking alcohol one or more times during their life	15.1 (13.5 - 16.6)	15.6 (13.5 - 17.7)	14.4 (13.0 - 15.8)
Most or all of their friends drink alcohol	2.0 (1.6 - 2.4)	2.5 (2.0 - 3.1)	1.3 (0.8 - 1.9)
Parents both drink alcohol	4.3 (3.4 - 5.2)	4.5 (3.5 - 5.5)	4.0 (2.9 - 5.2)
Used drugs, such as wee, cocaine, LSD, or heroine one or more times during their life	3.6 (2.9 - 4.3)	4.7 (3.7 - 5.7)	2.2 (1.4 - 3.1)
Were taught in any of their classes during the school year the dangers of using drugs, such as wee, cocaine, LSD, or heroine	79.9 (77.9 - 82.0)	78.3 (76.1 - 80.6)	82.0 (79.1 - 84.9)
Used marijuana or hashish most often	40.2 (35.3 - 45.1)	45.7 (39.8 - 51.6)	30.2 (22.1 - 38.2)

*95% confidence interval.

Results: Alcohol and Other Drug Use

In Ghana, the prevalence of current alcohol use among students (i.e., drinking at least one drink containing alcohol on one or more of the past 30 days) is 15.3 %. Male students (17.4%) are significantly more likely than female students (12.6%) to report current alcohol use.

Overall, 14.6% of students drank two or more drinks per day on the days they drank alcohol during the past 30 days. Male students were equally as likely as female students to drink one or more drinks per day on the days they drink alcohol.

Overall, 57.9% of students thought it would be fairly difficult or very difficult for them to get alcohol, such as beer, akpeteshie, palm wine, pito, gin, brandy, or guinness if they wanted. Male students (54.4%) were significantly less likely than female students (62.2%) to think it would be fairly difficult or very difficult for them to get alcohol such as beer, akpeteshie, palm wine, pito, gin, brandy, or guinness if they wanted.

Overall, 28.4% of students usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days. Male students are equally likely as female students to usually get the alcohol they drink by buying it from a store, shop, or from a street vendor.

During their life, 11.5% of students drank so much alcohol they were really drunk one or more times. Male students (13.7%) are more likely than female students (8.7%) to drink so much alcohol they were really drunk one or more times.

During the past 30 days, 6.9% of students drank so much alcohol that they were really drunk one or more times. Male students were equally as likely as female students to drink so much alcohol during the past 30 days that they were really drunk one or more times.

Overall, 15.1% of students ever had a hang-over, felt sick, got into trouble, missed school, or got into fights one or more times as a result of drinking alcohol during their life. Male students were equally likely as female students to have a hang-over, feel sick, get into trouble, miss school or get into fights as a result of drinking alcohol.

Overall, 2.0% of students report most or all of their friends drink alcohol. Male students (2.5%) are significantly more likely than female students (1.3%) to report most or all of their friends drink alcohol.

Overall, 4.3% of students report that their parents both drink alcohol. Male students were equally as likely as female students to report that their parents both drink alcohol.

During their life, 3.6% of students used drugs such as weed, cocaine, LSD, or heroine one or more times. Male students (4.7%) were significantly more likely than female students (2.2%) to use drugs such as weed, cocaine, LSD, or heroine one or more times during their life.

Among students who have ever used any drugs, 40.2% used marijuana or hashish most often. Of these students, males (45.7%) were significantly more likely than female students (30.2%) to use marijuana or hashish most often.

Overall, 79.9% of students were taught in any of their classes during the school year the dangers of using drugs such as weed, cocaine, LSD, or heroine. Male students were equally as likely as female students to be taught in any of their classes during the school year the dangers of using drugs such as weed, cocaine, LSD, or heroine.

Introduction: Tobacco Use

About 1.1 billion people worldwide smoke and the number of smokers continues to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020 (33). The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten. Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, strokes, emphysema and many other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. Children are at particular risk from adults' smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle ear disease, and possibly neuro-behavioural impairment and cardiovascular disease in adulthood. Many studies show that parental smoking is associated with higher youth smoking (5).

Table 4. Tobacco use among students, by sex, 2008 Ghana GSHS.

Questions	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Smoked cigarettes on one or more days during the past 30 days	1.5 (1.0 - 1.9)	1.9 (1.3 - 2.5)	0.9 (0.4 - 1.4)
Current smokers (past 30 days) who tried their first cigarette at age 13 or younger	45.4 (35.3 - 55.6)	**	**
Used any other form of tobacco, such as tawa snuff powder, chewing tobacco, paper rolled tobacco, dip, cigars, or pipe on one or more days during the past 30 days	5.1 (4.0 - 6.1)	5.7 (4.6 - 6.9)	4.3 (2.7 - 5.8)
Used any tobacco on one or more of the past 30 days	4.7 (3.9 - 5.6)	5.5 (4.4 - 6.5)	3.8 (2.6 - 5.0)
Current smokers (past 12 months) who tried to stop smoking cigarettes	42.1 (34.3 - 50.0)	49.5 (38.7 - 60.3)	28.0 (20.0 - 36.1)
People smoking in their presence on one or more days during the past 7 days	28.8 (27.0 - 30.7)	31.1 (28.8 - 33.5)	25.9 (23.5 - 28.3)
Parent or guardian who uses any form of tobacco	6.7 (5.8 - 7.5)	8.1 (6.9 - 9.2)	4.8 (3.8 - 5.9)

*95% confidence interval.

** Less than 100 students

Results: Tobacco Use

In Ghana, 1.5% of students smoked cigarettes on one or more days during the past 30 days. Male students were equally as likely as female students to smoke cigarettes on one or more days during the past 30 days.

Of the students who smoked cigarettes on one or more of the past 30 days, 45.4% tried their first cigarette at age 13 or younger.

Overall, 5.1% of students had used any other form of tobacco, such as tawa (snuff powder), chewing tobacco, paper rolled tobacco, dip, cigars, or pipe on one or more days during the past 30 days. Male students were equally as likely as female students to use any other form of tobacco during the past 30 days.

Overall, 4.7% of students used any tobacco on one or more of the past 30 days. Male students were equally as likely as female students to use any form of tobacco on one more days during the past 30 days.

Among students who smoked cigarettes during the past 12 months, 42.1% tried to stop smoking cigarettes. Male students (49.5%) were significantly more likely than female students (28.0%) to try to stop smoking cigarettes.

Overall, 28.8% of students reported people smoking in their presence on one or more days during the past 7 days. Male students (31.1%) were significantly more likely than female students (25.9%) to report people smoking in their presence on one or more days during the past 7 days.

Overall, 6.7% of students have a parent or guardian who uses any form of tobacco. Male students (8.1%) were significantly more likely than female students (4.8%) to have a parent or guardian who uses any form of tobacco.

Introduction: Dietary Behaviours

During adolescence, overweight is associated with hyperlipidemia, raised blood pressure (hypertension), abnormal glucose tolerance, and adverse psychological and social consequences. In Ghana's urban areas, the prevalence of hypertension has risen in most recent years. Hypertension is estimated to afflict 27.3% of the residents in Ghana (40).

Overweight acquired during childhood or adolescence may persist into adulthood and increase risk later in life for coronary heart disease, diabetes, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. Nutritional deficiencies as a result of food insecurity (protein-energy malnutrition, iron, Vitamin A, and iodine deficiency) affect school participation and learning (10).

Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances important for good health. Dietary patterns that include higher intakes of fruits and vegetables are associated with several health benefits, including a decreased risk for some types of cancer (11)

Table 5. BMI and dietary behaviours, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Overweight ¹	6.6 (5.2 - 8.0)	2.4 (1.5 - 3.3)	11.9 (10.4 - 13.4)
Obese ²	1.2 (0.9 - 1.5)	**	2.0 (1.4 - 2.6)
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	10.2 (9.4 - 11.1)	11.3 (9.9 - 12.7)	8.8 (7.5 - 10.2)
Usually ate fruit, such as oranges, pineapple, watermelon, banana, guava, pear, sweet apple, mangoes, or pawpaw one or more times per day during the past 30 days	65.1 (62.2 - 68.0)	61.1 (57.5 - 64.8)	70.2 (67.4 - 73.0)
Usually ate vegetables, such as kontomire, garden eggs, lettuce, cabbage, okra, alefu, bira, ayoyo, or bean leaves one or more times per day during the past 30 days	78.8 (77.2 - 80.3)	76.6 (74.7 - 78.5)	81.4 (79.2 - 83.7)
Ate fruits and vegetables five or more times per day during the past 30 days	20.0 (18.2 - 21.8)	18.0 (16.3 - 19.7)	22.5 (20.1 - 25.0)
Most of the time or always ate breakfast during the past 30 days	57.0 (54.9 - 59.1)	55.9 (53.3 - 58.4)	58.6 (55.1 - 62.1)
Taught in any of their classes during this school year the benefits of eating more fruits and vegetables.	76.8 (74.5 - 79.0)	73.0 (70.7 - 75.4)	81.5 (78.8 - 84.3)

*95% confidence interval.

¹Students who were above +1SD (equivalent to BMI 25 kg/m² at 19 years.). World Health Organization (WHO) Growth reference data for 5-19 years. http://www.who.int/growthref/bmifa_boys_5_19years_z.pdf

² Students who were above +2SD (equivalent to BMI 30 kg/m² at 19 years.). World Health Organization (WHO) Growth reference data for 5-19 years. http://www.who.int/growthref/bmifa_boys_5_19years_z.pdf

** Less than 20 students.

Results: Dietary Behaviours

In Ghana, 6.6% of students are overweight (i.e., above + 1 SD for body mass index by age and sex), and 1.2% of students are obese (i.e., above + 2 SD for body mass index by age and sex). Male students (2.4%) are significantly less likely than female students (11.9%) to be overweight.

Overall, 10.2% of students reported being hungry most of the time or always because there was not enough food in their home during the past 30 days. There was no significant difference between the percentage of male and female students who reported being hungry most of the time or always as a result of scarcity of food in their home during the past 30 days.

Overall, 65.1% of students usually ate fruit, such as oranges, pineapple, watermelon, banana, guava, pear, sweet apple, mangoes, or pawpaw, one or more times per day during the past 30 days. Male students (61.1%) are significantly less likely than female students (70.2%) to eat fruit one or more times per day during the past 30 days.

Overall, 78.8% of students usually ate vegetables, such as kontomire, garden eggs, lettuce, cabbage, okra, alefu, bira, ayoyo, or bean leaves, one or more times per day during the past 30 days. Male students (76.6%) are significantly less likely than female students (81.4%) to eat vegetables one or more times per day during the past 30 days.

In addition, 20.0% of students usually ate fruits and vegetables five or more times per day during the past 30 days. Male students (18.0%) are significantly less likely than female students (22.5%) to eat fruits and vegetables one or more times per day during the past 30 days.

Overall, 57.0% of students reported eating breakfast most of the time during the past 30 days. There was no significant difference between the percentage of male and female students who reported eating breakfast most of the time.

Overall, 76.8% of students were taught in any of the classes during the school year the benefits of eating more fruits and vegetables. Male students (73.0%) were significantly less likely than female students (81.5%) to be taught in any of their classes during the school year the benefits of eating more fruits and vegetables.

Introduction: Hygiene

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin American countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increased sugar consumption and inadequate fluoride exposure (12). In addition to causing pain and discomfort, poor oral health can affect children's ability to communicate and learn. More than 50 million school hours are lost annually because of oral health problems (13). In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental diseases (14).

Diarrhoeal diseases kill nearly 2 million children every year. Hygiene education and the

promotion of hand-washing can reduce the number of diarrhoeal cases by 45% (15). However, less than one in five individuals in Ghana use soap at critical times (39). Worldwide, about 400 million school-aged children are infected with worms. These parasites consume nutrients from children they infect, cause abdominal pain and malfunction, and can impair learning by slowing cognitive development (12).

Table 6. Hygiene-related behaviours, by Gender, 2008 Ghana GSHS.

Questions	Total % (CI)**	Sex	
		Male% (CI)*	Female % (CI)*
Brushed teeth less than 1 time per day during the past 30 days	3.1 (2.5 - 3.7)	3.3 (2.4 - 4.2)	2.9 (2.1 - 3.8)
Never or rarely washed their hands before eating during the past 30 days	2.9 (2.2 - 3.6)	2.9 (2.1 - 3.8)	2.8 (1.9 - 3.6)
Never or rarely washed their hands after using the toilet or latrine during the past 30 days	3.9 (3.4 - 4.4)	4.8 (4.2- 5.4)	2.7 (1.7 - 3.7)
Never or rarely used soap when washing their hands	7.9 (7.1 - 8.7)	10.1 (9.1 – 11.1)	5.1 (3.8 - 6.4)

*95% confidence interval.

Results: Hygiene

In Ghana, the percentage of students who brush their teeth less than 1 time per day during the past 30 days was 3.1%. There was no significant difference between male and female students.

Overall, 2.9% of students never or rarely washed their hands before eating during the past 30 days. There was no significant difference between male and female students who never or rarely wash their hands before eating.

Overall, 3.9% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. There was no significant difference between male and female students who never or rarely wash their hands after using the toilet or latrine.

Overall, 7.9% of students never or rarely used soap when washing their hands during the past 30 days. There was no significant difference between male and female students who never or rarely use soap when washing their hands.

Introduction: Malaria

Approximately half of the world's population is at risk for malaria. In 2006, there were an estimated 247 million cases worldwide resulting in 1 million deaths. The disease burden borne by Africa is disproportionately large (45). African children make up the vast majority of victims who die as a result of infection. In Ghana, 3,411,456 cases of malaria were reported in 2003. The estimated number of cases is much higher; 7.2 million malaria cases in 2006, 3% of the total for the WHO African Region. The financial burden on Ghana due to malaria is estimated at \$760 million in 2008.

Table 7. Malaria prevalence among students, by sex, 2008 Ghana GSHS.

Questions	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Told one or more times by a doctor or nurse that they were sick with malaria during the last school term	38.0 (36.2 - 39.8)	33.6 (31.8 - 35.3)	43.8 (41.1 - 46.4)
Missed school or classes one or more days because they were sick with malaria	56.8 (54.3 - 59.3)	53.8 (51.2 - 56.3)	60.5 (57.1 - 63.9)
Regularly took medicine to avoid getting malaria during the last school term	20.2 (18.8 - 21.6)	19.0 (17.6 - 20.4)	21.8 (19.3 - 24.2)
Slept in a mosquito net most of the time or always during the last school term	37.5 (33.7 - 41.3)	33.6 (30.2 - 36.9)	42.6 (37.1 - 48.1)
Slept in a mosquito net treated with insecticide	57.6 (55.6 - 59.5)	53.9 (51.2 - 56.6)	61.8 (58.4 - 65.2)
Had mosquito netting on the windows in the room in which they normally slept	46.2 (43.5 - 48.8)	42.4 (40.0 - 44.7)	51.1 (47.2 - 55.1)

*95% confidence interval.

Results: Malaria

In Ghana, 38.0% of students were told one or more times by a doctor or nurse that they were sick with malaria during the last school term. Male students (33.6%) were less likely than female students (43.8%) to be told one or more times by a doctor or nurse that they were sick with malaria during the last school term.

Among students who were sick with malaria during the last school term, 56.8% missed school or classes one or more days because they were sick with malaria. Of these students, males

(53.8%) were significantly less likely than females (60.5%) to miss school or classes one or more days because they were sick with malaria.

Overall, 20.2% of students regularly took medicine to avoid getting malaria during the last school term. Male students were equally as likely as female students to regularly take medicine to avoid getting malaria during the last school term.

Overall, 37.5% of students slept in a mosquito net most of the time or always during the last school term. Male students were equally as likely as female students to sleep in a mosquito net most of the time or always during the last school term.

Among students who slept in a mosquito net, 57.6% slept in a mosquito net treated with insecticide during the last school term. Of these students, males (53.9%) were significantly less likely than females (61.8%) to sleep in a mosquito net treated with insecticide during the last school term.

Overall, 46.2% of students had mosquito netting on the windows in the room in which they normally slept during the last school term. Male students (42.4%) were significantly less likely than female students (51.1%) to have mosquito netting on the windows in the room in which they normally slept during the last school term.

Introduction: Physical Activity and Non-Sport Physical Activity

Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes (21).

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood (22). Participating in adequate physical activity also helps build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being (23). Obesity is most prevalent in the Greater Accra Region of Ghana (16.1%), while it appears to be non-existent in the Upper East and Upper West Regions. Further, women (7.4%) are more likely to be obese compared to men (5.5%) (41).

Roughly 60% of the world's population is estimated to get insufficient physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behaviour adopted at a young age is likely to persist (24).

Table 8. Physical activity and non-sport physical activity among students, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Physically active all seven days for a total of at least 60 minutes per day during the past seven days	18.7 (16.9 - 20.5)	21.2 (19.2 - 23.2)	15.6 (13.0 - 18.1)
Went to physical education class 4 or more days each week during the school year	14.8 (13.8 - 15.9)	15.2 (13.8 - 16.7)	14.2 (12.9 - 15.6)
Spent any of their free time outside doing non-sport physical activities after school or on the weekends during the past 30 days	58.1 (56.7 - 59.4)	60.5 (58.7 - 62.3)	55.1 (53.1 - 57.1)
Went outside on 3 or more days during the past 7 days doing non-sport physical activities when they were not in school	21.8 (20.6 - 23.0)	25.6 (24.3 - 26.9)	16.9 (15.2 - 18.5)
Would like to spend more free time outdoors doing non-sport physical activities after school or on weekends	54.6 (52.5 - 56.7)	52.0 (49.4 - 54.5)	57.9 (55.0 - 60.9)
Thought it was important or very important to spend time outside doing non-sport physical activities after school or on weekends	51.1 (49.0 - 53.2)	50.2 (47.6 - 52.8)	52.2 (49.3 - 55.2)
Had parents or guardians who thought it was important or very important for them to spend time outside doing non-sport physical activities after school or on weekends	39.8 (37.8 - 41.8)	39.6 (37.3 - 41.9)	40.0 (37.3 - 42.7)
Walked or jogged as the outdoor non-sports physical activity they did most frequently	46.2 (43.8 - 48.6)	43.5 (41.2 - 45.9)	49.6 (45.8 - 53.3)
Interested in trying a new outdoor non-sport activity	68.1 (66.3 - 69.9)	67.5 (65.0 - 69.9)	69.0 (66.9 - 71.1)

*95% confidence interval.

Results: Physical Activity and Non-Sport Physical Activity

In Ghana, 18.7% were physically active on all 7 days during the past 7 days for a total of at least 60 minutes per day. Male students (21.2%) significantly more likely than female students

(15.6%) to report a total of at least 60 minutes of physical activity per day on all 7 days during the past 7 days.

Overall, 14.8% of students went to physical education class 4 or more days each week during the school year. Male students were equally as likely as female students to attend physical education class 4 or more days each week during the school year.

Overall, 58.1% of students spent any of their free time outside doing non-sport physical activities after school or on the weekends during the past 30 days. Male students (60.5%) were significantly more likely than female students (55.1%) to spend any of their free time outside doing non-sport physical activities after school or on the weekends during the past 30 days.

Overall, 21.8% of students went outside on 3 or more days during the past 7 days doing non-sport physical activities when they were not in school. Male students (25.6%) were significantly more likely than female students (16.9%) to go outside on 3 or more days during the past 7 days doing non-sport physical activities when they were not in school.

Overall, 54.6% of students would like to spend more free time outdoors doing non-sport physical activities after school or on weekends. Male students (52.0%) were significantly less likely than female students (57.9%) to want to spend more free time outdoors doing non-sport physical activities after school or on weekends.

Overall, 51.1% of students thought it was important or very important to spend time outside doing non-sport physical activities after school or on weekends. Male students were equally as likely as female students to think it was important or very important to spend time outside doing non-sport physical activities after school or on weekends.

Overall, 39.8% of students reported having parents or guardians who thought it was important or very important for them to spend time outside doing non-sport physical activities after school or on weekends. Male students were equally as likely as female students to report having parents or guardians who thought it was important or very important for them to spend time outside doing non-sport physical activities after school or on weekends.

Overall, 46.2% of students walked or jogged as their most frequent outdoor non-sports physical activity. Male students were equally as likely as female students to walk or jog as their most frequent outdoor non-sports physical activity.

Overall, 68.1% of students were interested in trying a new outdoor non-sport physical activity. Male students were equally as likely as female students to be interested in trying a new

outdoor non-sport physical activity.

Introduction: Mental Health

Worldwide, approximately 20% of children and adolescents suffer from a disabling mental illness (17). Anxiety disorders, depression and other mood disorders, and behavioural and cognitive disorders are among the most common mental health problems among adolescents. Half of all lifetime cases of mental disorders start by age 14 (18).

Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviours. Each year, about 4 million adolescents world-wide attempt suicide. Suicide is the third leading cause of death among adolescents (19, 20).

Table 8. Mental health issues among students, by sex, 2008 Ghana GSHS.

Questions	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Felt lonely most of the time or always during the past 12 months	15.2 (14.3 - 16.1)	14.5 (13.2 - 15.9)	16.1 (14.6 - 17.6)
Felt so worried about something that they could not sleep at night most of the time or always during the past 12 months	13.3 (12.3 - 14.3)	11.8 (10.4 - 13.3)	15.1 (13.6 - 16.7)
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months	37.5 (35.6 - 39.3)	34.3 (31.9 - 36.7)	41.5 (38.5 - 44.5)
Seriously considered attempting suicide during the past 12 months	14.6 (13.0 - 16.1)	12.5 (10.7 - 14.2)	17.2 (15.1 - 19.3)
Made a plan about how they would attempt suicide during the past 12 months	15.4 (13.7 - 17.1)	13.3 (11.6 - 15.1)	17.9 (15.2 - 20.5)

*95% confidence interval.

Results: Mental Health

In Ghana, 15.2% of students felt lonely most of the time or always during the past 12 months. Male students were equally as likely as female students to feel lonely most of the time or

always during the past 12 months.

Overall, 13.3% of students reported most of the time or always feeling so worried about something that they could not sleep at night during the past 12 months. Male students (11.8%) were significantly less likely than female students (15.1%) to report most of the time or always feeling so worried about something that they could not sleep at night during the past 12 months.

Overall, 37.5% of students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. Male students were equally as likely as female students to feel so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months.

Overall, 14.6% of students seriously considered attempting suicide during the past 12 months. Male students (12.0%) were significantly less likely than female students (17.2%) to seriously consider attempting suicide in the past 12 months.

Overall, 15.4% of students made a plan about how they would attempt suicide during the past 12 months. Male students (13.3%) were significantly less likely than female students (17.9%) to make a plan about how they would attempt suicide during the past 12 months.

Introduction: Protective Factors

For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviours including violence and sexual risk behaviours (25). Adolescents who have a positive relationship with teachers, and who have positive attitudes towards school are less likely to initiate sexual activity early, less likely to use substances, and less likely to experience depression. In addition, adolescents who live in a social environment which provides meaningful relationships, encourages self-expression, and provides structure and boundaries, are less likely to initiate sex at a young age, less likely to experience depression, and less likely to use substances (26).

Being liked and accepted by peers is crucial to young people's psychosocial health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to feelings of loneliness and psychological problems. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events (27).

Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours, and violence (28).

Table 9. Protective factors among students, by sex, 2008 Ghana GSHS

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Missed classes or school without permission on one or more of the past 30 days	28.4 (26.3 - 30.4)	29.9 (27.7 - 32.1)	26.4 (22.8 - 30.0)
Most of the students in their school were never or rarely kind and helpful during the past 30 days	13.9 (12.6 - 15.2)	15.5 (14.0 - 16.9)	12.0 (10.1 - 13.8)
Have no close friends	12.8 (11.8 - 13.7)	10.1 (8.8 - 11.3)	16.1 (14.8 - 17.4)
Parents or guardians most of the time or always understood their problems and worries during the past 12 months	55.1 (53.3 - 56.9)	53.7 (51.4 - 56.0)	56.9 (54.3 - 59.4)

*95% confidence interval.

Results: Protective Factors

In Ghana, 28.4% of students missed classes or school without permission on one or more of the past 30 days. Male students are equally as likely as female students to miss classes or school without permission.

Overall, 13.9% of students reported that most of the students in their school were never or rarely kind and helpful during the past 30 days. Male students (15.5%) were significantly more likely than female students (12.0%) to report that most of the students in their school were never or rarely kind and helpful during the past 30 days.

Overall, 12.8% of students have no close friends. Male students (10.1%) were significantly more likely than female students (16.1%) to have close friends.

Overall, 55.1% of students reported their parents or guardians most of the time or always understood their problems and worries during the past 12 months. Male students are equally as likely as female students to report that their parents or guardians never or rarely understood their problems and worries.

Introduction: Sexual Behaviours that Contribute to HIV Infection, Other STIs, and Unintended Pregnancy

AIDS has killed more than 25 million people since 1981. As of 2005, an estimated 40.3 million people were living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people became infected with HIV (29). The first case of HIV/AIDS reported in Ghana was in March of 1986. In 2008, the estimated prevalence of HIV among adolescents aged 15 to 24 was 0.4% for males and 1.3% for females (42). Worldwide, young people between the ages of 15 and 24 are the most threatened group, accounting for more than half of those newly infected with HIV. At the end of 2003, an estimated 10 million young people aged 15 to 24 were living with HIV. Studies show that adolescents who begin sexual activity early are likely to have sex with more partners and with partners who have been at risk of HIV exposure and they are not likely to use condoms. In many countries, HIV infection and AIDS is reducing average life expectancy, threatening food security and nutrition, dissolving households, overloading the health care system, reducing economic growth and development, and reducing school enrolment and the availability of teachers (30).

STIs are among the most common causes of illness in the world and have far-reaching health consequences. They facilitate the transmission of HIV and, if left untreated, can lead to cervical cancer, pelvic inflammatory diseases, and ectopic pregnancies (31). Worldwide, the highest reported rates of STIs are found among people between 15 and 24 years; up to 60% of the new infections and half of all people living with HIV globally are in this age group (32).

The Ghana Education Service (GES) is implementing a school-based HIV prevention programme known as the HIV Alert School Model in all basic schools throughout the country. The Alert Model builds on existing experiences and good practices on HIV/AIDS education, which have been implemented in schools since 2006. It is designed to:

- ❖ Harmonize school based HIV/AIDS prevention interventions at the basic school level.
- ❖ Address varying gaps in current school HIV/AIDS prevention interventions in the Districts.
- ❖ Mobilize and coordinate the efforts of all partners involved in HIV/AIDS prevention interventions among children.
- ❖ Provide a tool for assessing the state of implementation and depth of school-based HIV/AIDS prevention interventions.

Three Pillars of Teaching

The goal of the Alert Model is to achieve and sustain positive behaviour development and change to reduce the spread of the AIDS virus among teachers, school children, and the school

community. Once a school has implemented the minimum number of interventions it raises its level of HIV/AIDS response to a state of “Alert Status”. This is achieved through HIV/AIDS education delivered on three “pillars”:

Teacher-Led Pillar: Teachers are trained to educate children using the integrated HIV/AIDS curricula developed by the Ministry of Education. In addition to HIV/AIDS education, teachers are also trained to provide basic counselling skills for students.

Child-Led Pillar: Children are trained as peer educators to take the lead in teaching their fellow students and friends about HIV/AIDS prevention, through organized weekly sessions and other less formal activities designed for mass learning.

School Community-Directed Pillar: Teachers and external facilitators provide School Management Committees and Parent Teacher Associations with HIV/AIDS information and services to protect themselves, and to reinforce HIV/AIDS education for their children at home.

The Model seeks to provide children between 10 to 15 years, with information and skills which will help them to:

- ❖ Avoid HIV infection and other STIs
- ❖ Abstain from sexual behaviours
- ❖ Avoid teenage pregnancy and attempted abortion
- ❖ Avoid alcohol and substance abuse

Table 10. Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Ever had sexual intercourse	21.7 (20.0 - 23.5)	25.4 (23.6 - 27.3)	17.0 (14.4 - 19.6)
Initiated sexual intercourse before age 13 years	5.4 (4.8 - 6.0)	7.0 (6.0 - 8.0)	3.4 (2.7 - 4.1)
Had sexual intercourse with two or more people during their life	13.2 (12.0 - 14.3)	17.2 (15.6 - 18.8)	8.0 (6.5 - 9.4)

Table 10 Contd. Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Had sexual intercourse during the past 12 months	17.9 (16.0 - 19.8)	19.2 (17.3 - 21.2)	16.2 (13.6 - 18.9)
Among students who had sexual intercourse during the past 12 months, those who used a condom at last sexual intercourse	53.0 (49.1 - 56.9)	51.8 (46.6 - 57.1)	57.7 (49.0 - 60.5)
Main reason for not having sexual intercourse was wanting to wait until marriage	48.2 (45.8 - 50.5)	41.1 (39.0 - 43.3)	57.2 (54.4 - 60.0)
Most or all of their friends have had sexual intercourse	10.7 (9.4 - 12.0)	12.5 (11.0 - 13.9)	8.4 (6.7 - 10.2)
Been told by a doctor or nurse that they had a sexually transmitted infection, such as HIV, AIDS, syphilis, gonorrhoea, Chlamydia, or trichomoniasis	6.5 (5.4 - 7.5)	7.4 (6.1 - 8.6)	5.3 (4.1 - 6.4)
Been pregnant or gotten someone pregnant one or more times	4.9 (4.0 - 5.8)	4.9 (3.8 - 6.1)	4.9 (3.9 - 6.0)

*95% confidence interval.

Results: Sexual Behaviours that Contribute to HIV Infection, Other STIs, and Unintended Pregnancy

In Ghana, 21.7% of senior high school students have had sexual intercourse during their life. Male students (25.4%) are significantly more likely than female students (17.0%) to report to have had sexual intercourse.

Overall, 5.4% of students initiated sexual intercourse before age 13 years. Male students (7.0%) are significantly more likely than female students (3.4%) to have initiated sexual intercourse before age 13 years.

Overall, 13.2% of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Male students (17.2%) are significantly more likely than female students (8.0%) to have had multiple partners.

Overall, 17.9% of students had sexual intercourse during the past 12 months. Male students are

equally as likely as female students to have had sexual intercourse during the past 12 months.

Among students who had sexual intercourse during the past 12 months, 53.0% used a condom at last sexual intercourse. Male students are equally as likely as female students to have used a condom at last sexual intercourse.

Overall, 48.2 % of students reported their main reason for not having sexual intercourse as wanting to wait until they were married. Male students (41.1%) were significantly less likely than female students (57.2%) to report postponing sexual intercourse until marriage as their main reason for not having sexual intercourse.

Overall, 10.7% of students reported most or all of their friends have had sexual intercourse. Male students (12.5%) were significantly more likely than female students (8.4%) to report that most or all of their friends have had sexual intercourse.

Overall, 6.5% of students have been told by a doctor or nurse that they had a sexually transmitted infection such as HIV, AIDS, syphilis, gonorrhoea, Chlamydia, or trichomoniasis. Male students were equally as likely as female students to have been told by a doctor or nurse that they had a sexually transmitted infection such as HIV, AIDS, syphilis, gonorrhoea, Chlamydia, or trichomoniasis.

Overall, 4.9% of students have been pregnant or gotten someone pregnant one or more times. Male students were equally as likely to have gotten someone pregnant as female students were to have gotten pregnant one or more times.

Table 11. HIV-related knowledge, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse	68.3 (66.8 - 69.9)	69.0 (67.8- 70.2)	67.4 (64.4 - 70.3)
Believe people can protect themselves from HIV infection or AIDS by using a condom correctly every time they have sexual intercourse	64.0 (61.6 - 66.3)	66.1 (63.0- 69.2)	61.3 (58.6 - 63.9)
Taught in any of their classes during this school year how HIV infection or AIDS passes from one person to another	82.0 (80.1 - 83.9)	80.2 (78.3- 82.1)	84.2 (81.7 - 86.7)
Ever talked with their parents or guardians about HIV infection or AIDS	63.2 (60.7 - 65.8)	59.7 (56.6- 62.8)	67.7 (64.5 - 70.9)

**95% confidence interval*

Overall, 68.3% of students believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse. Male students are equally as likely as female students to believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse.

Furthermore 64.0% of students knew that people can protect themselves from HIV or AIDS by using a condom correctly every time they have sexual intercourse. Male students are equally as likely as female students to know that people can protect themselves from HIV or AIDS by using a condom correctly every time they have sexual intercourse.

Overall, 82.0% of students reported being taught in any of their classes during this school year how HIV infection or AIDS passes from one person to another. Male students are equally as likely as female students taught in any of their classes during this school year how HIV infection or AIDS passes from one person to another.

Overall, 63.2% of students ever talked about HIV or AIDS with their parents or guardians. Male students (59.7%) were significantly less likely than female students (67.7%) to report talking about HIV or AIDS with their parents or guardians.

Introduction: Violence and Unintentional Injury

The World Health Organization (2002) estimates that injury constitutes 16% of the global disease burden (44). Unintentional injuries are a major cause of death and disability among young children (35). Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000 (36). For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment (37). Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours. Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour, and suicide attempts (38). Injury significantly contributes to mortality in Ghana (45).

Table 12. Violence and unintentional injury among students, by sex, 2008 Ghana GSHS.

Question	Total % (CI)**	Sex	
		Male % (CI)*	Female % (CI)*
Were physically attacked one or more times during the past 12 months	30.8 (29.2 - 32.3)	32.0 (30.0 - 34.0)	29.1 (26.8 - 31.5)
Were in a physical fight one or more times during the past 12 months	27.1 (25.6 - 28.6)	29.2 (26.9 - 31.5)	24.5 (22.3 - 26.6)
Were seriously injured one or more times during the past 12 months	46.8 (44.7 - 49.0)	49.4 (47.1 - 51.8)	43.4 (40.4 - 46.5)
Among students who were seriously injured during the past 12 months, those whose most serious injury happened to them while they were playing or training for a sport	32.6 (30.2 - 35.0)	41.1 (38.2 - 44.0)	19.9 (17.6 - 22.2)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	25.7 (23.8 - 27.6)	26.5 (24.4 - 28.6)	24.3 (20.5 - 28.1)
Among students who were seriously injured during the past 12 months, those who most serious injury was the result of them hurting themselves by accident	35.7 (32.9 - 38.6)	36.2 (32.2 - 40.2)	35.0 (31.1 - 38.8)
Among students who were seriously injured during the past 12 months, those who had a broken bone or dislocated joint as their most serious injury	25.2 (23.0 - 27.4)	30.1 (27.6 - 32.6)	17.9 (15.5 - 20.3)
Were bullied on one or more days during the past 30 days	40.1 (37.3 - 43.0)	41.2 (37.3 - 45.0)	38.8 (35.8 - 41.9)
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	24.1 (21.4 - 26.7)	29.7 (26.8 - 32.7)	16.5 (13.2 - 19.9)

*95% confidence interval

Results: Violence and Unintentional Injury

In Ghana, 30.8% of senior high school students were physically attacked one or more times during the preceding 12 months. Male students were equally as likely as female students to report being physically attacked one or more times during the preceding 12 months.

Overall, 27.1% of students reported being involved in a physical fight one or more times during the preceding 12 months. Male students (29.2%) were significantly more likely than female

students (24.5%) to report being in a physical fight one or more times during the preceding 12 months.

Overall, 46.8% reported being seriously injured one or more times in the preceding 12 months. Male students (49.4%) were significantly more likely than female students (43.4%) to report being seriously injured one or more times during the preceding 12 months.

Of the those students who reported being seriously injured one or more times in the preceding 12 months, 32.6% reported that the most serious injury occurred while they were playing or training for a sport. Male students (41.1%) were significantly more likely than female students (19.9%) to report playing or training for a sport as the cause of their most serious injury in the past 12 months.

Of the those students who reported being seriously injured one or more times in the preceding 12 months, 25.7% reported that the most serious injury occurred as a result of a fall. Male students were equally as likely as female students to report a fall as the cause of their most serious injury in the past 12 months.

Of the those students who reported being seriously injured one or more times in the preceding 12 months, 35.7% reported that the most serious injury occurred as a result of them hurting themselves by accident. Male students (36.2%) were equally as likely as female students (35.0%) to report hurting themselves by accident as the cause of their most serious injury in the past 12 months.

Of the those students who reported being seriously injured one or more times in the preceding 12 months, 25.2% reported that their most serious injury was breaking a bone or dislocating a joint. Male students (30.1%) were significantly more likely than female students (17.9%) to report breaking a bone or dislocating a joint as their most serious injury in the past 12 months.

A relatively high number, 40.1%, reported being bullied one or more times during the past 30 days. Male students were equally as likely as female students to report being bullied one or more times during the past 30 days.

Among students who were bullied, 24.1% were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (29.7%) were significantly more likely than female students (16.5%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Conclusions and Recommendations

CONCLUSIONS

The 2008 Ghana GSHS is the first comprehensive nationwide surveillance of adolescent health behaviours and protective factors among senior high school students. The results represent baseline data on health behaviours and protective factors deemed important by the Ghana Education Service (GES). The results will also be useful to organizations or entities working in the arena of adolescent health. For the GSHS surveillance system to be of value, it must be repeated every 2-3 years to enable monitoring of trends and to ensure availability of current data for policy making, curriculum development, intervention development, design and evaluation.

RECOMMENDATIONS

Overall recommendations.

- Ghana should continue with GSHS surveillance in senior high schools in order to track trends in health risk behaviours and protective factors.
- Where relevant, GSHS surveillance data should serve as the basis for policy making and revision.
- GSHS data should be considered during development of health related curriculum development and revision as well as intervention design and evaluation.

Recommendations for alcohol and other drug use.

- ❖ Develop and advocate policies that prohibit sale of alcohol to underage youth. Policy should include fines to businesses that sell alcohol to minors. Policies should also include imposing fines on adults that furnish alcoholic beverages to minors.
- ❖ Integration of alcohol and drug use/abuse awareness into the curriculum. Curriculum should focus on the short-term and long-term effects of alcohol and drug use/abuse and possibility of alcohol and drug dependence.
- ❖ Alcoholic beverage advertisement directed at minors should be banned.

Recommendations for dietary behaviours.

- ❖ Encourage the provision of education through the curriculum and co-curricular activities on the benefits of good dietary practices.
- ❖ Heads of boarding schools be encouraged to provide more fruits and vegetables for meals at school.
- ❖ Schools to be encouraged to have school gardens to supplement purchased supplies.

- ❖ Nutrition clubs and quiz competitions to be introduced in schools.
- ❖ Caterers of Ghana School Feeding Programme to sensitised to provide nutritious meals with more fruits and vegetables.

Recommendations for hygiene.

- ❖ Encourage better practices of hygiene by posting posters and stickers about hand washing in rest rooms and in cafeterias/canteens.
- ❖ Provide soap and clean water near toilet/latrine facilities in schools.
- ❖ Intensify public education on benefits of handwashing with soap and other hygienic practices.
- ❖ Provide handwashing facilities in schools
- ❖ School Health clubs to intensify discussions on issues relating to personal hygiene, oral hygiene, menstrual hygiene etc.

Recommendations for physical activity.

- ❖ Ensure that schools provide a physical activity class for students on a frequent and regular basis.
- ❖ Schools should provide places for physical activities in schools
- ❖ Physical Education to be made examinable
- ❖ Physical Education allocation on the school time table should be used for its purpose
- ❖ Encourage students to engage in exercising during leisure time.

Recommendations for protective factors.

- ❖ Encourage open and honest conversations between parents and children.
- ❖ Provide education for parents through the Parent/Teacher Associations on psychological needs of adolescents.
- ❖ Encourage schools to put in place viable counselling services for students.

Recommendations for sexual behaviours that contribute to HIV infections, other STIs, and unintended pregnancy.

- ❖ Continue HIV prevention education in schools.
- ❖ Provide students with comprehensive sex education focusing on sexually transmitted diseases and unintended pregnancies.
- ❖ Peer Education sessions should be encouraged and supervised by trained personnel. Pupils/students should be taught assertive skills.
- ❖ Pupils/students should be encouraged to abstain from sexual behaviours.

Recommendations for violence and unintentional injury.

- ❖ Help schools establish safe and confidential way of reporting bullying to school officials. The penalty for bullying should be of substantial weight to deter students from intimidating fellow classmates.
- ❖ Increase students' awareness of how to avoid being bullied. Establish bully educational curriculum to be integrated into regular classroom and educational activities.
- ❖ Develop and implement an anti-bullying programme in schools.

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Appendix A: 2008 Ghana GSHS Questionnaire

2008 Ghana senior high Global school-based student health survey


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

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

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

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

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

Fill in the circles like this  Not like this  or 

Survey

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

Answer sheet

1.        

Thank you very much for your help.

1. How old are you?
 - A. 11 years old or younger
 - B. 12 years old
 - C. 13 years old
 - D. 14 years old
 - E. 15 years old
 - F. 16 years old or older

2. What is your sex?
 - A. Male
 - B. Female

3. In what grade are you?
 - A. SS 1
 - B. SS 2
 - C. SS 3

4. How do you describe your health in general?
 - A. Excellent
 - B. Very good
 - C. Good
 - D. Fair
 - E. Poor

5. During the **last school term** were you a boarding or day student?
 - A. Boarding student
 - B. Day student

6. Who is **most** responsible for taking care of your needs or being your guardian?
 - A. Both my father and mother
 - B. Only my father
 - C. Only my mother
 - D. My uncle or aunt
 - E. My grandmother or grandfather
 - F. My sister or brother
 - G. Some other person

7. Including you, how many children live in your household? *A household consists of all persons who live and eat together.*
 - A. 1 (If you are the only child)
 - B. 2
 - C. 3
 - D. 4
 - E. 5
 - F. 6
 - G. 7 or more

8. What is the highest level of school completed by your **mother** or **female guardian**?
 - A. I do not have a **mother** or **female guardian**
 - B. **Did not** complete primary school
 - C. Completed primary school
 - D. Completed middle school or JSS
 - E. Completed secondary school or SSS
 - F. Attended polytechnic or university
 - G. I do not know

9. What is the highest level of school completed by your **father** or **male guardian**?
 - A. I do not have a father or **male guardian**
 - B. **Did not** complete primary school
 - C. Completed primary school
 - D. Completed middle school or JSS
 - E. Completed secondary school or SSS
 - F. Attended polytechnic or university
 - G. I do not know

The next 3 questions ask about your height, weight, and going hungry.

10. 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
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	I do not know	

11. 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
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	I do not know	

12. During the past 30 days, how often did you go hungry because there was not enough food in your home?
- Never
 - Rarely
 - Sometimes
 - Most of the time
 - Always

The next 4 questions ask about eating breakfast and eating fruits and vegetables.

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

- Never
- Rarely
- Sometimes
- Most of the time
- Always

14. During the past 30 days, how many times per day did you **usually** eat fruit, such as such as oranges, pineapple, watermelon, banana, guava, pear, sweet apple, mangoes, or pawpaw?

- I did not eat fruit during the past 30 days
- Less than one time per day
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day

15. During the past 30 days, how many times per day did you **usually** eat vegetables, such as kontomire, garden eggs, lettuce, cabbage, okra, alefu, bira, ayoyo, or bean leaves?

- I did not eat vegetables during the past 30 days
- Less than one time per day
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day

16. During this school year, were you taught in any of your classes the benefits of eating more fruits and vegetables?

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

The next 4 questions ask about personal health activities.

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

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

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

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

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

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

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

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

The next 6 questions ask about malaria and mosquito nets.

21. During the **last school term**, how many times were you told by a doctor or nurse that you were sick with malaria?

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

22. During the **last school term**, how many days did you miss school or classes because you were sick with malaria?

- A. I was not sick with malaria during the last school term
- B. 0 days
- C. 1 day
- D. 2 days
- E. 3 days
- F. 4 days
- G. 5 or more days

23. During the **last school term** did you regularly take medicine to **avoid** getting malaria? (Do not answer yes if you took medicine only to treat malaria after you got sick.)

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

24. During the **last school term**, how often did you sleep in a **mosquito net**?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always
- F. I do not know

25. During the **last school term**, was the mosquito net you slept in treated with **insecticide**?

- A. I did not sleep in a mosquito net
- B. Yes
- C. No
- D. I do not know

26. During the **last school term**, did the room in which you normally sleep have **mosquito netting on the windows**?

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

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.

27. 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 or more students of about the same strength or power choose to fight each other.

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

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

The next 5 questions ask about the most serious injury that happened to you during the past 12 months. An injury is serious when it makes you miss at least one full day of usual activities (such as school, sports, or a job) or requires treatment by a doctor or nurse.

29. 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

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

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

31. During the past 12 months, **what was the major cause** of the most serious injury that happened to you?

- A. I was not seriously injured during the past 12 months
- B. I was in a motor vehicle accident or hit by a motor vehicle
- C. I fell
- D. Something fell on me or hit me
- E. I was fighting with someone
- F. I was attacked, assaulted, or abused by someone
- G. I was in a fire or too near a flame or something hot
- H. Something else caused my injury

32. During the past 12 months, **how** did the most serious injury happen to you?
- A. I was not seriously injured during the past 12 months
 - B. I hurt myself by accident
 - C. Someone else hurt me by accident
 - D. I hurt myself on purpose
 - E. Someone else hurt me on purpose

33. During the past 12 months, **what was** the most serious injury that happened to you?
- A. I was not seriously injured during the past 12 months
 - B. I had a broken bone or a dislocated joint
 - C. I had a cut, puncture, or stab wound
 - D. I had a concussion or other head or neck injury, was knocked out, or could not breathe
 - E. I had a gunshot wound
 - F. I had a bad burn
 - G. I lost all or part of a foot, leg, hand, or arm
 - H. Something else happened to me

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

34. 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

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

The next 6 questions ask about your feelings and friendships.

36. During the past 12 months, how often have you felt lonely?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
37. 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

38. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing your usual activities?
- A. Yes
 - B. No
39. During the past 12 months, did you ever **seriously** consider attempting suicide?
- A. Yes
 - B. No

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

- A. Yes
- B. No

41. How many close friends do you have?

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

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

42. How old were you when you first tried a cigarette?

- A. I have never smoked cigarettes
- B. 7 years old or younger
- C. 8 or 9 years old
- D. 10 or 11 years old
- E. 12 or 13 years old
- F. 14 or 15 years old
- G. 16 years old or older

43. 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

44. During the past 30 days, on how many days did you use any other form of tobacco, such as tawa snuff powder, chewing tobacco, paper rolled tobacco, dip, cigars, or pipe?

- 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

45. 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

46. 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

47. Which of your parents or guardians use any form of tobacco?

- A. Neither
- B. My father or male guardian
- C. My mother or female guardian
- D. Both
- E. I do not know

The next 9 questions ask about drinking alcohol. This includes drinking beer, akpeteshie, plam wine, pito, gin, brandy, or guinness. Drinking alcohol does not include drinking a few sips of wine for religious purposes.

48. 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

49. 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
50. During the past 30 days, how did you **usually** get the alcohol you drank? **SELECT ONLY ONE RESPONSE.**
- A. I did not drink alcohol during the past 30 days
 - B. I bought it in a store, shop, or from a street vendor
 - C. I gave someone else money to buy it for me
 - D. I got it from my friends
 - E. I got it from home
 - F. I stole it
 - G. I made it myself
 - H. I got it some other way
51. During your life, how many times have you ever had a hang-over, felt sick, got into trouble with your family or friends, missed school, or got into fights, as a result of drinking alcohol?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 or more times
52. **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
53. During the **past 30 days**, 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
54. How many of your friends drink alcohol?
- A. None
 - B. A few
 - C. Some
 - D. Most
 - E. All
55. Which of your parents or guardians drink alcohol?
- A. Neither
 - B. My father or male guardian
 - C. My mother or female guardian
 - D. Both
 - E. I do not know
56. How difficult do you think it would be for you to get alcohol, such as beer, akpeteshie, plam wine, pito, gin, brandy, or guinness, if you wanted to?
- A. Very difficult
 - B. Fairly difficult
 - C. Fairly easy
 - D. Very easy
 - E. I do not know
- The next 3 questions ask about drugs.**
57. During your life, how many times have you used drugs, such as wee, cocaine, LSD, or heroine?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 or more times

58. Which one of the drugs listed below have you used most often? **SELECT ONLY ONE RESPONSE.**
- A. I have never tried any of these drugs
 - B. Marijuana (also called wee) or hashish
 - C. Tranquilisers or sedatives, such as valium, without a doctor or nurse telling you to do so
 - D. Amphetamines
 - E. Methamphetamine
 - F. Crack or other forms of cocaine
 - G. Solvents or inhalants (also called glue, petrol, or shoe polish)
 - H. Some other drug
59. During this school year, were you taught in any of your classes the dangers of using drugs, such as wee, cocaine, LSD, or heroine?
- A. Yes
 - B. No
 - C. I do not know

The next 9 questions ask about sexual intercourse.

60. Have you ever had sexual intercourse?
- A. Yes
 - B. No
61. What is the **main** reason you have not had sexual intercourse?
- A. I have had sexual intercourse
 - B. I want to wait until I am older
 - C. I want to wait until I am married
 - D. I do not want to risk getting pregnant
 - E. I do not want to risk getting a sexually transmitted infection, such as HIV or AIDS
 - F. I have not had a chance to have sex or met anyone that I wanted to have sex with
 - G. It is against my religious values
 - H. Some other reason

62. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
 - B. 11 years old or younger
 - C. 12 years old
 - D. 13 years old
 - E. 14 years old
 - F. 15 years old
 - G. 16 years old or older
63. 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
64. During the past 12 months, have you had sexual intercourse?
- A. Yes
 - B. No
65. The **last time** you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
 - B. Yes
 - C. No
66. How many times have you been pregnant or gotten someone pregnant?
- A. 0 times
 - B. 1 time
 - C. 2 or more times
 - D. Not sure

67. Have you ever been told by a doctor or nurse that you had a sexually transmitted infection, such as HIV, AIDS, syphilis, gonorrhea, chlamydia or trichomoniasis?

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

68. How many of your friends have had sexual intercourse?

- A. None
- B. A few
- C. Some
- D. Most
- E. All

The next 4 questions ask about HIV infection or AIDS.

69. Can people protect themselves from HIV infection or AIDS by using a condom correctly every time they have sexual intercourse?

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

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

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

71. During this school year, were you taught in any of your classes how HIV infection or AIDS passes from one person to another?

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

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

- A. Yes
- B. No

The next 2 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, ampe, skipping, and hop scotch.

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

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

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

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

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

The next 7 questions ask about doing non-sports physical activities outside. Non-sports physical activities do not include sports. They are activities you do outside for fun or exercise. Do not count playing sports such as football, volleyball, netball etc. Correct examples of non-sports activities include riding a bicycle, ampe, jogging, skipping, hop scotch, walking for fun, fishing or hunting for fun, swimming etc.

75. During the past 30 days, did you spend any of your free time outside doing non-sport physical activities after school or on the weekends?

- A. Yes
- B. No

76. During the past 7 days, on how many days did you do outside doing non-sport physical activities when you were not in school?

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

77. Would you like to spend more free time outdoors doing non-sport physical activities after school or on weekends?

- A. Yes
- B. No

78. How important do **you** think it is to spend time outside doing non-sport physical activities after school or on weekends?

- A. Not at all important
- B. Somewhat important
- C. Important
- D. Very important

79. How important do your parents or guardians think it is for you to spend time outside doing non-sport physical activities after school or on weekends?

- A. Not at all important
- B. Somewhat important
- C. Important
- D. Very important

80. During the past 30 days, which of the following outdoor non-sports physical activities did **you** do **most frequently**?

- A. I did not do any non-sports physical activities
- B. Walking or jogging
- C. Riding a bicycle
- D. Swimming
- E. Fishing or hunting
- F. Canoeing on the river or sea
- G. Some other non-sports physical activity

81. Are you interested in trying a new outdoor non-sport physical activity?

- A. Yes
- B. No
- C. Not sure

The next 3 questions ask about your experiences at school and at home.

82. 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

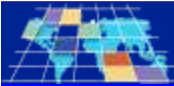
83. During the past 30 days, how often were most of the students in your school kind and helpful?

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

84. During the **past 12 months**, how often did your parents or guardians understand your problems and worries?

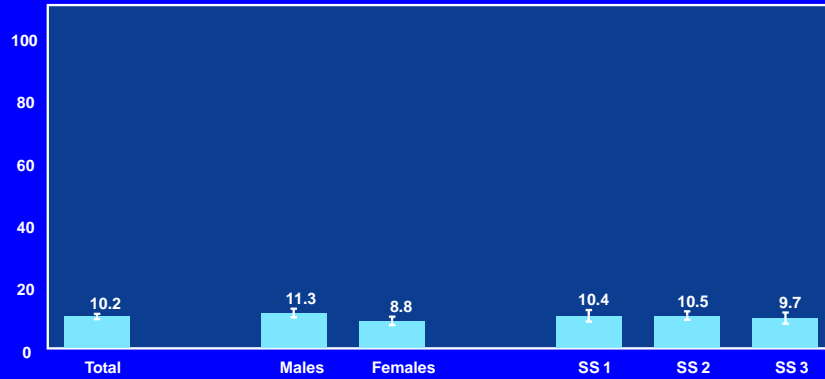
- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

Appendix B: 2008 Ghana GSHS Graphs



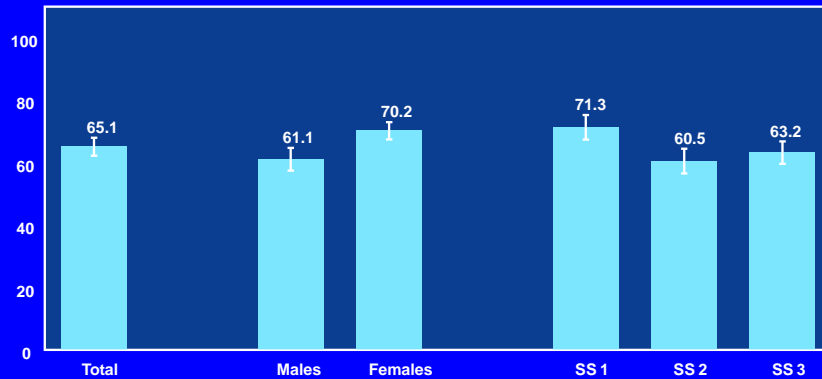
Ghana Senior High Survey

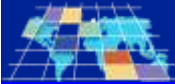
QN6. Percentage of students who went hungry most of the time or always during the past 30 days because there was not enough food in their home



Ghana Senior High Survey

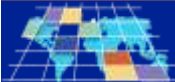
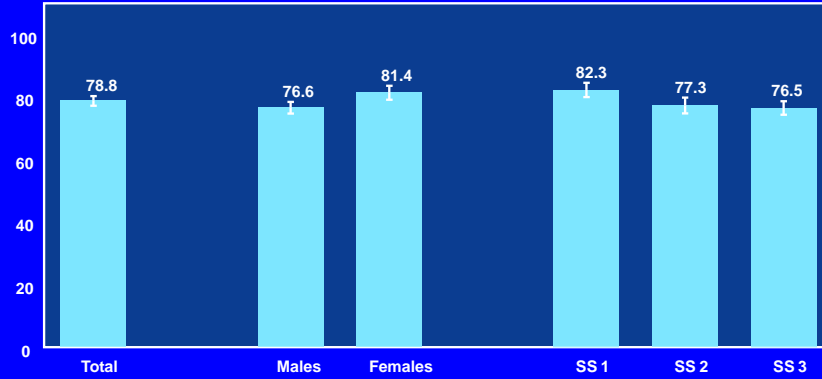
QN7. Percentage of students who usually ate fruit, such as oranges, pineapple, watermelon, banana, guava, pear, sweet apple, mangoes, or pawpaw one or more times per day during the past 30 days





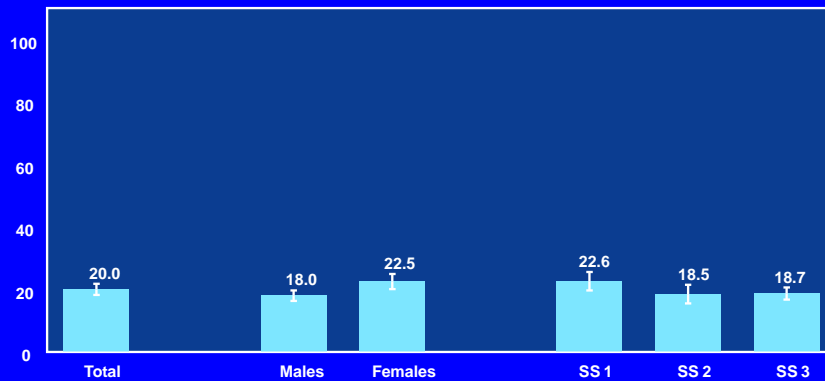
Ghana Senior High Survey

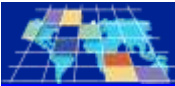
QN8. Percentage of students who usually ate vegetables, such as kontomire, garden eggs, lettuce, cabbage, okra, alefu, bira, ayoyo, or bean leaves one or more times per day during the past 30 days



Ghana Senior High Survey

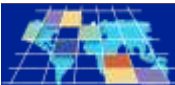
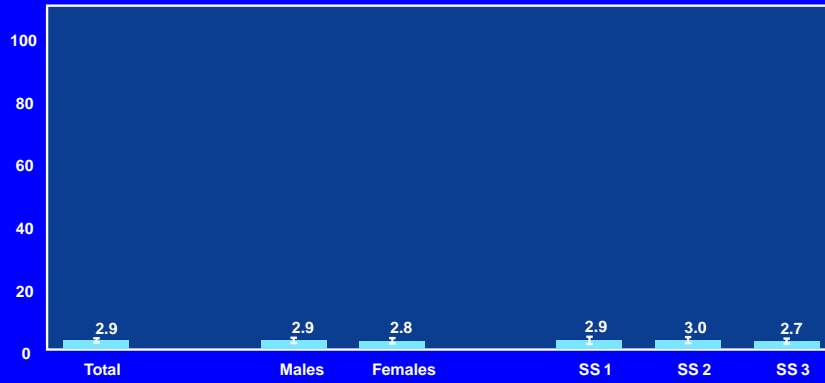
QNFRVGG. Percentage of students who ate fruits and vegetables five or more times per day during the past 30 days





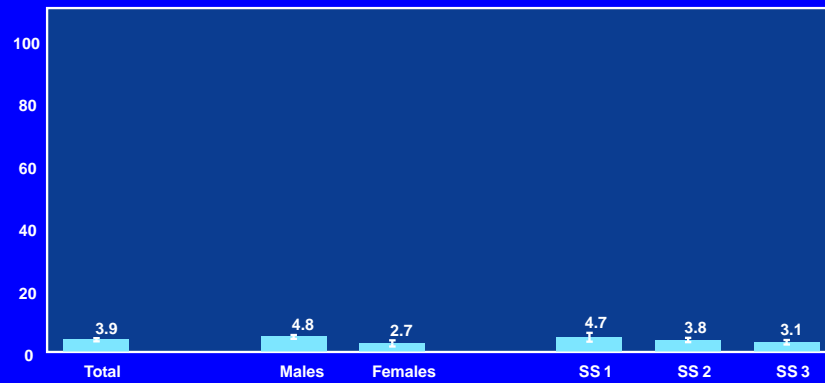
Ghana Senior High Survey

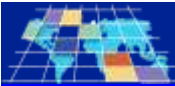
QN10. Percentage of students who never or rarely washed their hands before eating during the past 30 days



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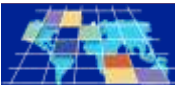
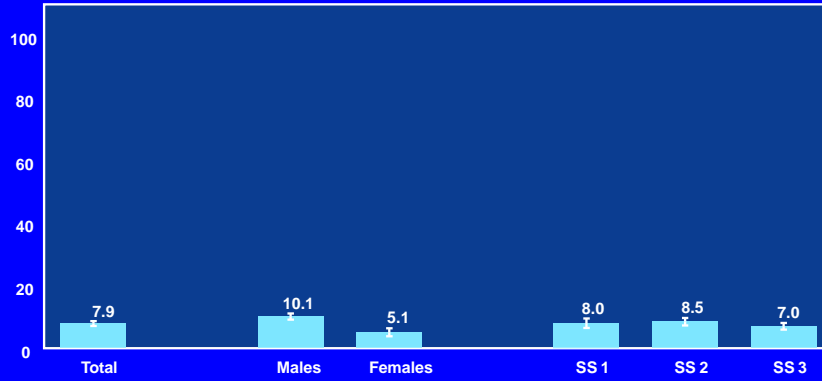
QN11. Percentage of students who never or rarely washed their hands after using the toilet or latrine during the past 30 days





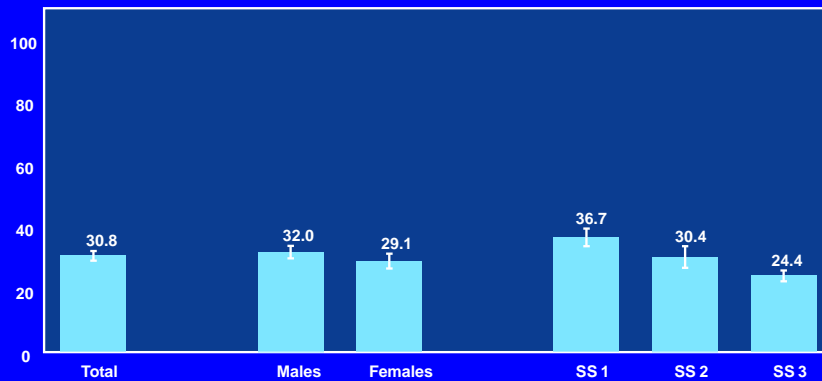
Ghana Senior High Survey

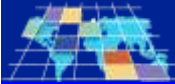
QN12. Percentage of students who never or rarely used soap when washing their hands during the past 30 days



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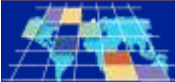
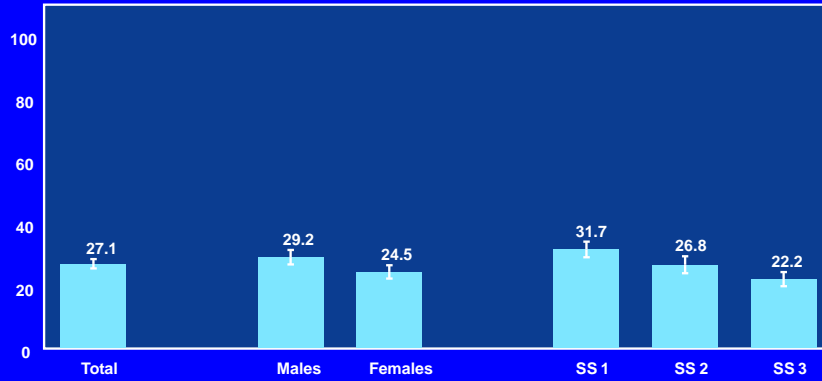
QN13. Percentage of students who were physically attacked one or more times during the past 12 months





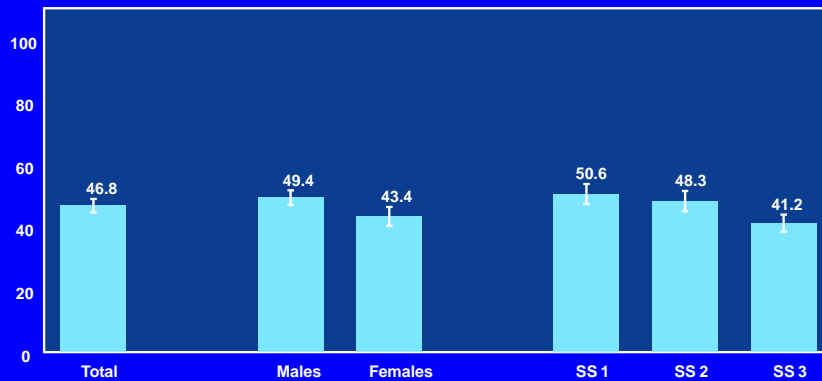
Ghana Senior High Survey

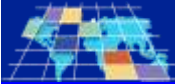
QN14. Percentage of students who were in a physical fight one or more times during the past 12 months



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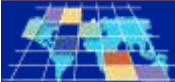
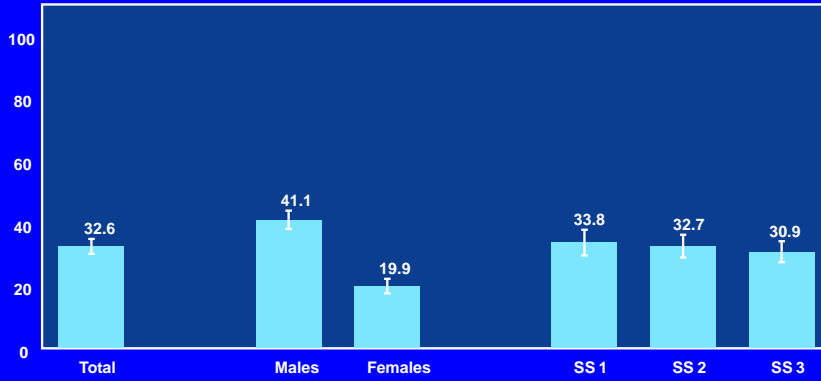
QN15. Percentage of students who were seriously injured one or more times during the past 12 months





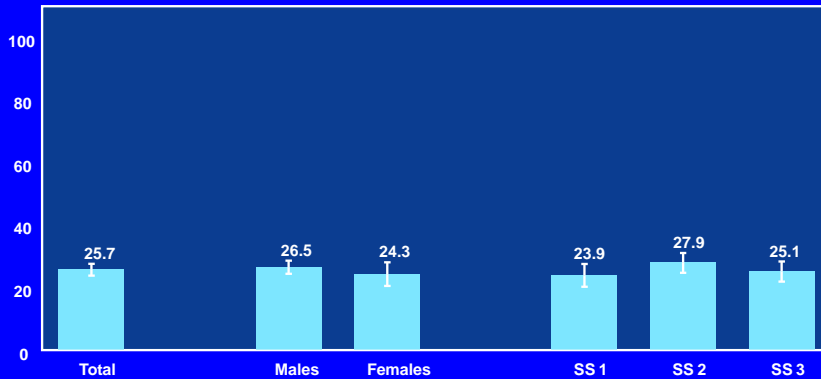
Ghana Senior High Survey

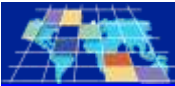
QN16. Among students who were seriously injured during the past 12 months, the percentage whose most serious injury happened to them while they were playing or training for a sport



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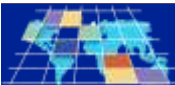
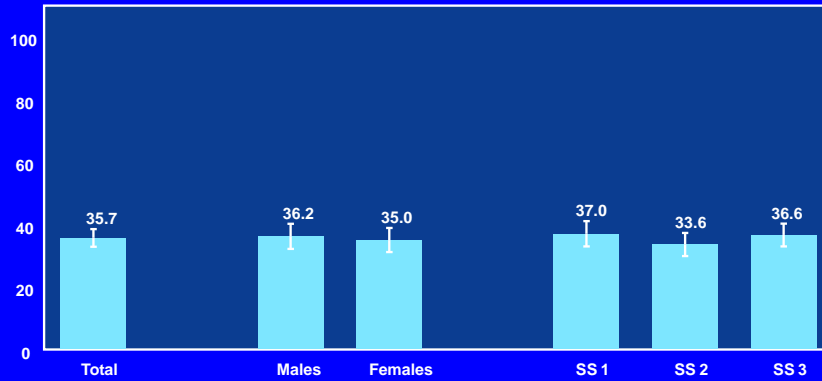
QN17. Among students who were seriously injured during the past 12 months, the percentage whose most serious injury was the result of a fall





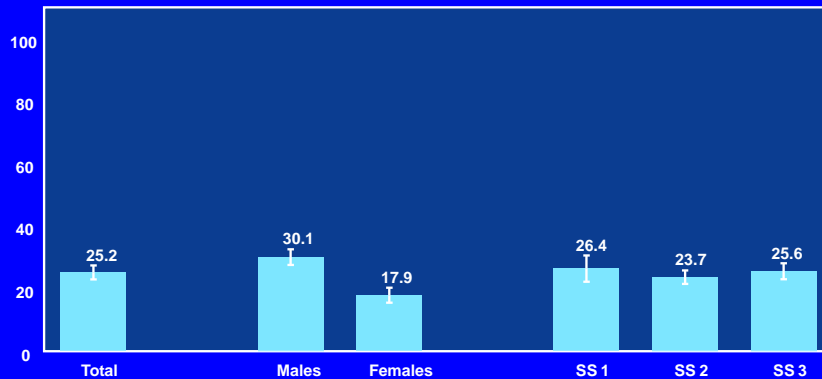
Ghana Senior High Survey

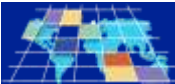
QN18. Among students who were seriously injured during the past 12 months, the percentage whose most serious injury was the result of them hurting themselves by accident



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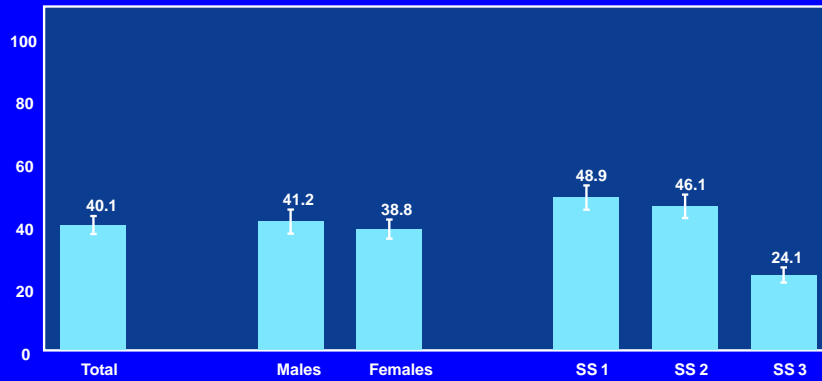
QN19. Among students who were seriously injured during the past 12 months, the percentage who had a broken bone or a dislocated joint as their most serious injury





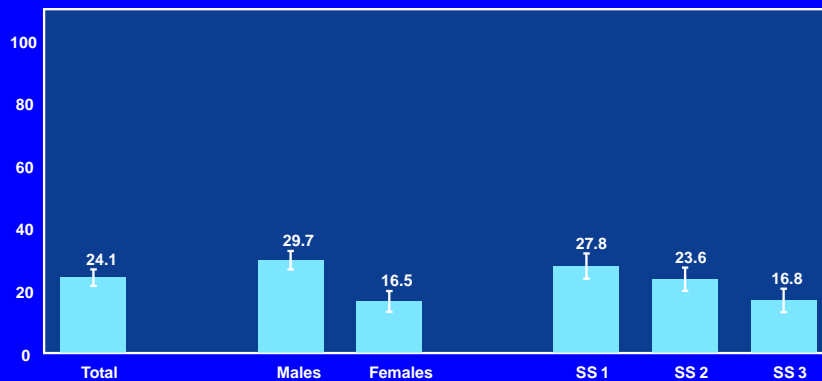
Ghana Senior High Survey

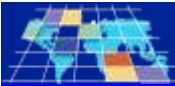
QN20. Percentage of students who were bullied on one or more days during the past 30 days



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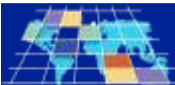
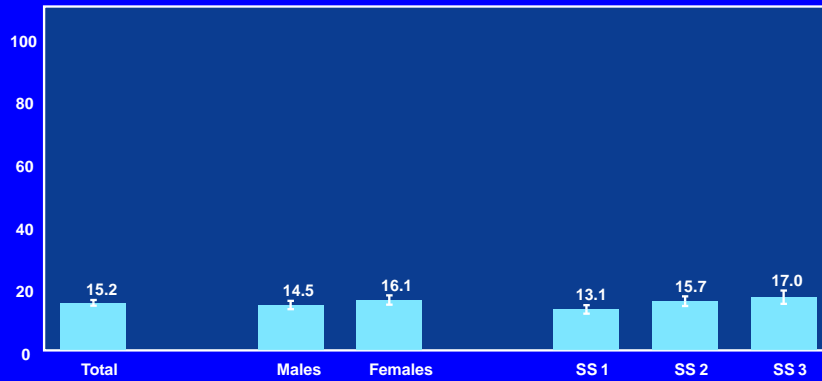
QN21. Among students who were bullied during the past 30 days, the percentage who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors





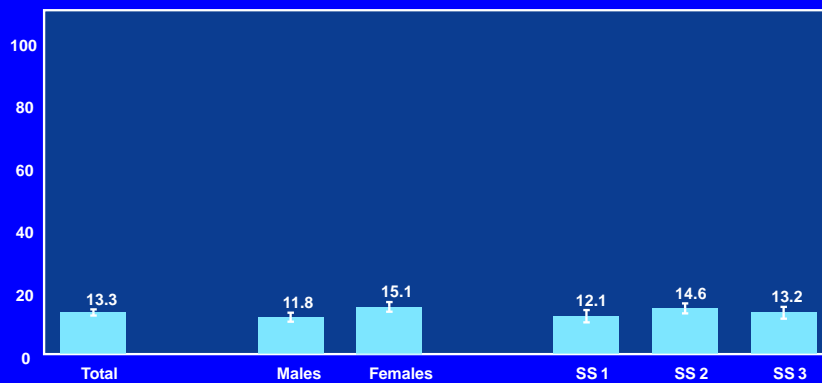
Ghana Senior High Survey

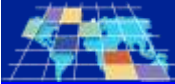
QN22. Percentage of students who felt lonely most of the time or always during the past 12 months



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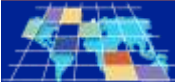
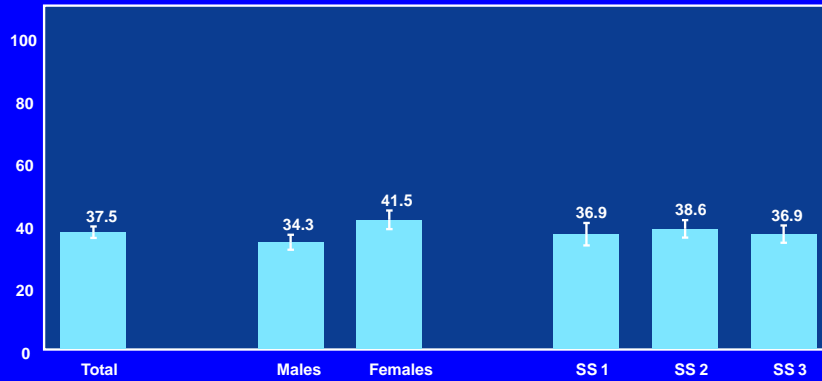
QN23. Percentage of students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months





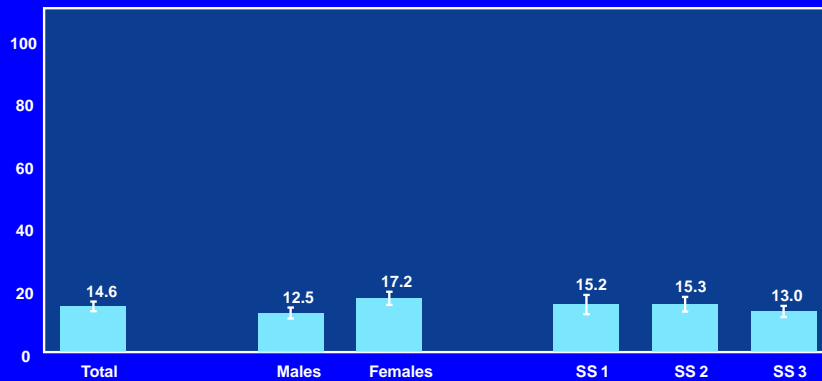
Ghana Senior High Survey

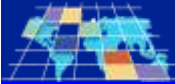
QN24. Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months



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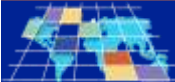
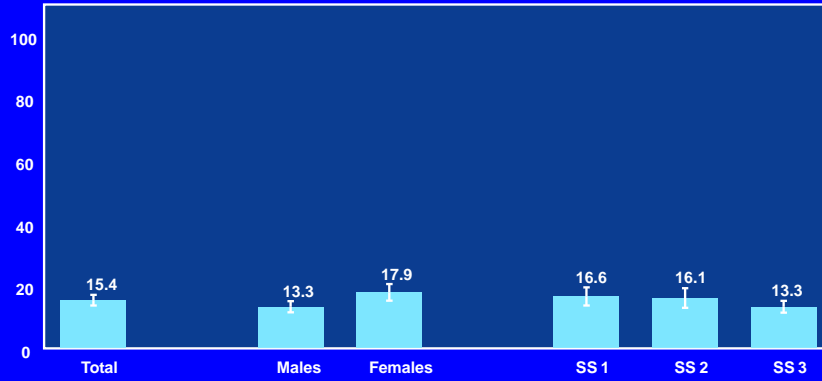
QN25. Percentage of students who seriously considered attempting suicide during the past 12 months





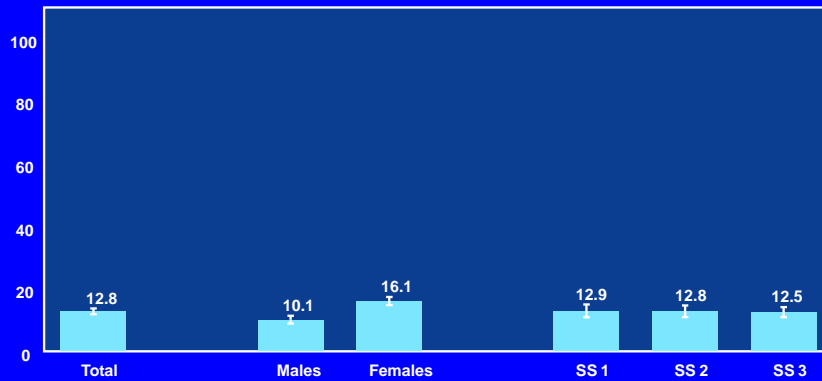
Ghana Senior High Survey

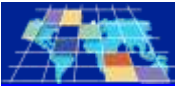
QN26. Percentage of students who made a plan about how they would attempt suicide during the past 12 months



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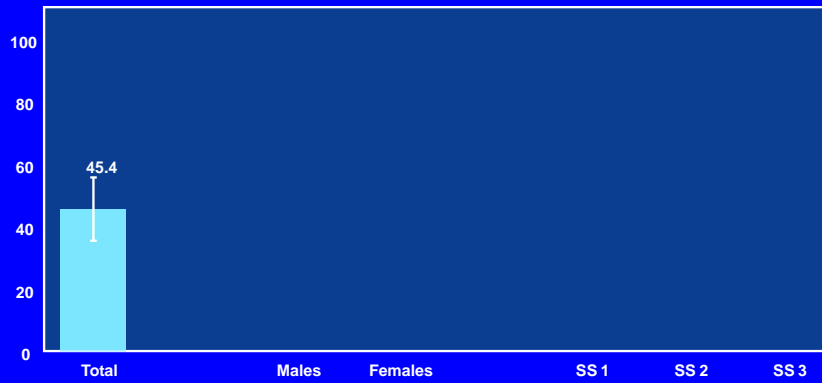
QN27. Percentage of students who have no close friends



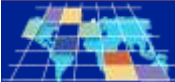


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QN28. Of students who smoked cigarettes on one or more of the past 30 days, the percentage who tried their first cigarette at age 13 or younger

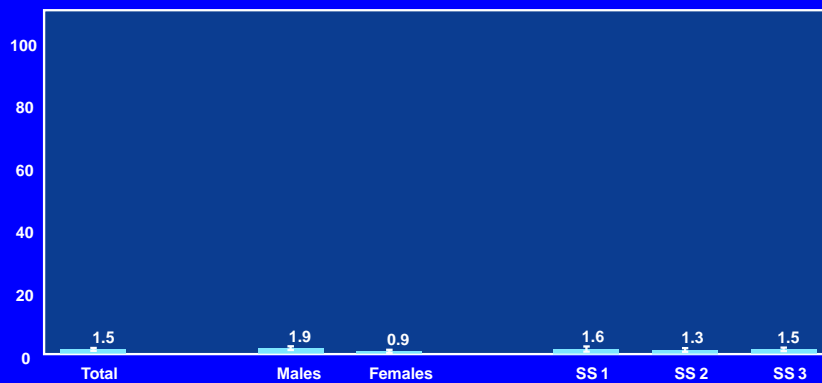


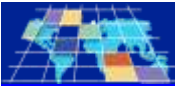
Missing bars indicate less than 100 respondents in the subgroup.



Ghana Senior High Survey

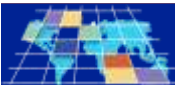
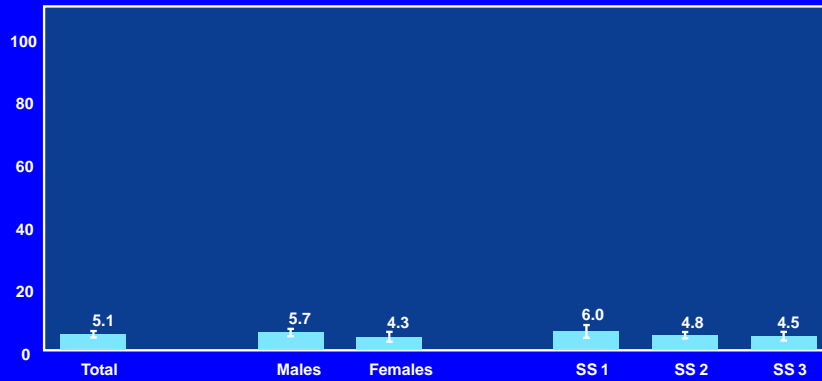
QN29. Percentage of students who smoked cigarettes on one or more days during the past 30 days





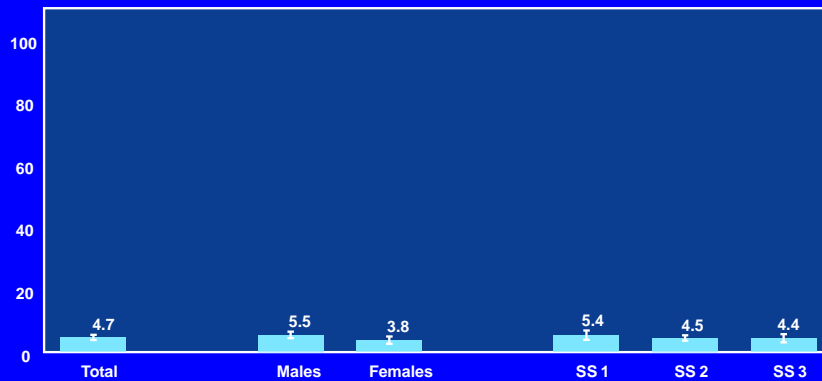
Ghana Senior High Survey

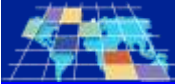
QN30. Percentage of students who used any other form of tobacco, such as tawa snuff powder, chewing tobacco, paper rolled tobacco, dip, cigars, or pipe on one or more days during the past 30 days



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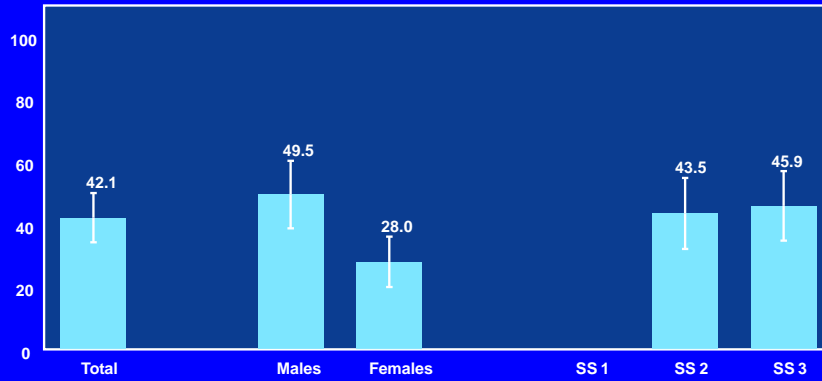
QNANYTBG. Percentage of students who used any tobacco on one or more of the past 30 days



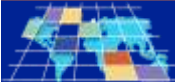


Ghana Senior High Survey

QN31. Among students who smoked cigarettes during the past 12 months, the percentage who tried to stop smoking cigarettes

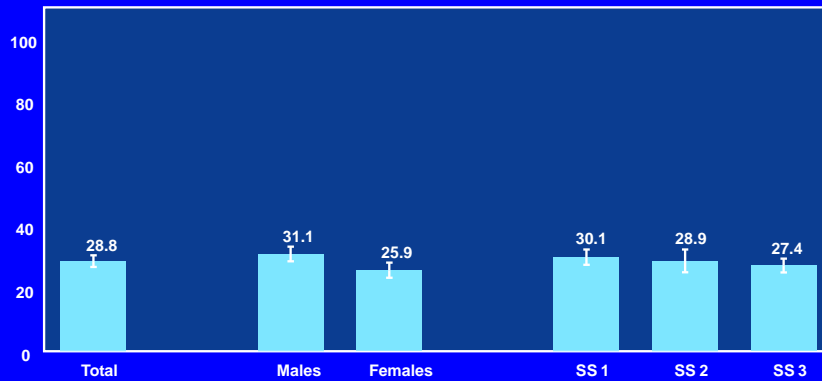


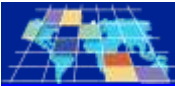
Missing bars indicate less than 100 respondents in the subgroup.



Ghana Senior High Survey

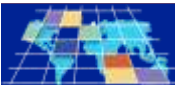
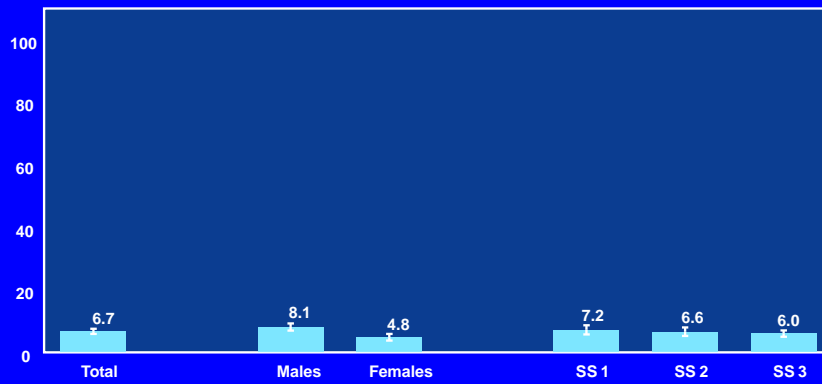
QN32. Percentage of students who reported people smoking in their presence on one or more days during the past 7 days





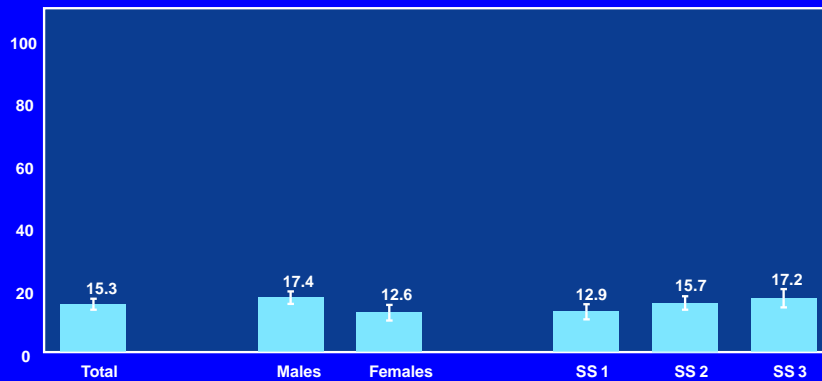
Ghana Senior High Survey

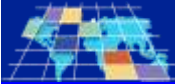
QN33. Percentage of students who have a parent or guardian who uses any form of tobacco



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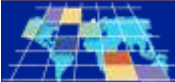
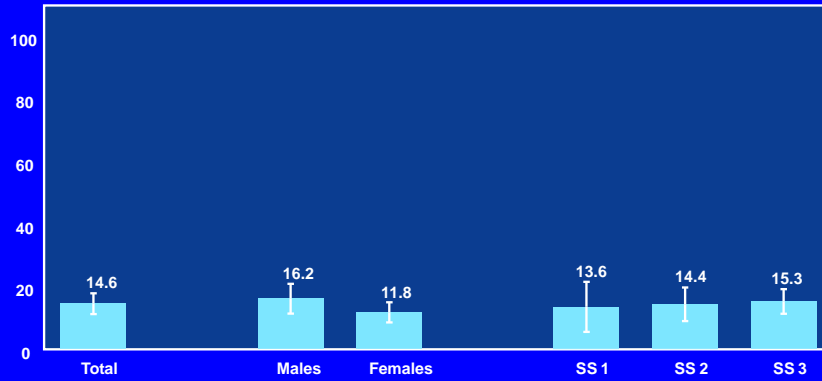
QN34. Percentage of students who had at least one drink containing alcohol on one or more days during the past 30 days





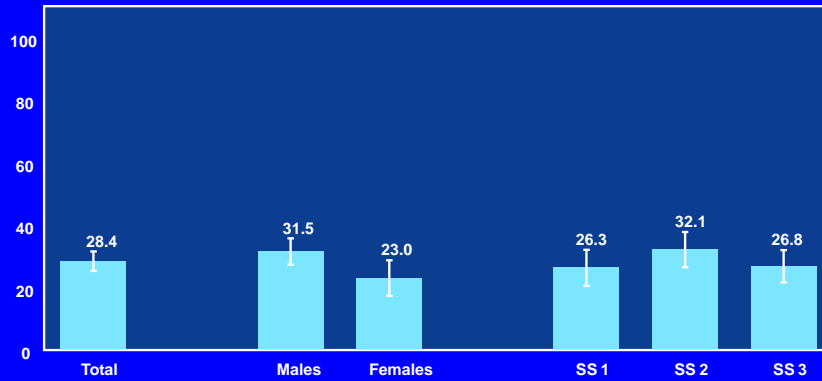
Ghana Senior High Survey

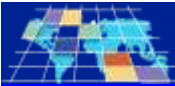
QN35. Among students who had at least one drink containing alcohol during the past 30 days, the percentage who usually drank two or more drinks per day on the days they drank alcohol during the past 30 days



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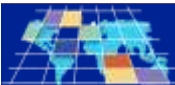
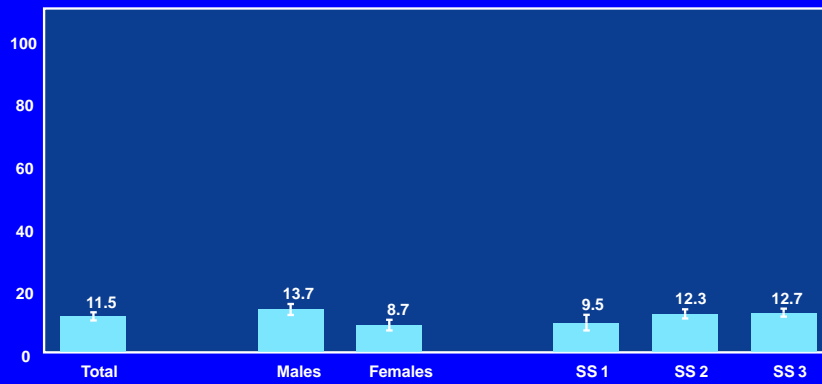
QN36. Among students who had at least one drink containing alcohol during the past 30 days, the percentage who usually got the alcohol they drank by buying it in a store, shop, or from a street vendor





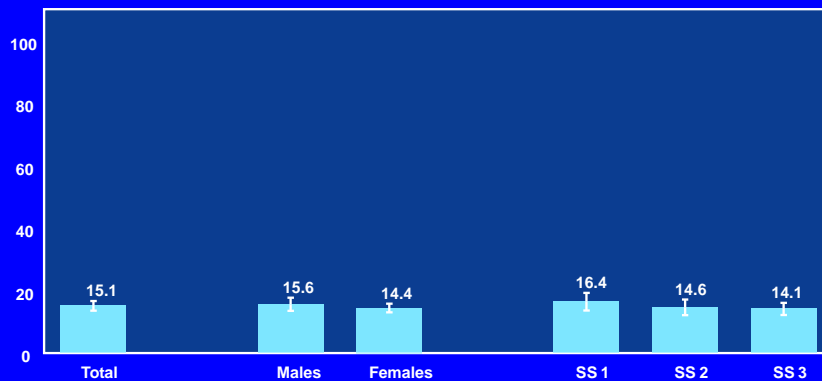
Ghana Senior High Survey

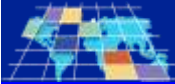
QN37. Percentage of students who drank so much alcohol that they were really drunk one or more times during their life



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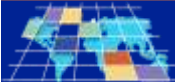
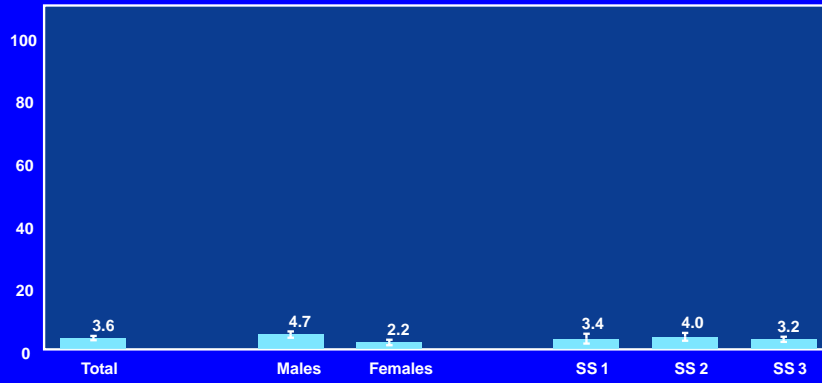
QN38. Percentage of students who had a hang-over, felt sick, got into trouble with their family or friends, missed school, or got into fights, as a result of drinking alcohol one or more times during their life





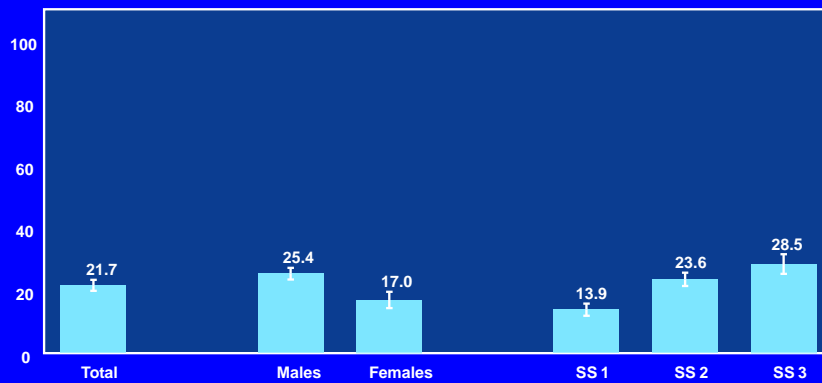
Ghana Senior High Survey

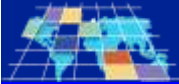
QN39. Percentage of students who used drugs, such as wee, cocaine, LSD, or heroine one or more times during their life



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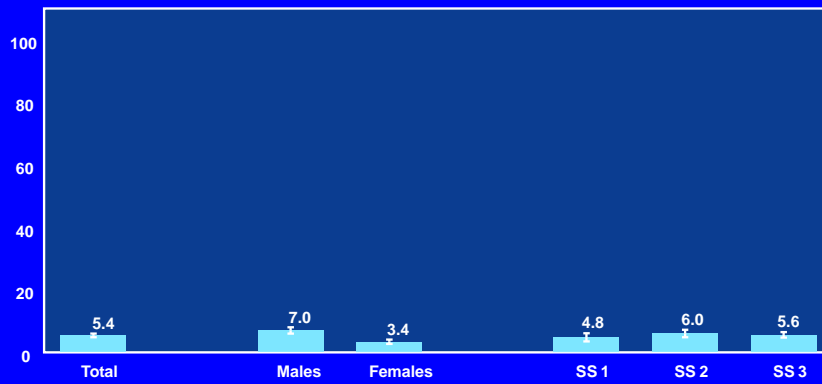
QN40. Percentage of students who have ever had sexual intercourse





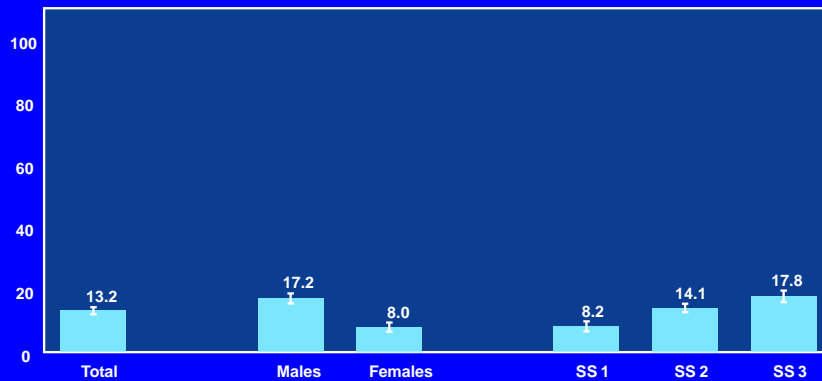
Ghana Senior High Survey

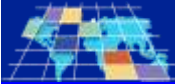
QN41. Percentage of students who had sexual intercourse for the first time before age 13



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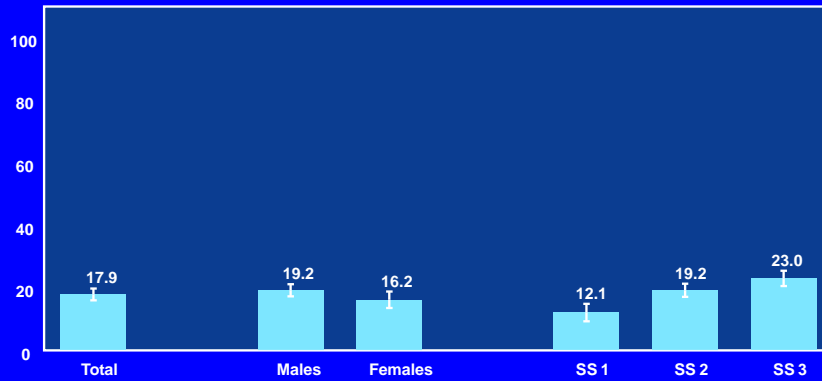
QN42. Percentage of students who have had sexual intercourse with two or more people during their life





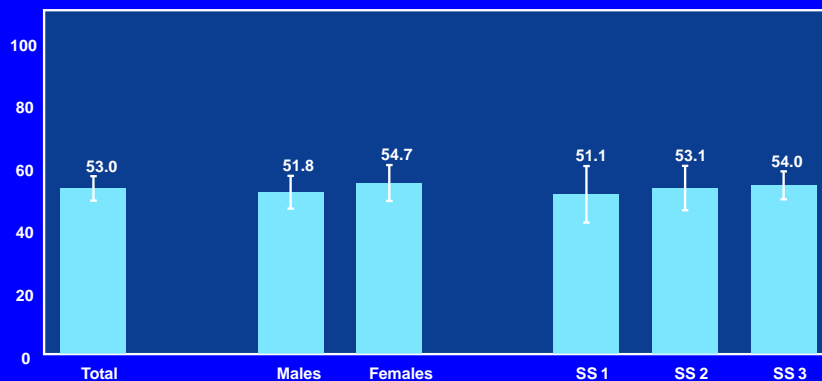
Ghana Senior High Survey

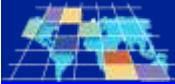
QN43. Percentage of students who had sexual intercourse during the past 12 months



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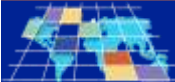
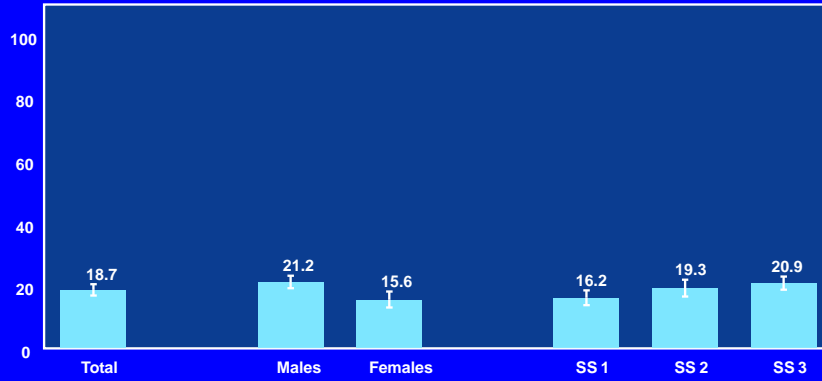
QN44. Among students who had sexual intercourse during the past 12 months, the percentage who used a condom the last time they had sexual intercourse





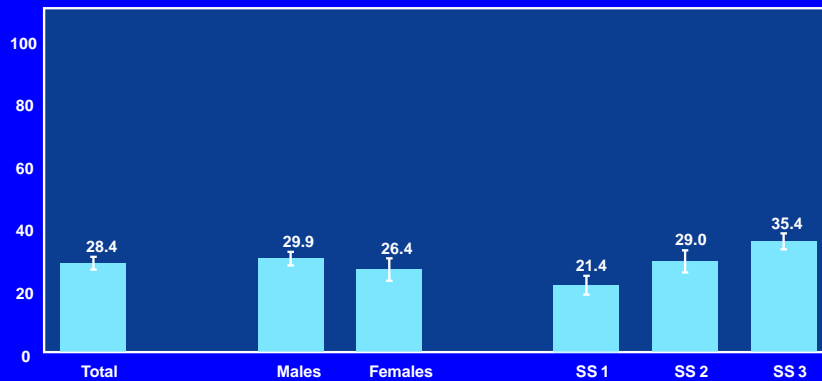
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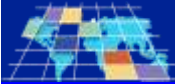
QN45. Percentage of students who were physically active for a total of at least 60 minutes per day on all 7 days during the past 7 days



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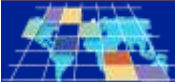
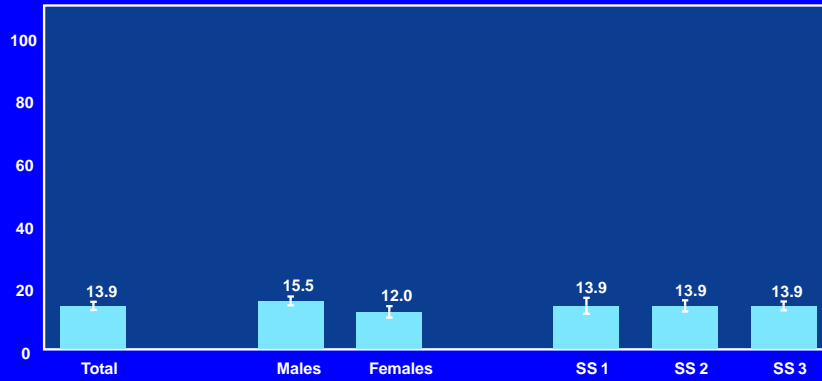
QN50. Percentage of students who missed classes or school without permission on one or more days during the past 30 days





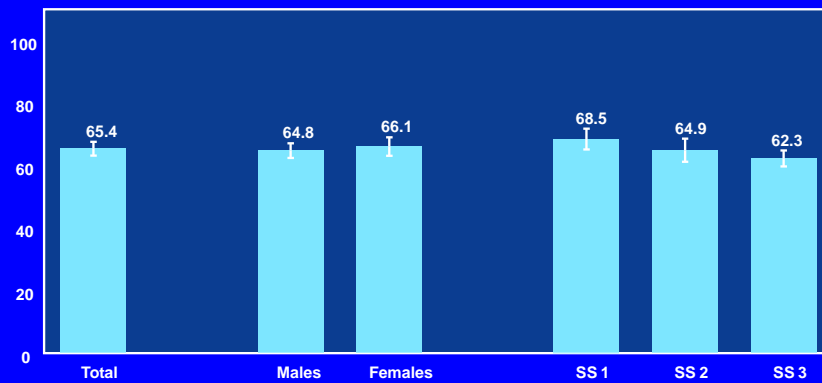
Ghana Senior High Survey

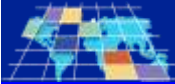
QN51. Percentage of students who reported that most of the students in their school were never or rarely kind and helpful during the past 30 days



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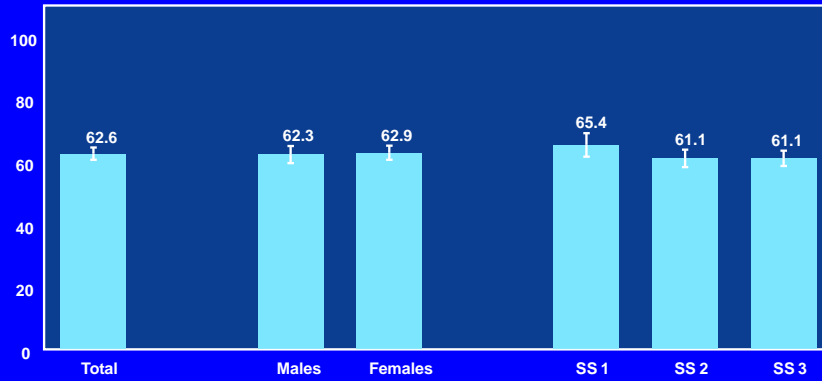
QN55. Percentage of students who describe their health as very good or excellent





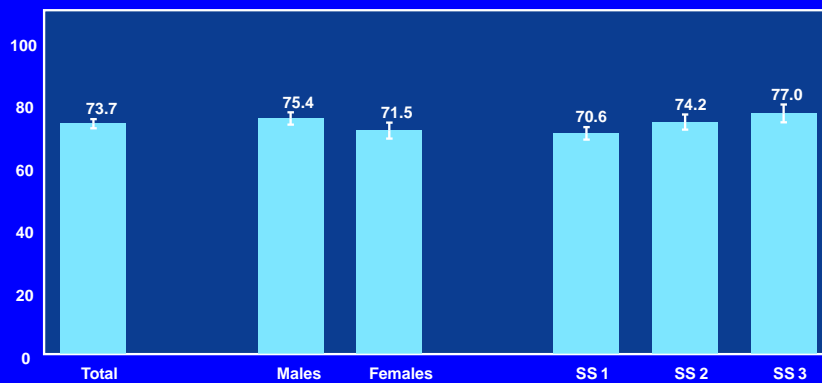
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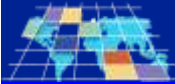
QN57. Percentage of students whose father and mother were most responsible for taking care of their needs or being their guardian



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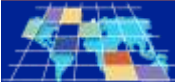
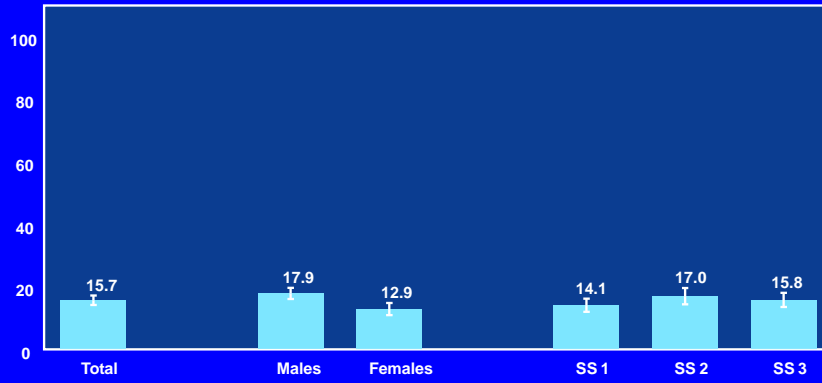
QN58. Percentage of students who, including themselves, have 4 or more children live in their household





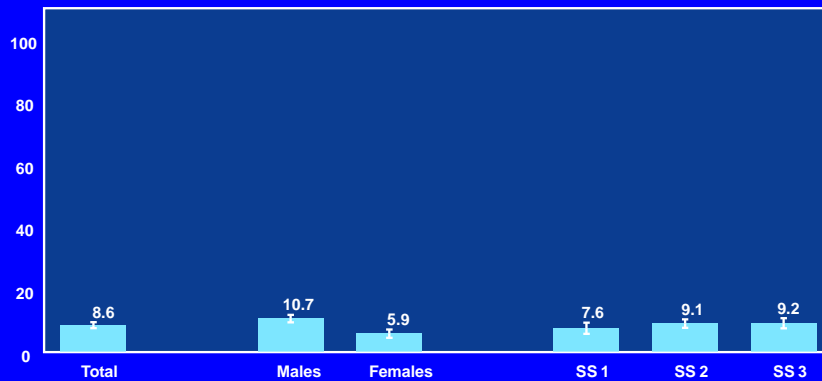
Ghana Senior High Survey

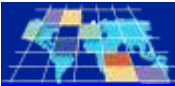
QN59. Among students who have a mother or female guardian, the percentage whose mother or female guardian did not complete primary school



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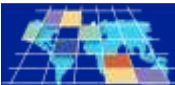
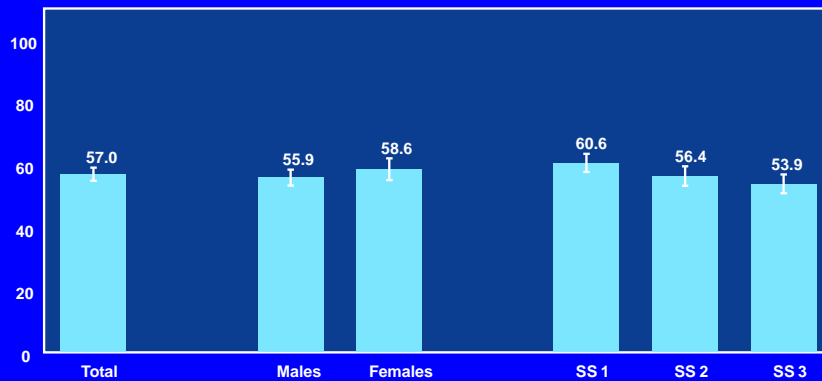
QN60. Among students who have a father or male guardian, the percentage whose father or male guardian did not complete primary school





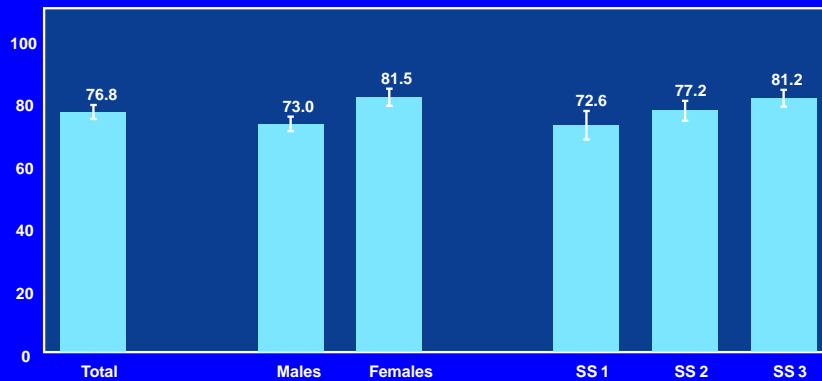
Ghana Senior High Survey

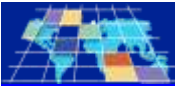
QN61. Percentage of students who ate breakfast most of the time or always during the past 30 days



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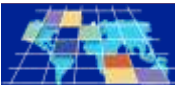
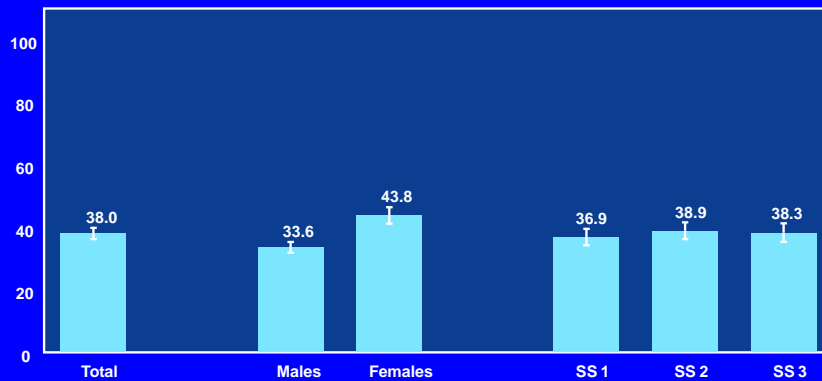
QN62. Percentage of students who were taught in any of their classes during this school year the benefits of eating more fruits and vegetables





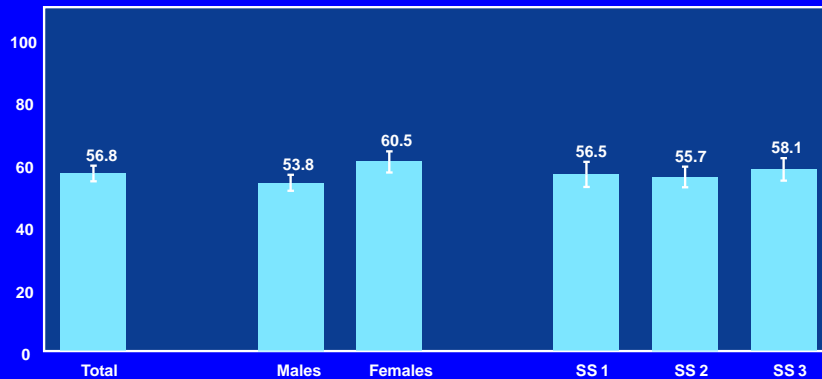
Ghana Senior High Survey

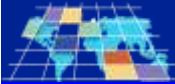
QN63. Percentage of students who during the last school term were told one or more times by a doctor or nurse that they were sick with malaria



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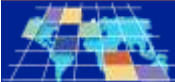
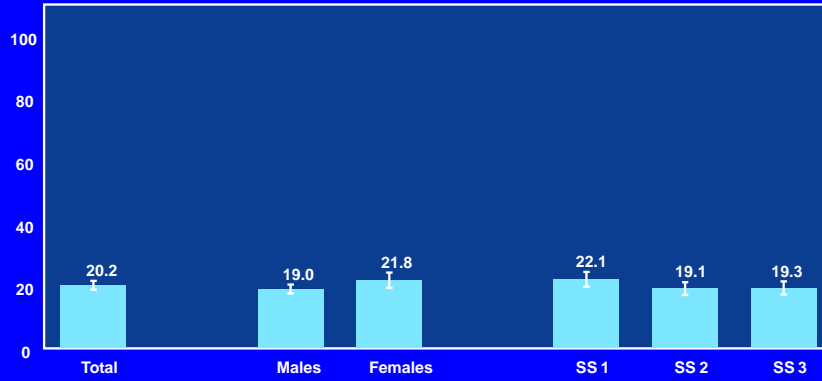
QN64. Among students who were sick with malaria during the last school term, the percentage who missed school or classes one or more days because they were sick with malaria





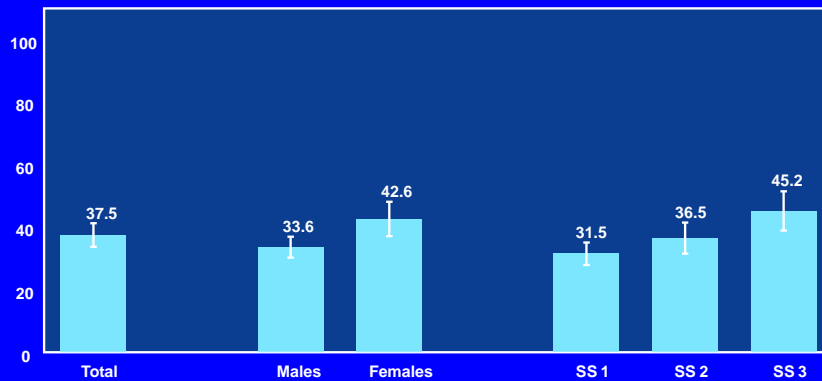
Ghana Senior High Survey

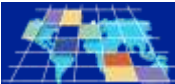
QN65. Percentage of students who during the last school term regularly took medicine to avoid getting malaria



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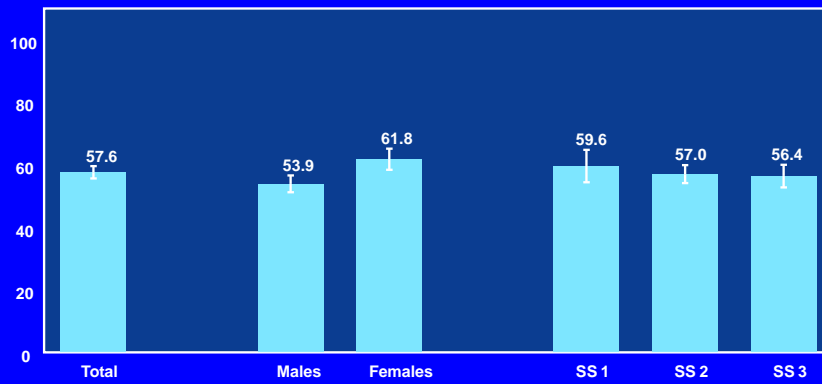
QN66. Percentage of students who during the last school term most of the time or always slept in a mosquito net





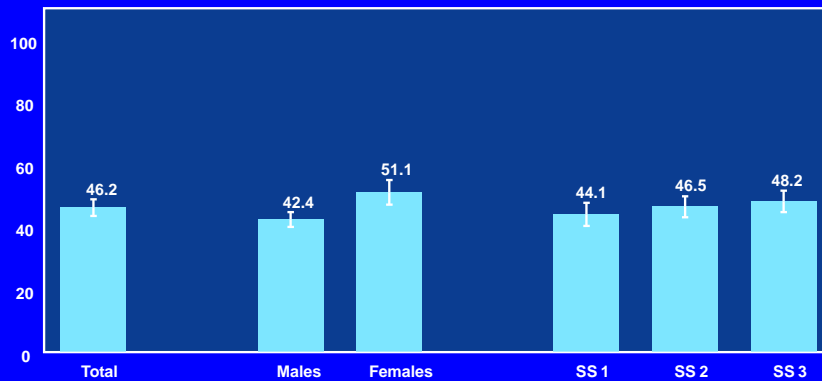
Ghana Senior High Survey

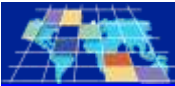
QN67. Among students who slept in a mosquito net, the percentage who during the last school term slept in a mosquito net treated with insecticide



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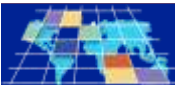
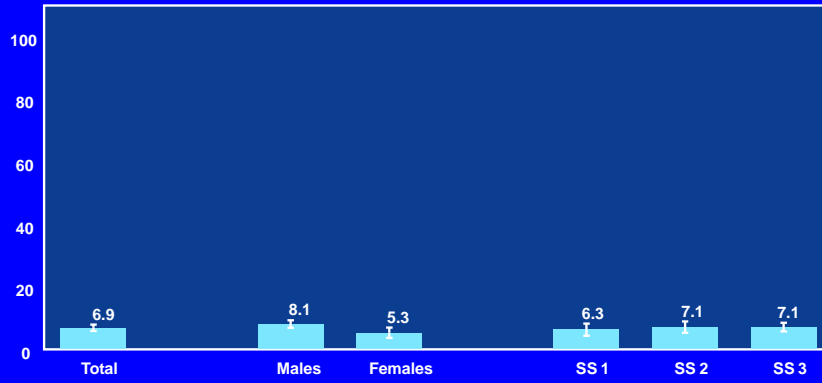
QN68. Percentage of students who during the last school term had mosquito netting on the windows in the room in which they normally slept





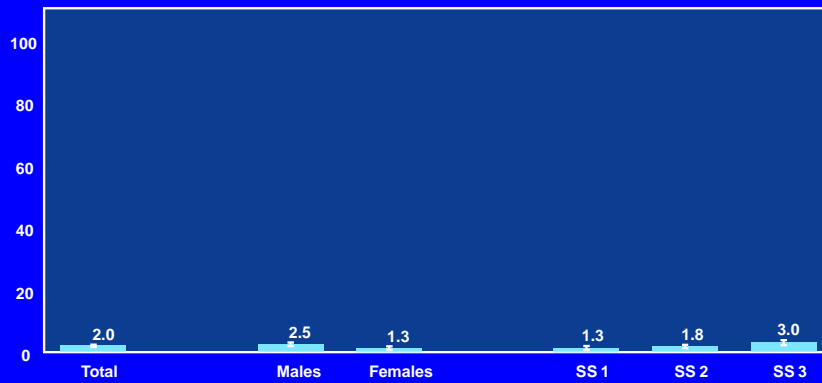
Ghana Senior High Survey

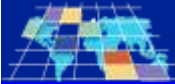
QN69. Percentage of students who drank so much alcohol during the past 30 days that they were really drunk one or more times



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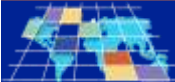
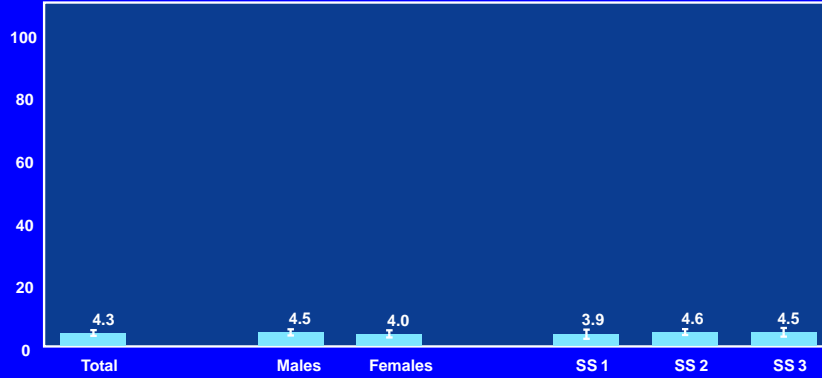
QN70. Percentage of students who report most or all of their friends drink alcohol





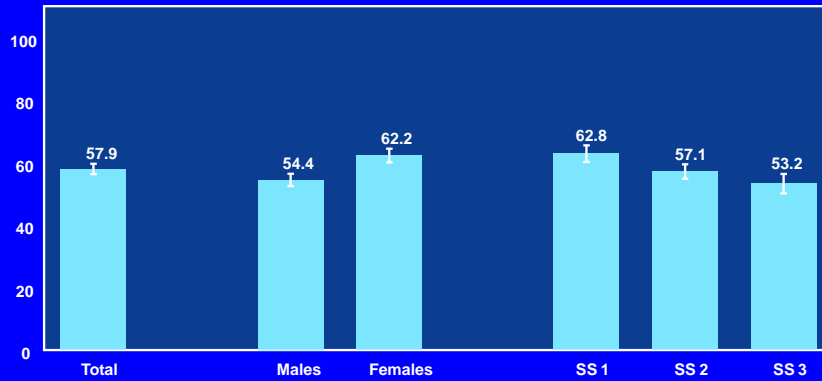
Ghana Senior High Survey

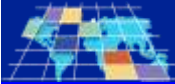
QN71. Percentage of students whose parents both drink alcohol



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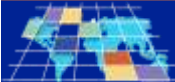
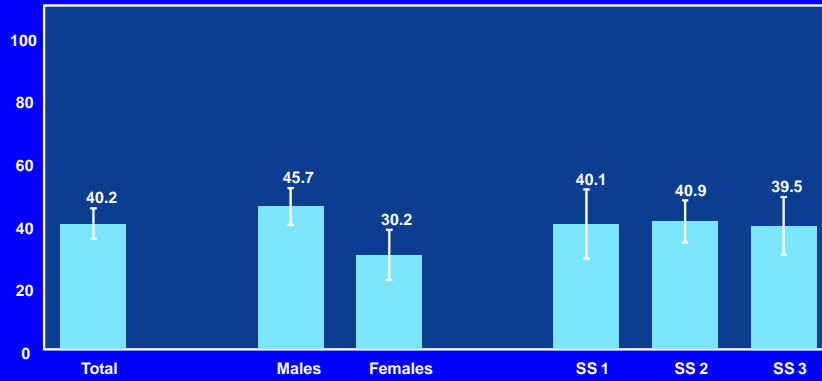
QN72. Percentage of students who thought it would be fairly difficult or very difficult for them to get alcohol, such as beer, akpeteshie, plum wine, pito, gin, brandy, or guinness, if they wanted to





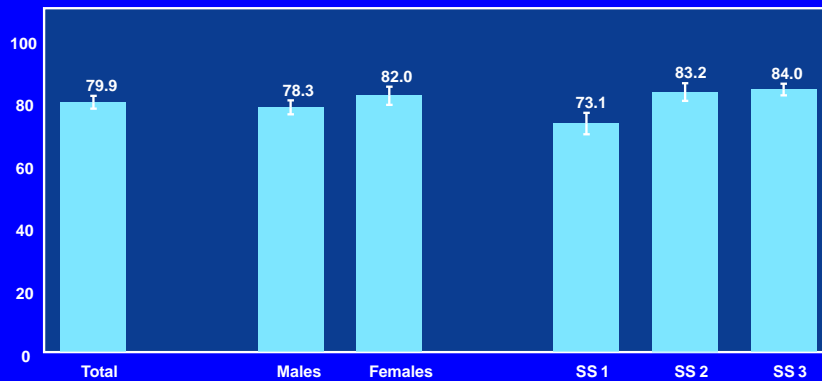
Ghana Senior High Survey

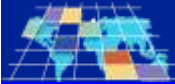
QN73. Among students who have ever used any drugs, the percentage who used marijuana or hashish most often



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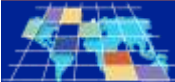
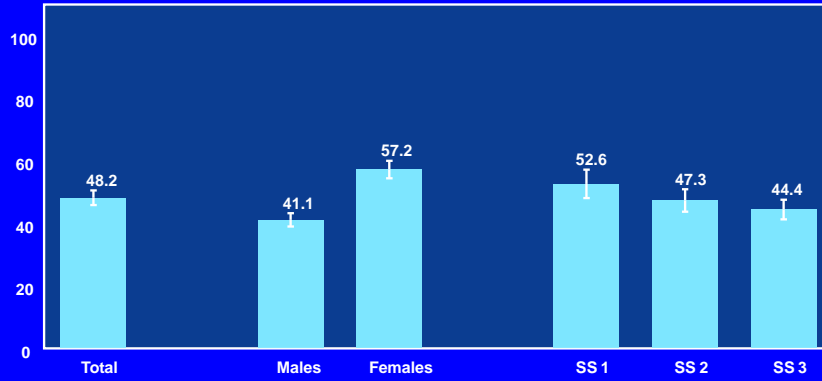
QN74. Percentage of students who were taught in any of their classes during this school year the dangers of using drugs, such as wee, cocaine, LSD, or heroine





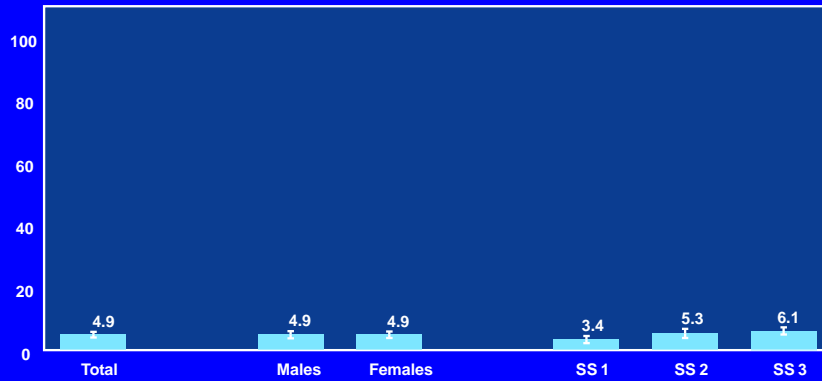
Ghana Senior High Survey

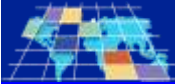
QN75. Percentage of students whose main reason for not having sexual intercourse is they want to wait until they are married



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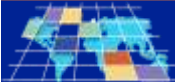
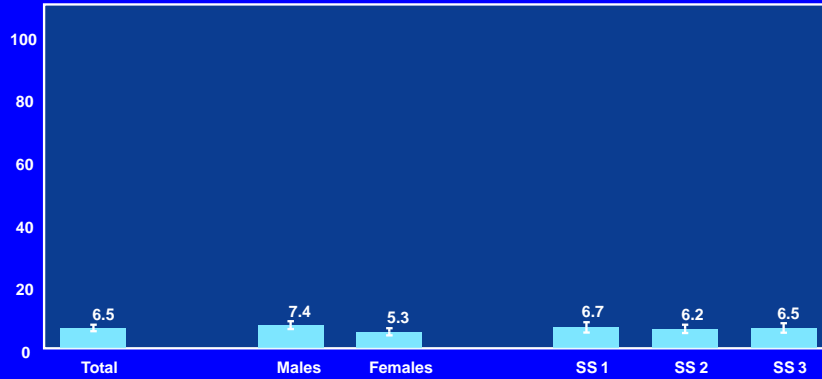
QN76. Percentage of students who have been pregnant or gotten someone pregnant one or more times





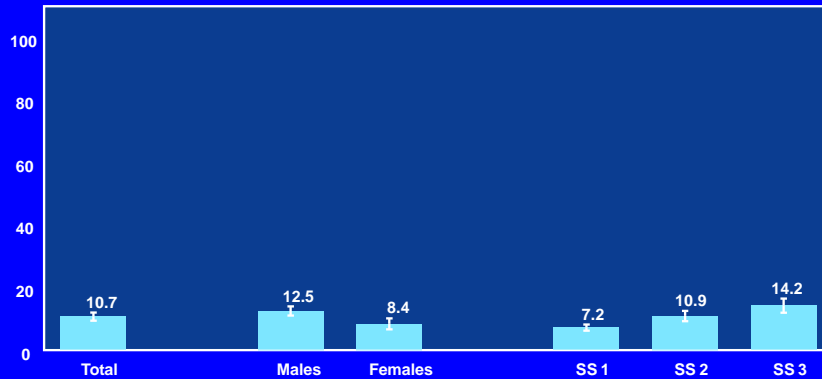
Ghana Senior High Survey

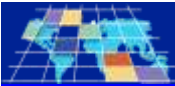
QN77. Percentage of students who have ever been told by a doctor or nurse that they had a sexually transmitted infection, such as HIV, AIDS, syphilis, gonorrhea, chlamydia, or trichomoniasis



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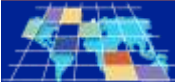
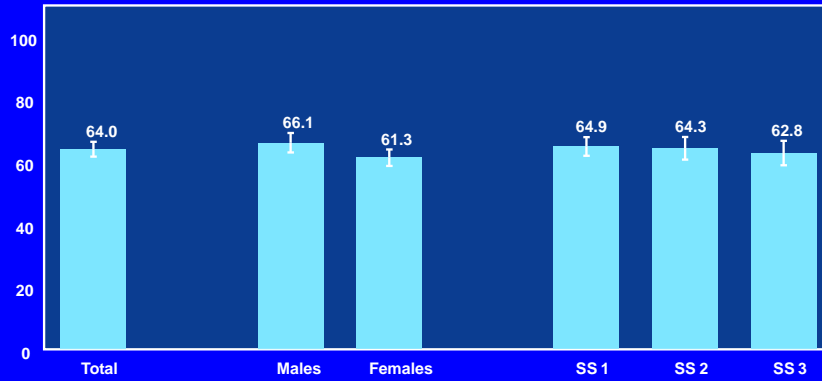
QN78. Percentage of students who report most or all of their friends have had sexual intercourse





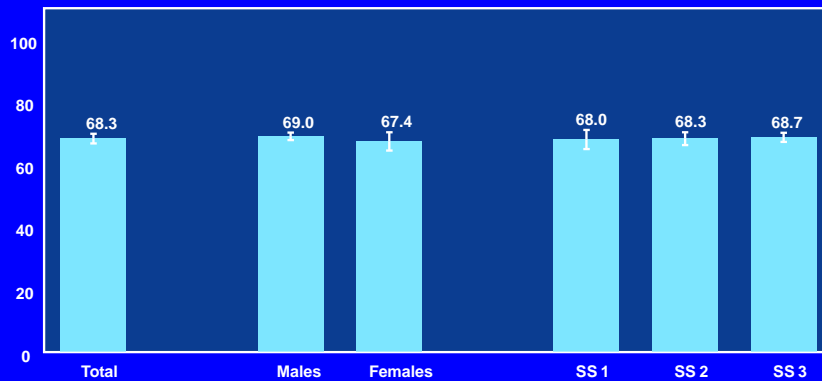
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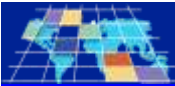
QN79. Percentage of students who believe people can protect themselves from HIV infection or AIDS by using a condom correctly every time they have sexual intercourse



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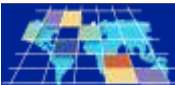
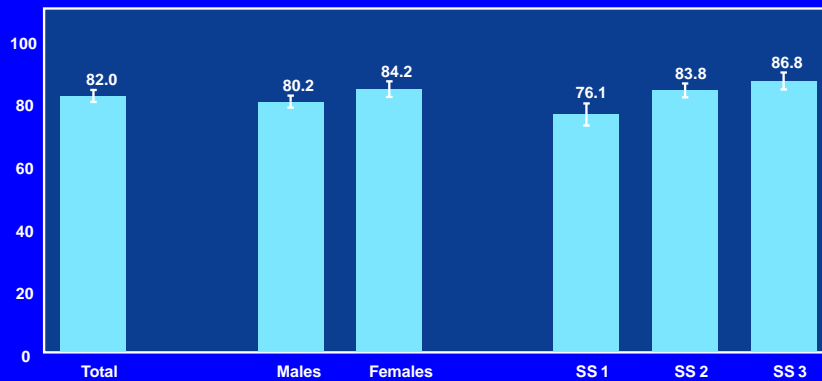
QN80. Percentage of students who believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse





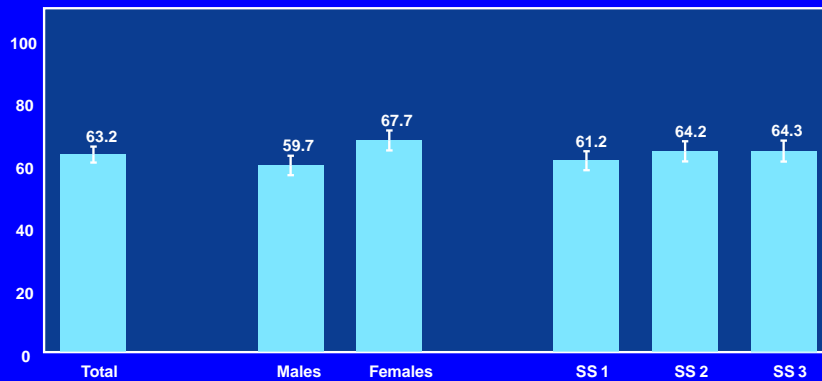
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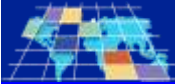
QN81. Percentage of students who were taught in any of their classes during this school year how HIV infection or AIDS passes from one person to another



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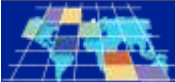
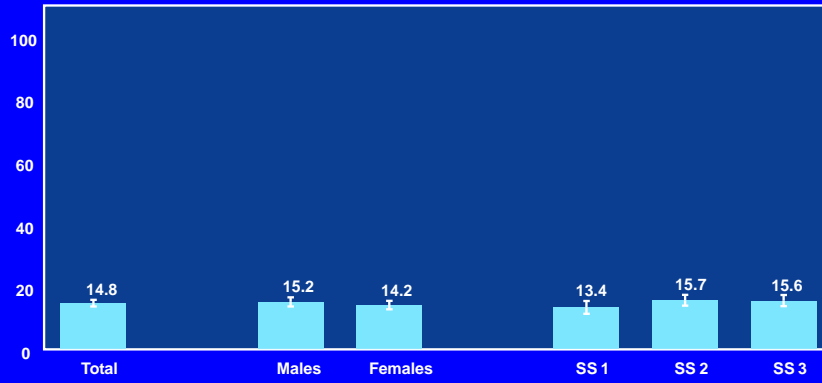
QN82. Percentage of students who have ever talked about HIV infection or AIDS with their parents or guardians





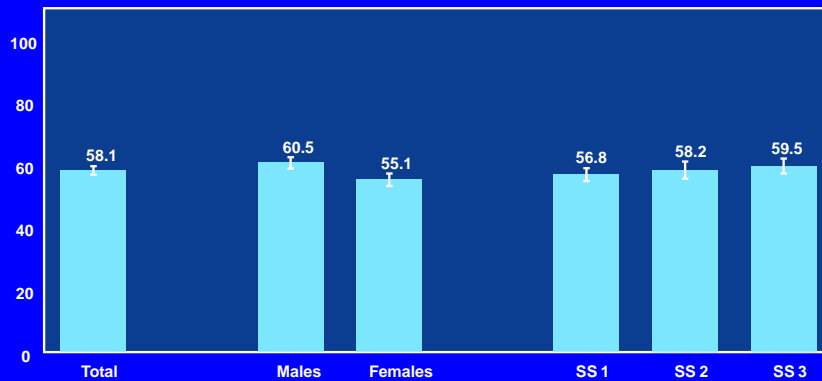
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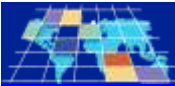
QN83. Percentage of students who during this school year went to physical education class 4 or more days each week



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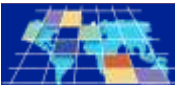
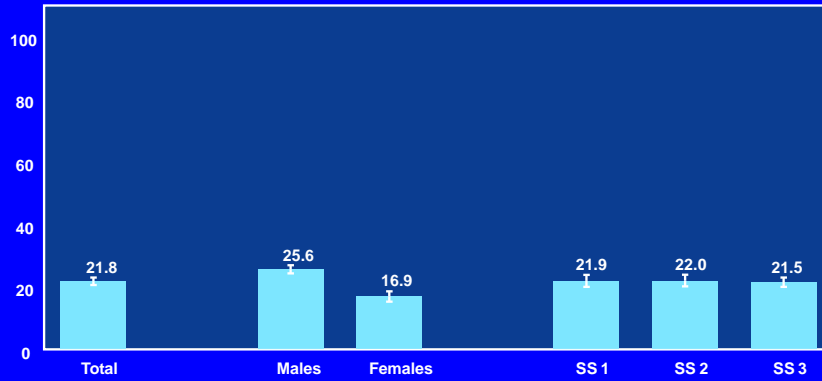
QN84. Percentage of students who spent any of their free time outside doing non-sport physical activities after school or on the weekends during the past 30 days





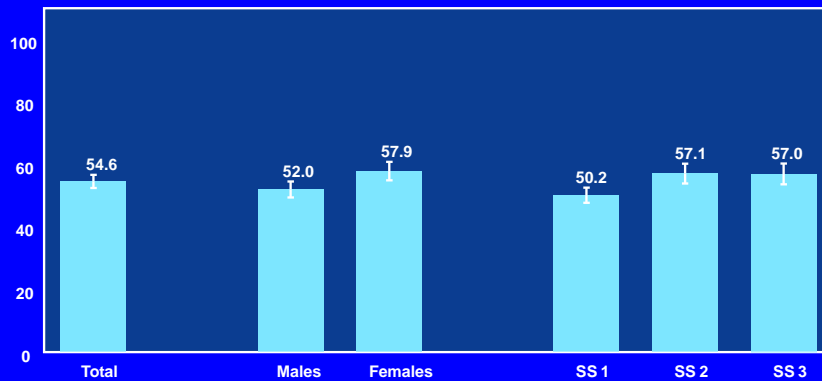
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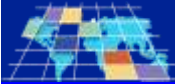
QN85. Percentage of students who went outside on 3 or more days during the past 7 days doing non-sport physical activities when they were not in school



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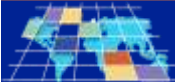
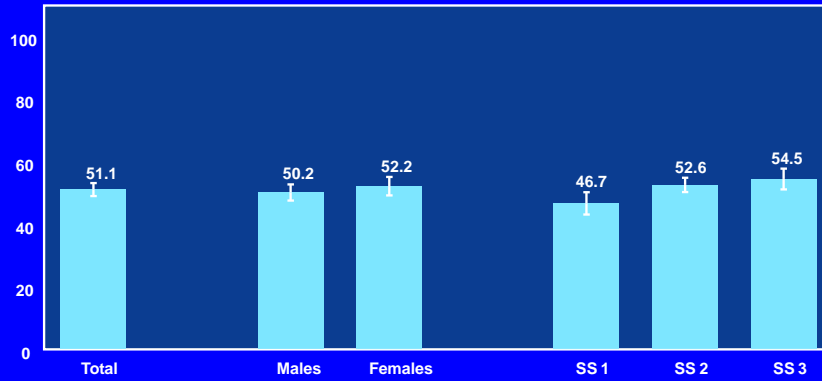
QN86. Percentage of students who would like to spend more free time outdoors doing non-sport physical activities after school or on weekends





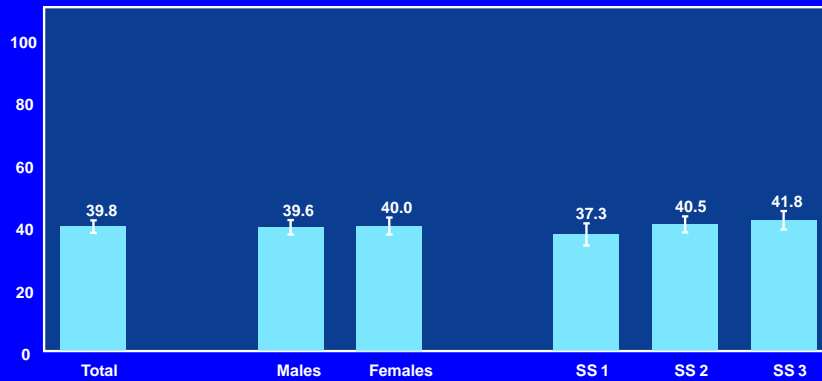
Ghana Senior High Survey

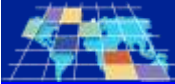
QN87. Percentage of students who think it is important or very important to spend time outside doing non-sport physical activities after school or on weekends



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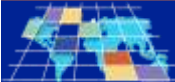
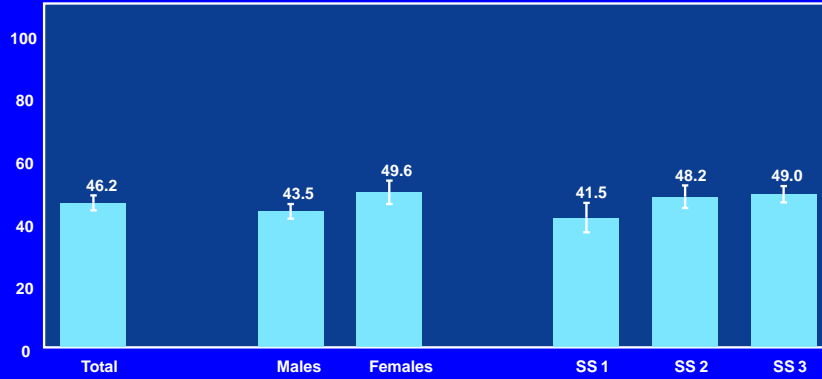
QN88. Percentage of students whose parents or guardians think it is important or very important for them to spend time outside doing non-sport physical activities after school or on weekends





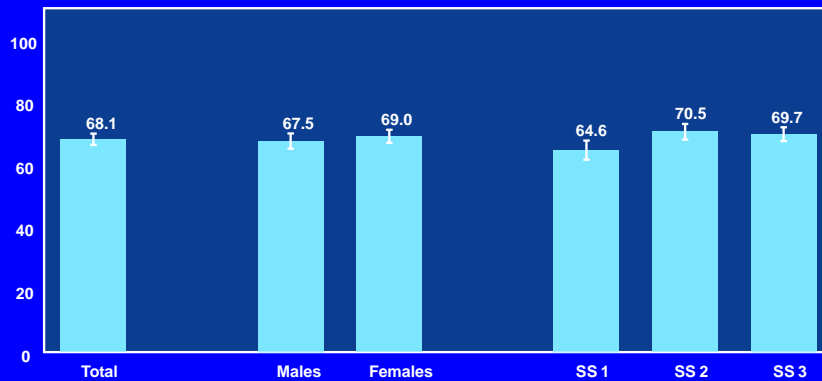
Ghana Senior High Survey

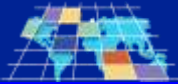
QN89. Percentage of students who walked or jogged as the outdoor non-sports physical activity they did most frequently



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QN90. Percentage of students who are interested in trying a new outdoor non-sport physical activity





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QN91. Percentage of students whose parents or guardians understood their problems and worries most of the time or always during the past 12 months

