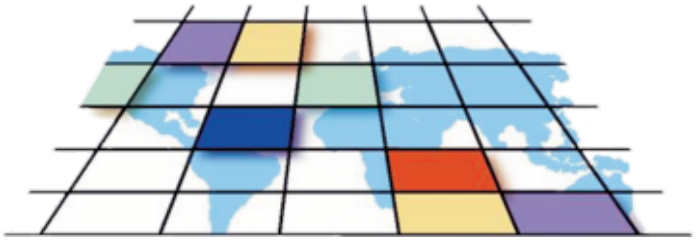
GSHS



Global School-based Student Health Survey

Lebanon, 2005 Global School-based Student Health Survey

GSHS Country Report

وزارة التربية
والتعليم العالي

REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

CDC
Centers For Disease Control And Prevention

World Health Organization

Preface
Ministry of Education & Higher Education

The School Health Program has been implemented in the Lebanese elementary public schools since 1987.Though, while the new curricula have been introduced, the Health Education curriculum has been developed and integrated in combination with other educational courses. Also, as part of the Education Reform Plan which included the new curricula's objectives, several objectives have been revealed in respect with the growth and development of the pupil in order to enable him to **"practice the health rules leading to his physical, psychological, and mental development".**

Until 2005, The School Health Program (SHP) has been applied using evaluation tools in order to monitor the pupils' behaviour based on their direct observation, and to compare the progress through their annual medical records.

In fact, The GSHS is actually considered as a scientific tool which will provide the Ministry of Education and Higher Education, the Ministry of Public Health, and the W.H.O, in addition to all associates, such as public institutions, international and local organizations, with an important database regarding the behaviour of the 3rd cycle students (Basic Education), prior to the forthcoming implementation of the SHP in all public schools.

Therefore, MEHE is taking into consideration the findings of this study in order to conduct further surveys with the intention of showing the development of the students' behaviour.

Finally, MEHE acknowledges the efforts made by all stakeholders in order to realize this study, and seize this opportunity to express its deep appreciation to all the involved organizations, and pays a special tribute to Dr. Jawad Mahjour, the representative of World Health Organization in Lebanon, for the demanding efforts that allowed to conduct this survey despite the current

circumstances, our beloved country is going through.

Minister of Education & Higher Education

Dr .Khaled Kabbani

Preface
Ministry of Public Health

The School Health Program, launched in 1997, aims to introduce into the curriculum at all educational levels health and environmental health messages and concepts, as per the New Education Infrastructure in Lebanon approved by the Council of Ministers in October 1995.

The Ministry of Health and the Ministry of Education both approved and engaged in the Global School-based Student Health Survey (GSHS), developed by the World Health Organization in 2001, in order to monitor the prevalence of important health risk behaviors and protective factors, and guide decisions related to the integrated school health curriculum.

The GSHS was conducted in 2005 for the first time in Lebanon. The results revealed in more than one area the need to revise the Lebanese Integrated Health Curriculum, as well as join efforts among the different partners to enhance and standardize the national school health program.

This publication contributes to filling the gap in health information and data availability, and constitutes a point of reference to the actual national school health program strategy and implementation level.

Dr. Walid Ammar
Director General
Ministry of Public Health

Table of Contents

Acknowledgements

On behalf of the Global School Health Survey Team, I would like to thank all those who contributed in their respective areas of expertise for the success of this survey. I would also like to acknowledge the efforts made by the Ministry of Education team, lead by Mrs Nina Lahham, as well as the Ministry of Health team, lead by Mrs Peggy Hanna, the WHO team, all Representatives of Private Schools Associations, all the participating schools and all the experts from the various disciplines, who voluntarily spent time and energy and worked wholeheartedly for preparing and implementing the study on time.

I would also like to thank the Center for Disease Control and Prevention (CDC) team in Atlanta who provided all the technical support needed, as well as the World Health Organization Regional Team, particularly Dr JouKhadar, for their continued assistance throughout the study.

Finally, special thanks go to Dr Rima Afifi Soweid and Ms Simone Abou Jaoudeh, who in addition to accompanying the national team in this tedious exercise, wrote up the final report for the whole study.

Dr Jaouad Mahjour
WHO representative
Beirut.

Executive Summary

In Oct. 05-Jan. 05, Lebanon implemented its first Global School-based Student Health Survey. The purpose of the survey was to:

- Gather data to develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies;
- Establish a baseline - and subsequently trends, in the prevalence of health behaviours and protective factors for use in evaluation of school health and youth health promotion; and
- Launch a systematic effort to gather data on health risk behaviour and protective factors among school children
- Define youth policies that should be implemented
- Identify actions to be taken to improve student's comprehensive health education

The survey was administered to students in grades 7-9 in 100 schools across Lebanon – chosen through a two-stage cluster sample design. Data was weighted to adjust for non response and varying probabilities of selection. The survey included questions on alcohol and other drug use, dietary behaviours, hygiene, mental health, protective factors, violence and unintentional injuries, and attitudes towards sexual and reproductive health and HIV related knowledge. Tobacco use was not included as the Global Youth Tobacco Survey had been implemented several months earlier in Lebanon.

Results indicated several areas of concern. Related to alcohol use, 19.5% of students had at least one drink containing alcohol in the month preceding the survey. Of those who drank, almost 40% drank two or more drinks on the day they drank. Fifteen percent of students are at risk for becoming overweight. With respect to attitudes towards sexual and reproductive health education, almost 50% of students were supportive of such discussions taking place in school classes. Surprisingly, 20% of students had never heard of HIV/AIDS. The topics of mental health and violence were the most distressing. Almost 40% of students felt so sad or hopeless in the last 12 months that they stopped doing their usual activities. Sixteen percent seriously considered suicide. Related to violence, 40% of students were physically attacked by a parent, and 25% by a teacher. Half have been in a physical fight one or more times in the last year. And over 30% state that they have been bullied. Unfortunately, the protective factor of parental supervision seems to be rare. About 4 in 10 students reported that their parents/guardians never or rarely really knew what they were doing with their free time in the last month. The results are presented overall, and by gender, school types (public/private) and grade level (7^{th}, 8^{th}, 9^{th}).

Overall, it is recommended that the Lebanese Integrated Health Curriculum be reassessed and edited in light of the results. Content needs to be enhanced, added, or methods of instruction changed. A recommendation to take an ecological approach to health promotion in schools, through the health promoting schools approach is also suggested. There is a clear and urgent need to specifically focus on the areas of violence prevention and mental health promotion, relying on the evidence based programs in these area. Finally, the necessity of evaluation of the extent of implementation of the current curriculum is stressed. Recommendations are also made related to specific risk behaviours.

Results of the GSHS presented here form a critical database for planning and evaluation of effective school health programs in Lebanon.

Introduction

Background

The Global School-based Student Health Survey (GSHS) was developed in 2001 by the World Health Organization (WHO), in collaboration with UNAIDS, UNESCO, and UNICEF, and with technical assistance from the United States Centers for Disease Control and Prevention (CDC). 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, 19 countries have completed the GSHS, including five from the Eastern Mediterranean Region. This report describes results from the first GSHS conducted in Lebanon during October 2005 - January 2006 by the Ministry of Education in collaboration with the Ministry of Public Health and the Lebanon Office of the World Health Organization.

Purpose

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

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

About GSHS

The GSHS is a school-based survey conducted primarily among students aged 13-15 years. It measures behaviors and protective factors related to the leading causes of mortality and morbidity among youth and adults in Lebanon. The modules covered in Lebanon were the following:

- Alcohol and other drug use
- Dietary behaviours
- Hygiene
- Mental health
- Protective factors
- Violence and unintentional injury

In addition, Lebanon added a section on attitudes towards education on sexual and reproductive health. Since the Global Youth tobacco Survey (GYTS) had been conducted twice in Lebanon, in 2001 and more recently 2005, it was felt unnecessary to include the tobacco module in the GSHS.

The World Health Organization in coordination with the Ministries of Health and Education had sponsored an earlier school based survey and related qualitative focus groups in 1997 prior to the initiation of an integrated health curriculum[1].

In addition, a survey of health risk behaviors was initiated in schools in Lebanon in 1997 by researchers at the American University of Beirut Department of Family Medicine and Department of Epidemiology and Biostatistics.[2] However, despite obtaining approval from both the Ministries of Health and Education, the survey was interrupted due to "unwarranted political reasons and other sensitive issues (p.15)." Results of the data gathered prior to interruption (n=1093) will be compared in the discussion section.

The GSHS, however, will be part of a systematic effort to collect ongoing data on health risk behaviors and protective factors of schools children in grades 7-9.

As mentioned previously, Lebanon has integrated health into its curriculum K-12 since 1997. Though comprehensive in scope, the implementation of this curriculum has not been evaluated since its becoming law. The Ministry of Education also has an active school health unit which is directly monitoring and following up activities till grade 6 of basic education in all public schools.

Information provided by the GSHS can serve as an indicator of curriculum implementation (but may also be indicative of factors which influence behaviors outside of the school system). GSHS results can also be used to guide the decisions related to the school health curriculum as well as extra-curricular activities.

In addition, the Ministry of Education and Higher Education has committed to extending the School Health Program, with its administrative infrastructure, to allow the implementation of a Comprehensive School Health Program from KG to G12, including having one School Health Educator in every Public School. Therefore, the results of the GSHS can help to:

1- Define youth health policies that need to be implemented in the near future, especially those most relevant to adolescent (for example, reproductive health issues and other health risk behaviors). Note that, if approved by the Ministry of Education, the policies defined would be mandatory to Public schools but only be recommended to private schools.
2- Define the terms of reference (TOR) for the school health educator – as well as any other needed personnel, including his/her professional profile and the kind of training needed to implement the TORs,
3- Identify actions to be taken to improve students' comprehensive health education

[1] World Health Organization. School Health and Environment Education Project. Results of quantitative and qualitative inquiries. 1997
[2] Sibi A & Kanan N. Youth Health Risk Behavior Survey among Secondary School Children in Lebanon: Prevalence and Clustering of Risk Behaviors, 1997. Report presented to WHO/UNICEF.

Methods

Sampling
The GSHS is a school-based survey of students aged 13-15 years. All schools containing seventh, eighth and ninth grade and that had 40 or more students were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample for Lebanon. This sample included 100 different schools (50 private and 50 public). Schools were selected with probability proportional to enrollment size; and classes were randomly selected. All students in the selected classes were eligible to participate.

GSHS Questionnaire
The questionnaire is self-administered consisting of two sets of questions. The first set included “core” questions that are used by all the countries unless the information is not relevant to the country. This set of questions allows the comparison of results between countries. The second set included optional questions that countries may or may not use according to its needs and priorities. The GSHS questionnaire in Lebanon included data on alcohol and other drug use, dietary behaviours, hygiene, mental health, protective factors, violence and unintentional injury, and attitudes towards the teaching of sexual and reproductive health. It consisted of 66 multiple-choice questions that were pre-tested with students of similar ages in Lebanon before GSHS was administered in schools. The survey was answered on special answer sheets and pencils were distributed to students from WHO in order to answer their survey. Pencils were kept with the students after completion of the survey as a gift. Appendix A included the final survey in English, and Appendix B in Arabic.

Preparatory Meetings
In Lebanon, various preparatory meetings took place. A technical committee composed of consultants in the various topics included in the GSHS, as well as the National Coordinator of School Health programs and the school health programs team from the Ministry of Education, reviewed the survey items and defined 'country-specific' items, leading to a total of 90 Arabic questions suggested by this committee.

Subsequently, in order to engage private schools, a series of meetings was held with representatives of the Private Schools Association. Other NGOs active in schools health such as YASA (active in Road Safety), Oum el Nour (Prevention and rehabilitation for Drug abuse), Makassed Foundation, Hariri Foundation, Al Hay’A Al Sohhiat Al Islamiah Social and Health offices, Food for Education Program (IOCC-Faculty of Health Sciences.of Balamand University), and Ajialouna were also invited to these meetings.

Finally, after receiving the school sample, 4 regional meetings were held with the concerned school representative. These meetings aimed at ensuring the approval of designated schools to participate actively to the survey.

The process described above greatly facilitated the process of field implementation.

Weighting
A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. The weight used for estimation is given by:

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

W1 = the inverse of the probability of selecting the school;
W2 = the inverse of the probability of selecting the classroom within the school;

f1 = a school-level nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools.
f2 = a student-level nonresponse adjustment factor calculated by class.
f3 = a poststratification adjustment factor calculated by grade.

The weighted results can be used to make important inferences about the priority health-risk behaviors and protective factors of all students in 7th, 8th, and 9th grades.

Data collection

Survey coordinators of different countries were trained at a regional workshop to conduct the GSHS in order to ensure that the survey is following the same procedures in all countries. In Lebanon, approximately 10 Survey Administrators were specially trained by the survey coordinator to conduct the GSHS. The survey administrators included School Health Supervisors from the Ministry of Education as well as MPH level professionals who had previous experience with survey administration. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet. (Note: the scannable sheet was in an English left to right format whereas the survey was an Arabic right to left format. The GSHS team would recommend that the scannable sheets be adjusted for the next administration of the survey)

After survey implementation was complete, a meeting was held with survey administrators to gather their insight into the survey implementation process. Their comments and suggestions are included as appendix C. These insights will be invaluable at the subsequent implementation of the GSHS in Lebanon

Results
Overview

The results describe the prevalence of alcohol and other drug use, dietary behaviours, hygiene, mental health, physical activity, protective factors, violence and unintentional injury, and reproductive and sexual health attitudes among students of the seventh, eighth and ninth grade in 92 different schools around Lebanon in Oct. – 2005 – Jan. 2006. 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. The school and student response rate, 92% and 96% respectively, were relatively high, yielding an overall rate of 88%. Each section begins with a background that defines the problem/issue internationally. This section is common in GSHS reports as it is abstracted from the Centers for Disease Control and Prevention master report template. *Lebanon-specific comparative data* (data from other studies conducted in Lebanon related to the particular issue/problem) are included in the Conclusions and Recommendations section.

Demographics

Over five thousand students (5,115) participated in the GSHS – Lebanon, 2005, 73.5% of whom were between 13-15 years of age and 52.3% were girls (2,776). (Table 1)

Table 1: demographic description of the sample

Variable		Frequency	Percent
Girls		2,776 students	52.3
Age: 13-15 years		3,754 students	73.5
Schools	Public	50 schools	50.0
	Private	42* schools	42.0
Grade 7		1,988 students	38.8
Grade 8		1,578 students	32.1
Grade 9		1,540 students	29.1

* 8 Private schools refused to participate

Alcohol and Other Drug Use

Background[3]

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 esophageal cancer, liver disease, homicide and other

[3] The background section and related references for each risk or protective factor was written by the Centers for Disease Control and Prevention.

intentional injuries, epilepsy, and motor vehicle accidents worldwide[i], and heavy alcohol use places one at greater risk for cardiovascular disease.[ii]

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.[iii]

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.[iv,v] Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively.[vi]

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.[vii]

Findings
The alcohol and drug use characteristics of the sample are described in the following table 2a,b,c by sex, school status (public or private) and grade level respectively.

Prevalence of current alcohol use
In Lebanon, 2 of every ten students (19.5%) had had at least one drink containing alcohol on one or more of the past 30 days. Male students (27.8%) were significantly more likely than female students (12.2%) to report such current alcohol use. Students in private schools (24.8%) were also more likely to report current alcohol use than students in public schools (13.4%).

Overall, 38.8% of students drank two or more drinks per day on the days they drank alcohol during the past 30 days. Male students (44.9%) were significantly more likely than female students (26.7%) to drink two or more drinks per day on the days they drink alcohol.

Access to alcohol products
Overall, 23.5% 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 (29.2%) were significantly more likely than female students (11.2%) to usually get the alcohol they drank by buying it from a store, shop, or from a street vendor.

Resistance to peer pressure
Overall, 91.2% of students would not drink alcohol if it was offered to them by their best friend. Female students had higher resistance (95.3%) than male students (86.8%) and public school students (93.7%) had higher resistance skills than private school students (89.2%).

Drunkenness and consequences of drinking
During their life, 13.8% of students drank so much alcohol they were really drunk one or more times. Male students (21.2%) were significantly more likely than female students (7.1%) to drink so much alcohol they were really drunk one or more times. Overall, almost 2 in 10 (17.0%) 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 (23.7%) were significantly more likely than female students (11.1%) to have a hang-over, feel sick, get into trouble, miss school or get into fights as a result of drinking alcohol.

Prevalence of lifetime drug use

In Lebanon, the prevalence of lifetime drug use (using drugs, such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers, one or more times during their life) was 3.5%. Male students (5.6%) were significantly more likely than female students (1.5%) to report lifetime drug use.

School health education about alcohol and other drugs

Only 30% of students surveyed had ever been taught in school about the dangers of alcohol and other drug use. Students in 8th grade (31.0%) and in 9th grade (36.1%) reported being taught about such dangers significantly more than students of 7th grade (24.5%).

Table 2a. Alcohol use and other drug use among students and by sex.

Questions	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Drank at least one drink containing alcohol on one or more of the past 30 days **	19.5 (15.6 – 23.4)	27.8 (22.1 – 33.4)	12.2 (8.9 – 15.5)
Drank two or more drinks per day on the days they drank alcohol during the past 30 days **	38.8 (35.2 – 42.4)	44.9 (41.1 – 48.8)	26.7 (22.5 – 31.0)
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days **	23.5 (19.8 – 27.1)	29.2 (25.3 – 33.0)	11.2 (7.1 – 15.4)
Drank so much alcohol they were really drunk one or more times during their life **	13.8 (11.3 – 16.3)	21.2 (17.0 – 25.3)	7.1 (5.6 – 8.7)
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 **	17.0 (14.9 – 19.2)	23.7 (20.2 – 27.1)	11.1 (9.4 – 12.7)
Probably or definitely would not drink alcohol if offered by their best friends **	91.2 (90.1 – 92.4)	86.8 (85.0 – 88.6)	95.3 (94.2 – 96.3)
Used drugs such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers one or more times during their life **	3.5 (2.8 – 4.1)	5.6 (4.3 – 6.9)	1.5 (1.0 – 2.0)
Students who were taught in any of their classes this year the dangers of drinking alcohol or using drugs	30.0 (27.7 – 32.2)	30.8 (28.1 – 33.6)	29.1 (26.6 – 31.6)

*95% confidence interval.

** statistically significant difference between girls and boys

Table 2b. Alcohol use and other drug use among students and by school status.

Questions	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Drank at least one drink containing alcohol on one or more of the past 30 days **	19.5 (15.6 – 23.4)	13.4 (8.0-18.7)	24.8 (19.3-30.2)
Drank two or more drinks per day on the days they drank alcohol during the past 30 days	38.8 (35.2 – 42.4)	43.4 (40.1-46.5)	36.8 (32.0-41.6)
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days	23.5 (19.8 – 27.1)	27.8 (22.7-32.9)	21.4 (16.5-26.2)
Drank so much alcohol they were really drunk one or more times during their life	13.8 (11.3 – 16.3)	10.3 (6.7-14.0)	16.7 (13.3-20.1)
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	17.0 (14.9 – 19.2)	14.1 (11.0-17.1)	19.6 (16.7-22.4)
Probably or definitely would not drink alcohol if offered by their best friends **	91.2 (90.1 – 92.4)	93.7 (92.0-95.5)	89.2 (87.6-90.7)
Used drugs such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers one or more times during their life	3.5 (2.8 – 4.1)	2.5 (1.6-3.3)	4.3 (3.3-5.3)
Students who were taught in any of their classes this year the dangers of drinking alcohol and using drugs	30.0 (27.7 – 32.2)	28.8 (25.7-31.8)	31.0 (27.7-34.3)

*95% confidence interval.

** statistically significant difference between public and private schools

Table 2c. Alcohol use and other drug use among students and by grade level.

Question	Grade Level		
	7th	8th	9th
Drank at least one drink containing alcohol on one or more of the past 30 days	18.7 (13.8-23.6)	19.9 (15.4-24.3)	20.1 (14.4-25.9)
Drank two or more drinks per day on the days they drank alcohol during the past 30 days	41.1 (34.8-47.3)	33.6 (29.2-38.0)	41.6 (34.9-48.4)
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days	19.5 (14.7-24.3)	26.5 (20.3-32.8)	24.6 (18.3-30.8)
Drank so much alcohol they were really drunk one or more times during their life	13.9 (10.4-17.5)	13.5 (10.8-16.2)	13.8 (10.4-17.3)
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	17.3 (14.2-20.3)	17.5 (14.8-20.2)	16.1 (13.1-19.2)
Probably or definitely would not drink alcohol if offered by their best friends	93.1 (91.4-94.7)	91.2 (89.4-92.9)	89.0 (86.7-91.4)
Used drugs such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers one or more times during their life	3.5 (2.4-4.6)	3.1 (2.1-4.2)	3.7 (2.7-4.7)
Students who were taught in any of their classes this year the dangers of drinking alcohol or using drugs ** ♠	24.5 (22.2-26.8)	31.0 (27.9-34.2)	36.1 (32.3-39.9)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ statistically significant difference between 7th an 9th

Dietary Behaviours

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

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

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.[ix]

Findings
The dietary behavior characteristics of the sample are described in the tables 3a,b,c by sex, school status (public or private) and grade level respectively.

Prevalence of overweight
In Lebanon, 15.8% of students were at risk for becoming overweight and 3.0% were overweight (i.e., at or above the 95th percentile for body mass index by age and sex). Male students (20.5%) were significantly more likely than female students (10.4%) to be at risk for becoming overweight.

Prevalence of hunger
Overall, 3.0% of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. Students in the 7th grade (3.8%) were significantly more likely to report going hungry than those in the 8th grade (2.1%).

Fruit and vegetable intake
Overall, 79.0% of students usually ate fruit, such as apples, bananas and oranges, one or more times per day during the past 30 days. Students in the 7th grade (83.2%) were significantly more likely to report eating fruits one or more times per day than students in the 8th grade (77.1%) or in the 9th grade (75.4%). Overall, 74.4% of students usually ate vegetables, such as salads, spinach, eggplant, tomatoes and cucumbers, one or more times per day during the past 30 days. In addition, 24.6% of students usually ate fruits and vegetables five or more times per day during the past 30 days. Male students (27.6%) were significantly more likely than female students (21.9%) to eat fruits and vegetables five or more times per day. In addition, public school students (27.2%) were significantly more likely to report eating fruits and vegetables 5 or more times per day than private school students (22.5%). And, students in 7th grade (28.4%) were significantly more likely to report such behavior than students in 8th grade (23.0%) or in 9th grade (21.5%).

Other dietary behaviors
Overall, 45.6% of students usually ate cereals and carbohydrates such as potato, wheat, rice, or maize and their products for two or more times/day during the past 30 days. Overall, 35.9% of students usually drank milk or ate milk products like yogurt, labneh, cheese and cream two or more times per day during the past 30 days. Male students (38.5%) were significantly more likely than female students (33.6%) to drink milk or eat milk products two or more times per day. Also, students in the 7th grade (37.9%) were significantly more likely to drink milk or eat milk products than those in the 9th grade (32.4%). Over thirty percent of students (33.0%) drank carbonated soft drinks like Pepsi, Coca cola, Fanta and Seven up two or more times/day during the past 30 days with males (39.6%) significantly more likely to drink carbonated soft drinks than females (27.0%). Sixty two percent of students ate breakfast most of the time with males (69.3%) significantly more likely than females (56.1%) to have breakfast. Overall, 19.2% of students said that the main reason for not having breakfast was not having enough time. About a fifth of students (21.0%) brought lunch with them to school most of the time. Private school students (26.3%) were significantly more likely than public school students (14.8%) to bring lunch to school most of the time. About a fourth (27.4%) of students reported eating or ordering from a restaurant that serves fast food like burgers, shawarma, pizza, falafel, thyme or

pastries on the three or more days of the last week. Males (31.6%) were significantly more likely to eat fast food than females (23.6%).

Table 3a. BMI and dietary behaviours, by sex.

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
At risk for becoming overweight[1] **	15.8 (14.4 – 17.2)	20.5 (18.7 – 22.4)	10.4 (8.6 – 12.1)
Overweight[2]	3.0 (2.2 – 3.8)	3.8 (2.7 – 5.0)	2.0 (1.1 – 2.9)
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	3.0 (2.5 – 3.5)	3.4 (2.6 – 4.2)	2.6 (2.0 – 3.2)
Usually ate fruit, such as apples, bananas and oranges, one or more times per day during the past 30 days	79.0 (77.3 – 80.6)	80.6 (78.6 – 82.5)	77.5 (75.5 – 79.6)
Usually ate vegetables, such as salads, spinach, eggplant, tomatoes and cucumbers, one or more times per day during the past 30 days	74.4 (73.2 – 75.7)	74.7 (73.0 – 76.4)	74.1 (72.4 – 75.9)
Ate fruits and vegetables five or more times per day during the past 30 days **	24.6 (23.0 – 26.2)	27.6 (25.3 – 29.8)	21.9 (20.0 – 23.9)
Ate cereals and carbohydrates such as potato, wheat, rice, or maize and their products for 2 or more times/day	45.6 (44.2 – 46.9)	46.6 (44.5 – 48.8)	44.6 (42.8 – 46.4)
Drank milk or ate milk products like yogurt, labneh, cheese and cream two or more times/day **	35.9 (34.3 – 37.6)	38.5 (36.2 – 40.7)	33.6 (31.5 – 35.8)
Drank carbonated soft drinks like Pepsi, Coca cola, Fanta and Seven up two or more times/day **	33.0 (30.8 – 35.2)	39.6 (36.7 – 42.4)	27.0 (25.0 – 29.1)
Ate breakfast most of the times **	62.1 (60.0 – 64.3)	69.3 (66.5 – 72.0)	56.1 (53.5 – 58.6)
Main reason for not eating breakfast is not having time	19.2 (17.7 – 20.7)	17.9 (15.6 – 20.1)	20.4 (18.7 – 22.0)
Brought lunch to school most of the time	21.0 (18.5 – 23.6)	20.6 (17.8 – 23.5)	21.4 (18.3 – 24.6)
Ate or ordered from a restaurant that serves fast food like burgers, shawarma, pizza, falafel, thyme or pastries on three or more days **	27.4 (25.9 – 29.0)	31.6 (29.8 – 33.5)	23.6 (21.5 – 25.7)

*95% confidence interval.

** statistically significant difference between girls and boys

[1]Students who were at or above the 85th percentile, but below the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.

[2]Students who were at or above the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.

Table 3b. BMI and dietary behaviours, by school status.

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
At risk for becoming overweight [1]	15.8 (14.4 – 17.2)	Data not available	16.6 (14.8-18.4)
Overweight [2]	3.0 (2.2 – 3.8)	Data not available	2.7 (1.9-3.5)
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	3.0 (2.5 – 3.5)	3.0 (2.2-3.7)	3.0 (2.4-3.7)
Usually ate fruit, such as apples, bananas and oranges, one or more times per day during the past 30 days	79.0 (77.3 – 80.6)	80.8 (78.7-83.0)	77.4 (74.9-79.9)
Usually ate vegetables, such as salads, spinach, eggplant, tomatoes and cucumbers, one or more times per day during the past 30 days	74.4 (73.2 – 75.7)	74.2 (72.2-76.2)	74.6 (73.1-76.1)
Ate fruits and vegetables five or more times per day during the past 30 days **	24.6 (23.0 – 26.2)	27.2 (24.7-29.7)	22.5 (20.4-24.5)
Ate cereals and carbohydrates such as potato, wheat, rice, or maize and their products for 2 or more times/day	45.6 (44.2 – 46.9)	46.1 (44.0-48.1)	45.1 (43.3-47.0)
Drank milk or ate milk products like yogurt, labneh, cheese and cream two or more times/day	35.9 (34.3 – 37.6)	33.5 (31.3-35.7)	38.0 (35.7-40.3)
Drank carbonated soft drinks like Pepsi, Coca cola, Fanta and Seven up two or more times/day	33.0 (30.8 – 35.2)	33.3 (30.4-36.2)	32.8 (29.5-36.1)
Ate breakfast most of the times	62.1 (60.0 – 64.3)	64.2 (60.5-67.8)	60.5 (58.1-62.9)
Main reason for not eating breakfast is not having time	19.2 (17.7 – 20.7)	17.7 (15.1-19.1)	21.0 (18.8-23.2)
Brought lunch to school most of the time **	21.0 (18.5 – 23.6)	14.8 (11.3-18.2)	26.3 (22.6-30.0)
Ate or ordered from a restaurant that serves fast food like burgers, shawarma, pizza, falafel, thyme or pastries on three or more days	27.4 (25.9 – 29.0)	27.4 (24.5-30.2)	27.5 (25.8-29.2)

*95% confidence interval.

** statistically significant difference between public and private

[1]Students who were at or above the 85th percentile, but below the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.

[2]Students who were at or above the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.

Table 3c BMI and dietary behaviours, by grade level.

Question	Grade Level		
	7th	8th	9th
At risk for becoming overweight[1]	16.7 (14.6-18.9)	15.8 (13.2-18.5)	14.7 (12.1-17.4)
Overweight [2]	4.0 (2.6-5.4)	2.6 (1.5-3.6)	2.4 (1.3-3.4)
Went hungry most of the time or always because there was not enough food in their home during the past 30 days **	3.8 (3.0-4.7)	2.1 (1.5-2.8)	2.9 (2.1-3.7)
Usually ate fruit, such as apples, bananas and oranges, one or more times per day during the past 30 days ** ♠	83.2 (81.1-85.3)	77.1 (74.6-79.5)	75.4 (73.0-77.7)
Usually ate vegetables, such as salads, spinach, eggplant, tomatoes and cucumbers, one or more times per day during the past 30 days	76.3 (74.3-78.4)	73.6 (71.1-76.1)	72.8 (70.4-75.1)
Ate fruits and vegetables five or more times per day during the past 30 days ** ♠	28.4 (26.1-30.6)	23.0 (20.7-25.2)	21.5 (19.3-23.7)
Ate cereals and carbohydrates such as potato, wheat, rice, or maize and their products for 2 or more times/day	46.3 (44.0-48.6)	46.2 (43.9-48.5)	44.0 (41.5-46.5)
Drank milk or ate milk products like yogurt, labneh, cheese and cream two or more times/day ♠	37.9 (35.4-40.5)	36.7 (33.6-39.8)	32.4 (30.0-34.8)
Drank carbonated soft drinks like Pepsi, Coca cola, Fanta and Seven up two or more times/day	35.5 (32.8-38.2)	31.8 (28.8-34.8)	31.1 (28.0-34.3)
Ate breakfast most of the times	62.6 (59.5-65.7)	62.9 (59.5-66.3)	60.7 (57.5-63.9)
Main reason for not eating breakfast is not having time	18.6 (16.1-21.1)	18.6 (16.5-20.8)	20.7 (18.7-22.7)
Brought lunch to school most of the time	21.7 (19.0-24.5)	22.4 (18.8-25.9)	18.6 (14.6-22.6)
Ate or ordered from a restaurant that serves fast food like burgers, shawarma, pizza, falafel, thyme or pastries on three or more days	29.8 (27.4-32.2)	26.1 (23.5-28.8)	25.8 (23.2-28.5)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ statistically significant difference between 7th an 9th

[1]Students who were at or above the 85th percentile, but below the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.
[2]Students who were at or above the 95th percentile for body mass index by age and sex based on reference data from Cole, Bellizzi, Flegal, and Dietz, *BMJ*, May 2000.

Hygiene

Background

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin American countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increased sugar consumption and inadequate fluoride exposure.[x] 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.[xi] In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental disease.[xii]

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

Findings

The hygiene behavior of the sample are described in the tables 4a,b,c by sex, school status (public or private) and grade level respectively.

Personal hygiene

In Lebanon, the percentage of students who did not clean or brush their teeth during the past 30 days was 12.3%. Male students (14.9%) were significantly more likely than female students (9.9%) to not clean or brush their teeth. And public school students (15.4%) were significantly more likely not to clean or brush their teeth than private school students (9.6%). However, if one takes the more appropriate indicator of brushing three times per day, then the data is less positive. Overall, 65% of students brushed their teeth less than 3 times per day. This ranges from 57% in 7th grade to 74% in 9th grade. Over a quarter of the students surveyed (27.5%) saw a dentist more than 24 months ago or never saw a dentist for a check-up, exam, teeth cleaning or other dental work. Public school students (32.9%) were significantly more likely to have seen a dentist over 24 months ago than private school students (23.0%).

Overall, 4.5% of students never or rarely washed their hands before eating during the past 30 days, 2.3% of students never or rarely used soap when washing their hands during the past 30 days and 2.3% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. Male students (3.2%) were significantly more likely than female students (1.5%) to never or rarely wash their hands after using the toilet or latrine.

Table 4a: Hygiene-related behaviours, by sex

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Cleaned or brushed their teeth less than 1 time/day during the past 30 days **	12.3 (11.0 – 13.6)	14.9 (13.1 – 16.7)	9.9 (8.4 – 11.4)
Cleaned or brushed their teeth less than 3 times/day during past 30 days∞	*64.9*	*67.8*	*62.2*
Last saw a dentist more than 24 months ago or never saw a dentist for a check-up, exam, teeth cleaning or other dental work	27.5 (25.2 – 29.8)	28.0 (25.3 – 30.7)	27.0 (23.9 – 30.2)
Never or rarely washed their hands before eating during the past 30 days	4.5 (3.6 – 5.3)	3.9 (2.8 – 5.0)	5.0 (4.0 – 5.9)
Never or rarely washed their hands after using the toilet or latrine **	2.3 (1.8 – 2.9)	3.2 (2.3 – 4.2)	1.5 (1.1 – 2.0)
Never or rarely used soap when washing their hands	2.3 (1.7 – 2.9)	3.1 (2.1 - 4.1)	1.5 (0.9 – 2.1)

*95% confidence interval.
** statistically significant difference between boys and girls
∞ no significance levels are available for this specific question

Table 4b: Hygiene-related behaviours, by school status

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Cleaned or brushed their teeth less than 1 time/day during the past 30 days **	12.3 (11.0 – 13.6)	15.4 (13.2-17.6)	9.6 (8.3-11.0)
Cleaned or brushed their teeth less than 3 times/day during past 30 days∞	*64.9*	*63.2*	*66.3*
Last saw a dentist more than 24 months ago or never saw a dentist for a check-up, exam, teeth cleaning or other dental work **	27.5 (25.2 – 29.8)	32.9 (29.8-35.9)	23.0 (19.7-26.4)
Never or rarely washed their hands before eating during the past 30 days	4.5 (3.6 – 5.3)	4.5 (3.3-5.7)	4.4 (3.3-5.6)
Never or rarely washed their hands after using the toilet or latrine	2.3 (1.8 – 2.9)	2.1 (1.2-3.0)	2.5 (1.8-3.3)
Never or rarely used soap when washing their hands	2.3 (1.7 – 2.9)	2.5 (1.5-3.5)	2.1 (1.4-2.8)

*95% confidence interval.
** statistically significant difference between public and private
∞ no significance levels are available for this specific question

Table 4c: Hygiene-related behaviours, by grade level

Question	Grade Level		
	7th	8th	9th
Cleaned or brushed their teeth less than 1 time/day during the past 30 days	10.6 (9.1-12.2)	12.4 (10.3-14.6)	14.3 (12.1-16.5)
Cleaned or brushed their teeth less than 3 times/day during past 30 days∞	*57.4*	*66.0*	*73.8*
Last saw a dentist more than 24 months ago or never saw a dentist for a check-up, exam, teeth cleaning or other dental work	27.0 (23.7-30.2)	27.8 (24.8-30.7)	28.1 (25.1-31.1)
Never or rarely washed their hands before eating during the past 30 days	3.8 (2.6-5.0)	4.6 (3.6-5.7)	5.2 (3.7-6.6)
Never or rarely washed their hands after using the toilet or latrine	2.8 (1.9-3.6)	2.2 (1.3-3.1)	1.9 (1.2-2.7)
Never or rarely used soap when washing their hands	2.3 (1.4-3.2)	2.8 (1.9-3.7)	1.7 (1.1-2.3)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ statistically significant difference between 7th an 9th
∞ no significance levels are available for this specific question

Mental Health

Background

World-wide, approximately 20% of children and adolescents suffer from a disabling mental illness.[xv] 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.[xvi] 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 behaviors. Each year, about 4 million adolescents world-wide attempt suicide. Suicide is the third leading cause of death among adolescents. [xvii, xviii]

Findings

The mental health-related characteristics of the sample are described in the tables 5a,b,c by sex, school status (public or private) and grade level respectively.

Loneliness/depression

In Lebanon, more than 1 in 10 students (12.1%) felt lonely most of the time or always during the past 12 months. Female students (16.1%) were significantly more likely than male students (7.7%) to feel lonely most of the time or always. In addition, public school students (14.2%) were significantly more likely to feel lonely than private school students (10.3%). Overall, over one in ten students (13.7%) felt so worried about something most of the time or always that they could not sleep at night

during the past 12 months with female students (17.7%) significantly more likely than male students (9.3%). More than ten percent of students (12.5%) had a hard time staying focussed on their homework or other things they had to do during the past 12 months. Students in the 9th grade (16.6%) were significantly more likely to report having a hard time staying focused than students in the 8th grade (11.2%) or the 7th grade (10.5%).

Overall, almost 4 out of 10 students (37.5%) felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. Female students (42.9%) were significantly more likely than male students (31.6%) to feel so sad or hopeless almost every day for two weeks or more in a row. In addition, students of the 9th grade (41.4%) were significantly more likely to report feeling so sad or hopeless than students of the 7th grade (35.2%).

Suicidal behavior

Overall, 16.0% of students seriously considered attempting suicide during the past 12 months and 11.1% of students made a plan about how they would attempt suicide during the past 12 months. Students in the 9th grade (18.8%) were significantly more likely to seriously consider suicide than students in the 7th grade (14.2%). Students in the 9th grade (13.1%) were significantly more likely to make a plan than students in the 8th grade (9.2%).

Overall, 3.5% of students have no close friends and 68.3% were satisfied with the number of close friends they have. Students in private schools (70.6%) were significantly more likely than student in public schools (65.5%) to report being satisfied with the number of close friends they had.

Table 5a: Mental health issues among students, by sex

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Most of the time or always felt lonely during the past 12 months **	12.1 (10.7 – 13.4)	7.7 (6.4 – 9.0)	16.1 (14.2 – 17.9)
Most of the time or always felt so worried about something that they could not sleep at night during the past 12 months **	13.7 (12.3 – 15.1)	9.3 (7.9 – 10.7)	17.7 (15.9 – 19.6)
Had hard time staying focussed on their homework or other things they had to do during the past 12 months	12.5 (11.4 – 13.6)	11.8 (10.4 – 13.1)	13.2 (11.8 – 14.6)
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 (35.3 – 39.8)	31.6 (29.0 – 34.1)	42.9 (40.4 – 45.5)
Seriously considered attempting suicide during the past 12 months	16.0 (14.7 – 17.4)	14.5 (13.0 – 16.0)	17.5 (15.6 – 19.4)
Made a plan about how they would attempt suicide during the past 12 months	11.1 (9.9 – 12.2)	11.0 (9.7 – 12.3)	11.2 (9.7 – 12.7)
Have no close friends	3.5 (2.8 – 4.1)	3.7 (2.6 – 4.8)	3.3 (2.6 – 4.0)
Satisfied with the number of close friends they have	68.3 (66.4 – 70.1)	66.1 (63.5 – 68.7)	70.2 (68.0 – 72.4)

**95% confidence interval.*

** statistically significant difference between girls and boys

Table 5b: Mental health issues among students, by school status

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Most of the time or always felt lonely during the past 12 months **	12.1 (10.7 – 13.4)	14.2 (12.0-16.3)	10.3 (8.6-11.9)
Most of the time or always felt so worried about something that they could not sleep at night during the past 12 months	13.7 (12.3 – 15.1)	15.8 (13.4-18.2)	11.9 (10.4-13.5)
Had hard time staying focussed on their homework or other things they had to do during the past 12 months	12.5 (11.4 – 13.6)	13.0 (11.4-14.5)	12.1 (10.5-13.7)
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 (35.3 – 39.8)	40.3 (36.7-44.0)	35.2 (32.6-37.8)
Seriously considered attempting suicide during the past 12months	16.0 (14.7 – 17.4)	16.1 (14.3-17.9)	16.0 (14.1-17.9)
Made a plan about how they would attempt suicide during the past 12 months	11.1 (9.9 – 12.2)	12.7 (11.1-14.2)	9.8 (8.2-11.4)
Have no close friends	3.5 (2.8 – 4.1)	4.0 (3.2-4.8)	3.1 (2.1-4.0)
Satisfied with the number of close friends they have **	68.3 (66.4 – 70.1)	65.5 (63.4-67.6)	70.6 (67.7-73.5)

**95% confidence interval.*

** statistically significant difference between public and private

Table 5c: Mental health issues among students, by grade level

	Grade Level		
	7th	8th	9th
Most of the time or always felt lonely during the past 12 months	11.5 (10.1-12.8)	11.9 (9.5-14.3)	12.9 (10.6-15.2)
Most of the time or always felt so worried about something that they could not sleep at night during the past 12 months	12.7 (11.0-14.5)	12.5 (10.3-14.8)	16.1 (13.9-18.4)
Had hard time staying focussed on their homework or other things they had to do during the past 12 months ♣♠	10.5 (9.2-11.7)	11.2 (9.5-13.0)	16.6 (14.3-19.0)
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 ♠	35.2 (32.3-38.0)	36.8 (32.9-40.8)	41.4 (38.5-44.2)
Seriously considered attempting suicide during the past 12months ♠	14.2 (12.5-15.9)	15.7 (13.4-18.1)	18.8 (16.8-20.9)
Made a plan about how they would attempt suicide during the past 12 months ♣	11.2 (9.7-12.7)	9.2 (7.5-10.9)	13.1 (11.3-14.9)
Have no close friends	3.7 (2.6-4.8)	3.6 (2.6-4.6)	3.0 (2.1-3.9)
Satisfied with the number of close friends they have	68.0 (65.4-70.6)	69.5 (66.5-72.4)	67.4 (64.6-70.2)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ *statistically significant difference between 7th an 9th*

Protective Factors

Background
For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviours including violence and sexual risk behaviours.[xix]

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

Being liked and accepted by peers is crucial to young people's health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to

feelings of loneliness and psychological symptoms. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events.[xxi]

Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours, and violence.[xxii]

Findings
The protective factors characteristic of the sample are described in the tables 6a,b,c by sex, school status (public or private) and grade level respectively.

Missing classes
In Lebanon, 15.3% of students missed classes or school without permission on one or more of the past 30 days. Male students (20.9%) were significantly more likely than female students (10.3%) to miss classes or school without permission.

Being kind and helpful
Overall, 19.1% 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 (22.0%) were significantly more likely than female students (16.5%) to report that most of the students in their school were never or rarely kind and helpful during the past 30 days. In addition, students in the 7th grade (24.3%) were significantly more likely to report that most students in their schools were never or rarely kind and helpful than students in the 8th grade (17.7%) or the 9th grade (13.7%).

Parents or guardians
Overall, almost 4 in 10 students (37.6%) reported their parents or guardians never or rarely checked to see if their homework was done during the past 30 days. Female students (40.8%) were significantly more likely than male students (34.1%) to report their parents or guardians never or rarely check to see if their homework is done. Overall, 38.6% of students reported their parents or guardians never or rarely understood their problems and worries during the past 30 days. Public school students (42.8%) were significantly more likely to report that their parents don't understand them than private school students (35.0%). Almost 4 in 10 students (39.9%) reported their parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days. Male students (43.0%) were significantly more likely than female students (37.1%) to report their parents or guardians never or rarely knew what they are doing with their free time. In addition, public school students (43.8%) were more likely to report that their parents did not know what they were doing than private school students (36.6%); and students in the 7th grade (43.8%) were significantly more likely to report so than students in the 8th grade (37.3%) or the 9th grade (37.3%).

Table 6a: Protective factors among students, by sex

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Missed classes or school without permission on one or more of the past 30 days **	15.3 (13.9 – 16.7)	20.9 (18.7 – 23.0)	10.3 (9.0 – 11.7)
Most of the students in their school were never or rarely kind and helpful during the past 30 days **	19.1 (17.4 – 20.8)	22.0 (19.7 – 24.3)	16.5 (14.5 – 18.4)
Parents or guardians never or rarely checked to see if their homework was done during the past 30 days **	37.6 (35.8 – 39.3)	34.1 (31.3 – 36.9)	40.8 (38.8 – 42.8)
Parents or guardians never or rarely understood their problems and worries during the past 30 days	38.6 (36.3 – 40.9)	39.4 (37.0 – 41.8)	37.9 (34.7 – 41.0)
Parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days **	39.9 (37.8 – 41.9)	43.0 (40.3 – 45.7)	37.1 (34.2 – 40.0)

*95% confidence interval.
** statistically significant difference between girls and boys

Table 6b: Protective factors among students, by school status

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Missed classes or school without permission on one or more of the past 30 days	15.3 (13.9 – 16.7)	16.1 (13.7-18.4)	14.7 (13.0-16.4)
Most of the students in their school were never or rarely kind and helpful during the past 30 days	19.1 (17.4 – 20.8)	21.2 (18.7-23.6)	17.3 (14.9-19.6)
Parents or guardians never or rarely checked to see if their homework was done during the past 30 days	37.6 (35.8 – 39.3)	37.3 (34.7-39.8)	37.9 (35.4-40.3)
Parents or guardians never or rarely understood their problems and worries during the past 30 days **	38.6 (36.3 – 40.9)	42.8 (39.8-45.9)	35.0 (31.6-38.3)
Parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days **	39.9 (37.8 – 41.9)	43.8 (41.2-46.4)	36.6 (33.5-39.7)

*95% confidence interval.
** statistically significant difference between public and private

Table 6c: Protective factors among students, by grade level

	Grade Level		
	7th	8th	9th
Missed classes or school without permission on one or more of the past 30 days	16.6 (14.7-18.4)	13.1 (10.6-15.7)	16.1 (13.6-18.5)
Most of the students in their school were never or rarely kind and helpful during the past 30 days ** ♠	24.3 (21.7-26.9)	17.7 (15.2-20.2)	13.7 (11.7-15.7)
Parents or guardians never or rarely checked to see if their homework was done during the past 30 days	36.1 (33.9-38.3)	36.8 (33.2-40.5)	40.4 (37.3-43.5)
Parents or guardians never or rarely understood their problems and worries during the past 30 days	41.4 (38.6-44.2)	35.7 (32.6-38.8)	38.0 (35.1-40.8)
Parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days ** ♠	43.8 (41.0-46.5)	37.3 (33.9-40.8)	37.3 (34.8-40.3)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ statistically significant difference between 7th an 9th

Violence and Unintentional Injury

Background
Unintentional injuries are a major cause of death and disability among young children.[xxiii] Each year, about 875,000 children under the age of 18 years 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 years have 60% higher injury death rates than females. Teenagers aged 15-19 years 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[xxiv]. For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment.[xxv]

Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviors.

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

Findings
The violence and unintentional injury characteristics of the sample are described in the tables 7a,b,c by sex, school status (public or private) and grade level respectively.

Violence
In Lebanon, almost 4 in 10 students (37.0%) were physically attacked by an adult family member one or more times during the past 30 days. Students in grade 7 (40.4%) were more likely to report being attacked by a family member than students in grade 9 (32.6%). In addition, 1 in 4 students (24.7%) reported being physically attacked by a teacher or school staff one or more times during the past 30 days. Male students (37.0%) were significantly more likely than female students (13.5%) to have been attacked. And students in the 7th grade (31.1%) were significantly more likely than students in the 9th grade (17.6%) to report being attacked by a teacher or school staff. Overall, almost 5 in 10 students (46.0%) were in a physical fight one or more times during the past 12 months with male students (64.6 %) significantly more likely than female students (29.0%) to have been in a physical fight.

More than thirty percent (32.4%) were seriously injured one or more times during the past 12 months with male students (37.0%) significantly more likely than female students (28.4%) to have been seriously injured. Among students who were seriously injured during the past 12 months, 18.5% were playing or training for a sport when their most serious injury happened to them, 7.9% had their most serious injury caused by a fall, 54.4% had their most serious injury occur as a result of hurting themselves by accident, and 32.5% experienced a broken bone or dislocated joint as their most serious injury. Male students (25.2%) were significantly more likely than female students (10.7%) to be playing or training for a sport when their most serious injury happens to them. And, male students (40.8%) were significantly more likely than female students (22.9%) to experience a broken bone or dislocated joint as their most serious injury.

Bullying
Overall, more than 3 of 10 students (33.8%) were bullied on one or more days during the past 30 days with male students (38.7%) significantly more likely than female students (29.4%) to be bullied. Among students who were bullied during the past 30 days, more than 1 out of 4 (26.9%) reported being bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Male students (32.2%) are significantly more likely than female students (20.6%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Sixteen percent of students (16.5%) reported having had someone steal or deliberately damage their property (car, clothing, books) on school grounds one or more time during the past 30 days. Male students (19.0%) were significantly more likely than female students (14.3%) to have their property stolen or damaged. Also, students in the 7th grade (19.3%) were significantly more likely to report such damage than students in the 8th (14.8%) or 9th grades (14.7%).

Sexual harassment
Overall, almost 2 in 10 students (17.3%) report being subjected to sexual harassment with male students (19.5%) significantly more likely than female students (15.3%) to be sexually harassed.

Using a seat belt
Less than 15% of students (14.3%) report using a sear belt most of the time or always when riding in a car or other motor vehicle driven by someone else during the past 30 days. Students in the 7th grade (18.8%) were more likely to report wearing a seat belt most or all of the time than students in the 8th (12.8%) or 9th (10.0%) grades.

Table 7a: Violence and unintentional injury among students, by sex

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Physically attacked by an adult family member one or more times during the past 30 days	37.0 (35.0 – 39.0)	37.3 (34.8 – 39.9)	36.7 (34.4 – 39.1)
Physically attacked by teacher or school staff one or more times during the past 12 months **	24.7 (21.4 – 27.9)	37.0 (32.3 – 41.6)	13.5 (10.9 – 16.0)
Were in a physical fight one or more times during the past 12 months **	46.0 (43.9 – 48.1)	64.6 (62.1 – 67.0)	29.0 (26.9 – 31.0)
Were seriously injured one or more times during the past 12 months (of those who were in a fight) **	32.4 (30.7 – 34.2)	37.0 (34.2 – 39.7)	28.4 (26.2 – 30.7)
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 **	18.5 (15.9 – 21.1)	25.2 (21.3 – 29.0)	10.7 (8.2 – 13.2)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	7.9 (6.0 – 9.7)	9.7 (7.1 – 12.2)	5.6 (3.7 – 7.6)
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	54.4 (51.3 – 57.5)	53.1 (48.9 – 57.3)	56.1 (51.2 – 60.9)
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 **	32.5 (29.7 – 35.4)	40.8 (36.8 – 44.9)	22.9 (19.3 – 26.6)
Were bullied on one or more days during the past 30 days**	33.8 (31.9 – 35.6)	38.7 (35.9 – 41.4)	29.4 (27.0 – 31.8)
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 **	26.9 (24.1 – 29.7)	32.2 (28.6 – 35.8)	20.6 (17.0 – 24.2)
Subjected to sexual harassment **	17.3 (15.9 – 18.6)	19.5 (17.3 – 21.7)	15.3 (13.9 – 16.6)
Had someone steal or deliberately damage their property, such as their car, clothing, or books on school property on one or more times during the past 30 days **	16.5 (15.2 – 17.9)	19.0 (17.0 – 21.1)	14.3 (12.9 – 15.7)
Most of the time or always used a seat belt when riding in a car or other motor vehicle driven by someone else during the past 30 days	14.3 (12.9 – 15.7)	15.4 (13.4 – 17.3)	13.3 (11.6 – 15.1)

*95% confidence interval.

** statistically significant difference between girls and boys

Table 7b: Violence and unintentional injury among students, by school status

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Physically attacked by an adult family member one or more times during the past 30 days	37.0 (35.0 – 39.0)	38.0 (35.2-40.8)	36.1 (33.4-38.8)
Physically attacked by teacher or school staff one or more times during the past 12 months	24.7 (21.4 – 27.9)	26.8 (23.0-30.5)	22.9 (17.8-28.0)
Were in a physical fight one or more times during the past 12 months	46.0 (43.9 – 48.1)	43.5 (39.8-47.1)	48.1 (45.7-50.5)
Were seriously injured one or more times during the past 12 months (of those who were in a fight)	32.4 (30.7 – 34.2)	31.2 (28.7-33.6)	33.4 (30.9-35.9)
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	18.5 (15.9 – 21.1)	18.0 (13.1-22.9)	18.9 (16.1-21.6)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	7.9 (6.0 – 9.7)	7.4 (5.2-9.6)	8.2 (5.4-11.0)
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	54.4 (51.3 – 57.5)	52.4 (47.3-57.6)	55.9 (52.1-59.6)
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	32.5 (29.7 – 35.4)	29.2 (25.2-33.1)	35.1 (31.1-39.1)
Were bullied on one or more days during the past 30 days	33.8 (31.9 – 35.6)	33.0 (30.0-36.0)	34.4 (32.1-36.7)
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	26.9 (24.1 – 29.7)	28.9 (24.0-33.8)	25.4 (22.2-28.5)
Subjected to sexual harassment	17.3 (15.9 – 18.6)	17.8 (15.6-20.1)	16.8 (15.2-18.3)
Had someone steal or deliberately damage their property, such as their car, clothing, or books on school property on one or more times during the past 30 days	16.5 (15.2 – 17.9)	16.4 (14.2-18.6)	16.7 (15.2-18.3)
Most of the time or always used a seat belt when riding in a car or other motor vehicle driven by someone else during the past 30 days	14.3 (12.9 – 15.7)	12.8 (11.1-14.5)	15.6 (13.5-17.6)

*95% confidence interval.

** statistically significant difference between public and private

Table 7c: Violence and unintentional injury among students, by grade level

	Grade Level		
	7th	**8th**	**9th**
Physically attacked by an adult family member one or more times during the past 30 days ♠	40.4 (37.4-43.5)	36.8 (33.4-40.2)	32.6 (29.4-35.8)
Physically attacked by teacher or school staff one or more times during the past 12 months ♠	31.1 (26.5-35.6)	23.4 (18.7-28.0)	17.6 (14.2-20.9)
Were in a physical fight one or more times during the past 12 months	48.5 (45.5-51.5)	45.7 (42.3-49.1)	43.1 (39.6-46.5)
Were seriously injured one or more times during the past 12 months (of those who were in a fight)	34.0 (31.0-37.0)	32.9 (29.5-36.3)	29.9 (26.7-33.1)
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	19.8 (16.1-23.6)	18.8 (13.6-23.9)	16.6 (12.4-20.8)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	9.9 (6.9-12.9)	6.4 (4.2-8.5)	6.6 (3.4-9.9)
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	54.4 (49.4-59.4)	54.0 (47.4-60.6)	54.6 (49.1-60.1)
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	30.1 (26.1-34.1)	35.3 (30.8-39.8)	33.0 (27.8-38.2)
Were bullied on one or more days during the past 30 days	32.4 (29.3-35.5)	35.0 (31.6-38.4)	34.2 (30.9-37.5)
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	29.2 (25.0-33.4)	27.8 (23.7-31.9)	23.2 (18.5-27.9)
Subjected to sexual harassment	16.3 (14.2-18.3)	17.4 (15.3-19.5)	18.4 (16.0-20.8)
Had someone steal or deliberately damage their property, such as their car, clothing, or books on school property on one or more times during the past 30 days ** ♠	19.3 (17.4-21.1)	14.8 (12.4-17.2)	14.7 (12.9-16.5)
Most of the time or always used a seat belt when riding in a car or other motor vehicle driven by someone else during the past 30 days ** ♠	18.8 (16.8-20.8)	12.8 (10.5-15.0)	10.0 (8.2-11.9)

*95% confidence interval.

** statistically significant difference between 7th and 8th

♣statistically significant difference between 8th and 9th

♠ statistically significant difference between 7th an 9th

Reproductive/sexual health attitudes and HIV related knowledge

Background

AIDS has killed more than 25 million people since 1981. As of 2005, an estimated 40.3 million people were living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people became infected with HIV.[xxvii] Young people between the ages of 15 and 24 years 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 years were living with HIV.

Certain behaviors put people at increased risk for HIV/IADS. One such behavior is unprotected sexual activity. The cultural context of Lebanon does not allow for question to be asked to youth aged 13-15 years about their involvement in sexual activity. However, the Lebanon GSHS team felt it important to include some aspect of sexual and reproductive health. Therefore, we focused on knowledge and attitudes, as important precursors of behavior. The assessment of reproductive and sexual health knowledge and attitudes is seen within the commitment of 1994 International Conference on Population and Development (ICPD) to adolescents.[4]

Findings

The attitudes toward sexual and reproductive health education as well as some indicators of knowledge related to HIV are described in the tables 8a,b,c by sex, school status (public or private) and grade level respectively.

Attitudes towards sexual and reproductive health education in schools

Over 1 in 4 students (27.6%) believe that education on sexual and reproductive health should begin before puberty. Male students (30.6%) were significantly more likely than female students (24.9%) to state so; and students in private schools (30.7%) were significantly more likely to state so than students in public schools (23.9%). Almost a half of the students overall (49.6%) support the discussion of sexual and reproductive health topics in school classes. Students in 9th grade (60.5%) were significantly more likely to support such discussions than students in 8th grade (50.1%) or 7th grade (41.0%). Students in 8th grade were also significantly more likely to support such discussion than those in 7th grade. In addition, about a fifth of students (22.4%) believed that the discussion of sexual and reproductive health topics should take place just as other subjects taught. Male students (26.6%) were more likely to believe so than female students (18.6%); students in private schools (27.1%) more than those in public schools (16.9%) and those in 9th grade (31.2%) more than those in 8th grade (23.4%) or those in 7th grade (14.9%) (significant difference between 7th and 8th grade as well). In contrast, 31% of students felt that the discussion of sexual and reproductive health issues should take place in boy-only or girl-only classes. This frequency ranged from 26% for males to 36% for girls, and from 29% in private schools to 35% in public schools. Interestingly, more 9th graders (34%) than 7th graders (30%) wanted such discussions in girl or boy only classes.

Asking questions about reproductive and sexual health topics

Eight out of ten students (79.6%) had not asked their teacher about reproductive and sexual health topics. Female students (83.3%) were more likely than male students (75.6%) *not* to have asked their teacher bout such topics. Students were asked how the teacher responded when asked a question about sexual and reproductive health.

[4] http://www.unfpa.org/icpd/summary.htm#chapter7

Almost 70% stated that the teacher answered the question (rather than scold, refuse, refer) the question. This frequency differed greatly between males (60%) and females (80%); and between 7th grade (63%) and 8th grade (72%). In addition, almost 7 out of 10 students (66.8%) had not asked their parents about sexual and reproductive health topics. Male students (70.5%) were more likely *not* to have asked their parents about such topics than female students (63.4%); public schools students (69.7%) also more likely *not* to have asked their parents than private school students (64.3%); and 7th grade students (69.7%) more likely *not* to have asked than 9th grade students (62.5%). Students were asked how their parent responded when asked a question about sexual and reproductive health. Over 80% stated that the parent answered the question (rather than scold, refuse, refer) the question. This frequency differed greatly between males (73%) and females (87%); and between 7th grade (76%) and 8th grade (85%).

HIV-related knowledge

Almost 8 in 10 students had ever heard of HIV infection or a disease called AIDS. Students in the 9th grade (90.8%) were more likely to have heard of HIV & AIDS than students in the 8th (81.3%) or 7th (62.7%) grades (the difference between 8th and 7th was also significant). Almost 35% of students (34.9%) had been taught in any of their classes this year how to avoid HIV infection or AIDS. Students in 9th grade (51.9%) were significantly more likely than students in 8th (38.1%) or 7th grade (19.2%) to have been taught in school this year how to avoid HIV. Almost half (44%) of students believed that people could protect themselves from HIV infection or AIDS by not having sexual intercourse. Male students (47.8%) were more likely to believe this than female students (40.6%). And students in the 9th grade (60.4%) were more likely to believe this than students in the 8th (45.9%) or 7th (29.9%) grades (the difference between 8th and 7th was also significant).

Finally, almost 6 in 10 students felt they knew how to tell someone they did not want to have sexual intercourse with them. Female students (65.7%) were more likely to report they knew how to tell someone than male students (49.8%). And students in the 9th grade (65.9%) were more likely to feel they knew how to tell someone they did not want sex than students in the 7th (49.5%) grades. Students in the 8th grade (61.5%) were also more likely to feel they knew how to tell someone than those in the 7th grade.

Table 8a: Reproductive/sexual health attitudes and HIV related knowledge by sex

Question	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Students who believe education on reproductive health and sexual health should start before the age of puberty **	27.6 (25.7 – 29.5)	30.6 (27.7 – 33.4)	24.9 (22.9 – 26.8)
Students who support the discussion of reproductive and sexual health topics in school classes	49.6 (47.1 – 52.0)	52.4 (49.3 – 55.6)	47.1 (43.9 – 50.3)
Students who feel the discussion of reproductive and sexual health topics take place just as other subjects are taught **	22.4 (20.2 – 24.6)	26.6 (23.7 – 29.6)	18.6 (16.4 – 20.8)
Students who feel the discussion of reproductive and sexual health topics take place in boy only or girl only classes∞	*31.6*	*26.6*	*36.0*
Students who did not ask their teacher about reproductive and sexual health topics **	79.6 (77.7 – 81.6)	75.6 (73.2 – 78.1)	83.3 (81.0 – 85.6)
Teachers who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*68.9*	*59.5.*	*80.5*
Students who did not ask their parents about reproductive and sexual health topics **	66.8 (65.4 – 68.2)	70.5 (68.6 – 72.5)	63.4 (61.4 – 65.3)
Parents who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*81.5*	*73.5*	*87.1*
Students who have ever heard of HIV infection or the disease called AIDS	76.9 (74.6 – 79.2)	77.0 (74.3 – 79.7)	76.8 (74.1 – 79.5)
Students who were taught in any of their classes during this school year how to avoid HIV infections or AIDS	34.9 (31.9 – 37.8)	36.7 (33.3 – 40.1)	33.2 (29.7 – 36.6)
Students who believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse **	44.0 (41.9 – 46.1)	47.8 (45.2 – 50.4)	40.6 (38.1 – 43.2)
Students who know how to tell someone they do not want to have sexual intercourse with them **	58.2 (56.1 – 60.2)	49.8 (47.3 – 52.3)	65.7 (63.0 – 68.4)

*95% confidence interval.

** statistically significant difference between girls and boys

∞ no significance levels are available for this specific question

Table 8b: Reproductive/sexual health attitudes and HIV related knowledge by school status

Question	Total % (CI)*	School Status	
		Public % (CI)*	Private % (CI)*
Students who believe education on reproductive health and sexual health should start before the age of puberty **	27.6 (25.7 – 29.5)	23.9 (21.5-26.3)	30.7 (27.9-33.5)
Students who support the discussion of reproductive and sexual health topics in school classes	49.6 (47.1 – 52.0)	45.9 (42.5-49.2)	52.7 (49.2-56.3)
Students who feel the discussion of reproductive and sexual health topics take place just as other subjects are taught **	22.4 (20.2 – 24.6)	16.9 (15.2-18.6)	27.1 (23.3-30.8)
Students who feel the discussion of reproductive and sexual health topics take place in boy only or girl only classes∞	*31.6*	*34.9*	*28.7*
Students who did not ask their teacher about reproductive and sexual health topics	79.6 (77.7 – 81.6)	79.0 (76.2-81.8)	80.2 (77.5-82.8)
Teachers who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*68.9*	*65.9*	*71.4*
Students who did not ask their parents about reproductive and sexual health topics **	66.8 (65.4 – 68.2)	69.7 (67.8-71.7)	64.3 (62.3-66.3)
Parents who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*81.5*	*79.1*	*83.2*
Students who have ever heard of HIV infection or the disease called AIDS	76.9 (74.6 – 79.2)	75.6 (72.4-78.8)	78.1 (74.7-81.4)
Students who were taught in any of their classes during this school year how to avoid HIV infections or AIDS	34.9 (31.9 – 37.8)	34.5 (30.9-38.1)	35.2 (30.6-39.7)
Students who believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse	44.0 (41.9 – 46.1)	46.0 (42.8-49.1)	42.4 (39.7-45.2)
Students who know how to tell someone they do not want to have sexual intercourse with them	58.2 (56.1 – 60.2)	57.9 (54.8-61.0)	58.4 (55.6-61.2)

*95% confidence interval.

** statistically significant difference between public and private

∞ no significance levels are available for this specific question

Table 8c: Reproductive/sexual health attitudes and HIV related knowledge by grade level

	Grade Level		
	7th	**8th**	**9th**
Students who believe education on reproductive health and sexual health should start before the age of puberty	26.7 (24.5-28.9)	27.5 (25.1-29.8)	29.0 (24.9-33.2)
Students who support the discussion of reproductive and sexual health topics in school classes ** ♣ ♠	41.0 (37.9-44.1)	50.1 (46.7-53.4)	60.5 (56.4-64.7)
Students who feel the discussion of reproductive and sexual health topics take place just as other subjects are taught ** ♣ ♠	14.9 (12.5-17.3)	23.4 (20.9-26.0)	31.2 (26.8-35.6)
Students who feel the discussion of reproductive and sexual health topics take place in boy only or girl only classes∞	*29.4*	*32.2*	*33.7*
Students who did not ask their teacher about reproductive and sexual health topics	79.5 (77.2-81.8)	80.0 (76.9-83.1)	79.4 (75.9-82.9)
Teachers who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*62.9*	*72.1*	*73.5*
Students who did not ask their parents about reproductive and sexual health topics ♠	69.7 (67.5-72.0)	67.2 (65.0-69.5)	62.5 (59.7-65.3)
Parents who answered (rather than scold, refuse, refer) the question about sexual and reproductive health when asked∞	*76.7*	*85.2*	*83.6*
Students who have ever heard of HIV infection or the disease called AIDS ** ♣ ♠	62.7 (59.3-66.0)	81.3 (78.2-84.4)	90.8 (88.9-92.7)
Students who were taught in any of their classes during this school year how to avoid HIV infections or AIDS ** ♣ ♠	19.2 (16.9-21.5)	38.1 (32.6-43.6)	51.9 (47.1-56.6)
Students who believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse ** ♣ ♠	29.9 (27.3-32.4)	45.9 (41.9-50.0)	60.4 (57.7-63.2)
Students who know how to tell someone they do not want to have sexual intercourse with them ** ♠	49.5 (46.5-52.5)	61.5 (57.7-65.3)	65.9 (62.6-69.2)

*95% confidence interval.
** statistically significant difference between 7th and 8th
♣statistically significant difference between 8th and 9th
♠ statistically significant difference between 7th an 9th
∞ no significance levels are available for this specific question

Overall summary

Table 9 summarizes the significant differences described above by sex, school type and grade level. Males seem particularly at risk for several of these behaviors. Graphs beginning on page 55 also visually portray selected differences by sex, school type and grade level.

Table 9 - summary of significant results by sex, school type, and grade level.

Item	Gender with higher percent	School status with higher percent	Grade level with higher percent
Alcohol & other drugs			
Drank at least one drink containing alcohol on one or more of the past 30 days	Male	Private	--
Drank two or more drinks per day on the days they drank alcohol during the past 30 days	Male	--	--
Usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days	Male	--	--
Drank so much alcohol they were really drunk one or more times during their life	Male	--	--
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	--	--
Probably or definitely would not drink alcohol if offered by their best friends	Female	Public	--
Used drugs such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers one or more times during their life	Male		--
Students who were taught in any of their classes this year the dangers of drinking alcohol or using drugs	__	--	$8^{th}>7^{th}$, $9^{th}>7^{th}$
BMI & Dietary behaviour			
At risk for becoming overweight	Male		--
Overweight	--		--
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	--	--	$7^{th}>8^{th}$
Usually ate fruit, such as apples, bananas and oranges, one or more times per day during the past 30 days	--	--	$7^{th}>8^{th}$; $7^{th}>9^{th}$
Usually ate vegetables, such as salads, spinach, eggplant, tomatoes and cucumbers, one or more times per day during the past 30 days	--	--	--

Item	Gender with higher percent	School status with higher percent	Grade level with higher percent
Ate fruits and vegetables five or more times per day during the past 30 days	Male	Public	7^{th} >8^{th} ; 7^{th} > 9^{th}
Ate cereals and carbohydrates such as potato, wheat, rice, or maize and their products for 2 or more times/day	--	--	--
Drank milk or ate milk products like yogurt, labneh, cheese and cream two or more times/day	Male	--	7^{th} > 9^{th}
Drank carbonated soft drinks like Pepsi, Coca cola, Fanta and Seven up two or more times/day	Male	--	--
Ate breakfast most of the times	Male	--	--
Main reason for not eating breakfast is not having time	--	--	--
Brought lunch to school most of the time	--	Private	--
Ate or ordered from a restaurant that serves fast food like burgers, shawarma, pizza, falafel, thyme or pastries on the three or more days	Male	--	--
Hygiene behaviour			
Did not clean or brush their teeth less than 1 time/day during the past 30 days	Male	Public	--
Last saw a dentist more than 24 months ago or never saw a dentist for a check-up, exam, teeth cleaning or other dental work	--	Public	--
Never or rarely washed their hands before eating during the past 30 days	--	--	--
Never or rarely washed their hands after using the toilet or latrine	Male	--	--
Never or rarely used soap when washing their hands	--	--	--
Mental Health			
Most of the time or always felt lonely during the past 12 months	Female	Public	--
Most of the time or always felt so worried about something that they could not sleep at night during the past 12 months	Female	--	--

Item	Gender with higher percent	School status with higher percent	Grade level with higher percent
Had hard time staying focussed on their homework or other things they had to do during the past 12 months	--	--	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months	Female	--	$9^{th} > 7^{th}$
Seriously considered attempting suicide during the past 12months	--	--	$9^{th} > 7^{th}$
Made a plan about how they would attempt suicide during the past 12 months	--	--	$9^{th} > 7^{th}$
Have no close friends	--	--	--
Satisfied with the number of close friends they have	--	Private	--
Protective factors			
Missed classes or school without permission on one or more of the past 30 days	Male	--	--
Most of the students in their school were never or rarely kind and helpful during the past 30 days	Male	--	$7^{th} > 8^{th}$; $7^{th} > 9^{th}$
Parents or guardians never or rarely checked to see if their homework was done during the past 30 days	Female	--	--
Parents or guardians never or rarely understood their problems and worries during the past 30 days	--	Public	--
Parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days	Male	Public	$7^{th} > 8^{th}$; $7^{th} > 9^{th}$
Violence & unintentional injury			
Physically attacked by an adult family member one or more times during the past 30 days	--	--	$7^{th} > 9^{th}$
Physically attacked by teacher or school staff one or more times during the past 12 months	Male	--	$7^{th} > 9^{th}$
Were in a physical fight one or more times during the past 12 months	Male	--	--

Item	Gender with higher percent	School status with higher percent	Grade level with higher percent
Were seriously injured one or more times during the past 12 months (of those who were in a fight)	Male	--	--
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	Male	--	--
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	--	--	--
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	--	--	--
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	Male	--	--
Were bullied on one or more days during the past 30 days	Male	--	--
Among students who were bullied during the past 30 days, those who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors	Male	--	--
Subjected to sexual harassment	Male	--	--
Had someone steal or deliberately damage their property, such as their car, clothing, or books on school property on one or more times during the past 30 days	Male	--	$7^{th} > 8^{th}$; $7^{th} > 9^{th}$
Most of the time or always used a seat belt when riding in a car or other motor vehicle driven by someone else during the past 30 days	--	--	$7^{th} > 8^{th}$; $7^{th} > 9^{th}$

Item	Gender with higher percent	School status with higher percent	Grade level with higher percent
Reproductive/sexual health attitudes			
Students who believe education on reproductive health and sexual health should start before the age of puberty	Male	Private	--
Students who support the discussion of reproductive and sexual health topics in school classes	--	--	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$; $8^{th} > 7^{th}$
Students who feel the discussion of reproductive and sexual health topics take place just as other subjects are taught	Male	Private	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$; $8^{th} > 7^{th}$
Students who did not ask their teacher about reproductive and sexual health topics	Female	--	--
Students who did not ask their parents about reproductive and sexual health topics	Male	Public	$7^{th} > 9^{th}$
Students who have ever heard of HIV infection or the disease called AIDS	--	--	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$; $8^{th} > 7^{th}$
Students who were taught in any of their classes during this school year how to avoid HIV infections or AIDS	--	--	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$; $8^{th} > 7^{th}$
Students who believe people can protect themselves from HIV infection or AIDS by not having sexual intercourse	Male	--	$9^{th} > 8^{th}$; $9^{th} > 7^{th}$; $8^{th} > 7^{th}$
Students who know how to tell someone they do not want to have sexual intercourse with them	Female	--	$9^{th} > 7^{th}$; $8^{th} > 7^{th}$

Conclusions and Recommendations

This section will comment on the prevalence of specific risk and protective behavior as found through the Lebanon GSHS 2005 by comparing with available local, as well as regional data. This section will also comment on differences noted by gender, grade level, and type of school. Recommendations are *italicized*. A later section on implications will make more general recommendations related to the Lebanon school health program.

Alcohol and other drug use

The rate of current use of alcohol (at least once in the last 30 days) was almost 20%. The rate reported by Sibai & Kanaan in 1997 for a student population whose age ranged between 15 and 24 years, and the majority of whom were enrolled in private schools was 17.9%. This suggests that rate of current use of alcohol is increasing and occurring at younger ages. What is more alarming is that almost 20% of students report having experienced negative consequences of drinking. And, even more troubling is that 40% of those students who reported drinking in the last 30 days consumed 2 or more drinks at the time they drank.

On the other hand, boding more positively, the vast majority of students (91.2%) state that they would not drink alcohol if offered by their best friend. This suggests either that - from the perspective of students, the issue is less one of peer pressure and more one of not knowing the dangers of drinking, or points to the common perceived invulnerability of youth.

Almost one fifth of the students for the alcohol they drank by buying it at stores. This is not surprising as Lebanon does not have an age limit on the purchase of alcohol.

About 3% of students report ever using drugs. The rate reported by Sibai & Kanaan (1997) for Hashish was 4.5%. Again, the rates are quite similar despite the lower age range of the current sample.

Almost a third of students report having been taught about the danger of drinking alcohol or using drugs in any of their classes in the past year. The Lebanese integrated health education curriculum[5] includes a discussion of the dangers of alcohol use in the 9th grade. Almost 30% of the sample were 9th graders suggesting that implementation of the health education instruction in this grade level took place in all schools. This would be ideal and is unlikely but the data on receipt of instruction regarding consequences of drinking indicate - at the very least, a good level of implementation of the health education curriculum as currently required.

However, given the lack of a significant difference in prevalence of drinking in the last month between grade levels, *the Ministry of Education should consider lowering the grade level for instruction on the consequences of alcohol use to at least 7th grade if not 6th grade.*

The Lebanese integrated Health Curriculum includes a discussion of drugs in grade 11 and 12. However, since some students, even 3%, are using drugs, *education about drug use and its consequences should take place much earlier than 11th grade.*

Tobacco is considered a drug. Of important note, the GSHS in 2005 did not ask about tobacco use as the Global Youth Tobacco Survey (GYTS) had been implemented only

[5] الجمهورية اللبنانية, وزارة التربية الوطنية و الشباب و الرياضة, المركز التربوي للبحوث و الانماء. مناهج التربية الصحية و أهدافها, مراحل التعليم قبل الجامعية. تعميم رقم 71\م\98, 12 تشرين الثاني 1997

months before it. However, results of the GYTS[6] suggested alarming rates of tobacco use by the same age group of youth, with increasing rates of use of the argileh (water pipe). The curriculum includes education on the consequences of tobacco use beginning in 1st grade. A comprehensive school health program cannot ignore tobacco use in its curriculum. The data reported by the GSHS suggests either that the school health curriculum regarding tobacco use is not implemented or not effectively implemented, or that the social and media environment supportive of tobacco use is strong. With way, schools must work to provide knowledge and skills as well as a supportive environment for non-use. *It is highly suggested that schools become smoke free[7] for students, staff, teachers, and administrators to ensure that an environment supportive for health behavior exists.* Some private schools have initiated smoke free campuses with high success.

Dietary Behaviors

Although a relatively low percent of students are currently overweight, about 15% are at risk of becoming overweight. Prevention programs are necessary for such children. The frequency reported by Sibai & Kanaan (1997) was 24.4% using a similar cut off point (at or above 95th percentile for BMI by age and sex). Another recent study[8] of younger children (6-8 years) in Beirut also found rates of obesity (measured according to the International Obesity Task Force) of 26% for boys and 25% for girls. This latter study relied on objective measures of height and weight rather than self report. The low rate of obesity found in the current survey could indicate a reporting bias of students. This type of bias (reporting lower weight and taller height) is recognized in the literature[9].

It is heartwarming to realize that very few children report being hungry as a result of lack of food in their homes. The goal of a social health program would be to reduce this small percentage to 0.

With respect to intake of fruits and vegetables, a high percentage of students eat at least one portion of fruits and vegetables per day. However, very few (only 1 in 4) eat enough portions (5 fruits and vegetables per day) to be sufficiently protected against the consequences of poor nutrition, such as cancer.

In addition, relatively few children seem to be getting enough calcium from dairy products. Given the fact that these are children that are still growing, it is disturbing that only less than 4 in 10 drank milk or ate milk products at least 2 times per day. This is even more surprising given the high availability of these products on the local market and the fact that milk products such as yoghurt and labneh are in fact a staple of the Lebanese diet.

The lack of healthy diet (too few fruits and vegetables and too little milk) is perhaps explained by the prevalence of fast food consumption. Over 1 in 4 students reported that they ate from a restaurant on three or more days of the last week.

The Lebanese integrated health curriculum required education on nutrition requirements and benefits beginning in grade 1. This includes in the 3rdf grade the nutritional requirements

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[6] Saade G., Abou Jaoude S., Afifi Soweid R., (corresponding author), Warren C.W., Jones N.R. Patterns of tobacco use: results from GYTS in Lebanon. *The Eastern Mediterranean Health Journal* (in press)

[7] http://www.sofweb.vic.edu.au/edulibrary/public/stratman/Policy/schoolgov/druged/SmokeFreeSchools.pdf

[8] Jabre P, Sikis P, Khater-Menassa B, Baddoura R, & Awada H. (2005). Overweight children in Beirut: Prevalence estimates and characteristics. *Child Care, Health, and Development*, 31(2): 159-165.

[9] Hill A & Roberts J. (1998). Body mass index: A comparison between self-reported and measured height and weight. *Journal of Public Health Medicine*, 20(2), 206-210.

(according to the food pyramid). The results found here may indicate a lack of proper implementation of the curriculum. However, they are more likely indicative of the weak link between knowledge and behavior. Behavior change is complex and is dependent on factors at a variety of ecological levels. Ensuring an enabling environment is as important if not more important than transmitting knowledge. There is no data in the current survey to assess the extent of enabling environment including provision of healthy foods / snacks in schools cafeterias. *Further assessment perhaps of a more qualitative nature is needed to understand the reasons behind the low prevalence of appropriate nutritional behaviors of students.*

Hygiene

The prevalence of good hygienic behavior is relatively high. Very few students report never or rarely washing their hands before eating or using the toilet. And the vast majority report using soap. The integrated health education curriculum does require education in first grade on washing hands with soap after eating and using the toilet.

With respect to dental health, the percentages are slightly lower. About 1 in 10 students brush their teeth less than one time per day, and more than 1 in 4 have not been to see a dentist in the last 2 years. Both of these later behaviors differ significantly between private and public schools. If we are to consider public school enrollment as a proxy for socio-economic status, the data suggests an economic component to these behaviors. More importantly, the Lebanon Oral Health Strategy for Schools (2005-2010) has set a target of brushing teeth three times per day. The data from FSHS suggest that we are far away from this objective. Overall, 65% of students brushed their teeth less than 3 times per day. This fits with data from the Ministry of Education Oral Health program that indicates that 82.36% of children seen had problems with their teeth. [10] Of those with problems, 76.21% needed treatment, 18.34% needed restorative care, and 6.42 had other problems. Although brushing teeth is mentioned as a part of the integrated health curriculum in year 2, not much detail is provided on this behavior. *Education about appropriate timing and amount of tooth brushing and associated dental health behaviors is needed as early as possible (beginning in year 1) of the health education curriculum*

Mental Health

The prevalence of mental health related symptoms was shocking. However, the current prevalence data on mental health must be kept in context of the Lebanese situation around the time of the survey. On Feb. 14th 2005, Prime Minister Rafik El Hariri was assassinated. This sent the country into shock for quite some time afterwards. Uncertainty was high and the fear of resumption of civil war loomed. In addition, a series of other car bombs took place in the year or so after this tragic event, also killing well known political figures. It is likely that the mental health symptoms reported by the students were affected by these events. This does not in any way, decrease their importance and significance, but contextualizes them.

More than 1 in 10 students report not being able to stay focused on their homework or other things during the past 12 months. Alarmingly, about 4 in 10 students report feeling so sad or hopeless every day for the last two weeks that they stopped doing their usual activities.

Sixteen percent of students seriously considered suicide in the past 12 months. This is very similar to the prevalence reported by Sibai & Kanaan for older students (15.2%). However, in the current sample, 11.1% made a plan about how to attempt suicide whereas the Sibai & Kanaan prevalence of making a plan was much lower (4.8%). Making a plan is indicative of

[10] وزارة التربية والتعليم العالي، المديرية العامة للتربية، الإرشاد والتوجيه – التربية الصحية. نتائج الكشف الطبي المدرسي على الأسنان. إحصاء 2006-2005 .

increasing severity in suicide planning[11] and therefore the increasing rate is reason for concern.

The Lebanese integrated health curriculum does not discuss issues of mental health or suicide ideation. *Results of the GSHS clearly suggest the need to **urgently** include such education into the curriculum, and to include it at an early age as even in 7th grade, 14% of students had seriously considered suicide, and 35% felt so sad or lonely they were not able to do their usual activities.*

Protective factors

Recently, the conceptual paradigm to understand youth health has shifted from a focus on risk to a focus on protective factors or assets.[12] Youth that are equipped with these protective factors are less likely to engage in risky behaviors and do better in school [13]. A consistent, secure, and supportive relationship with parents is one of the key protective factors. Unfortunately, about 4 in 10 students reported that their parents rarely or never checked their homework, rarely understood them, or rarely or never knew what they were doing in their free time. Schools are only one part of the puzzle of youth health. Another critical piece is parents. *Schools might encourage parental-student interaction by requiring social-content-related (or psychosocial-related) homework that is done in partnership with parents.*

Violence

The prevalence of violence and bullying was unexpectedly high. To our knowledge, no previous survey in Lebanon has assessed these behaviors (except for being involved in a fight). Students are victims of violence at home and at school. Almost 4 in 10 students were physically attacked by a family member in the last month, and 1 in 4 was attacked by a teacher. Both of these prevalence figures are cause for great alarm. Although it may be harder to control behavior of parents, violent teacher behavior should be unequivocally unacceptable and grounds for immediate dismissal.

Clearly, violence breeds violence. The victimization by adults translated at the peer level into physical fights and into a magnitude of bullying that is hard to fathom. Almost half of the students had been involved in a fight in the last 12 months (the majority males). And the fights were quite severe, about a third of those involved in a fight were seriously injured as a result. While the corresponding rate for being involved in a fight in the Sibai & Kanaan sample was 37.9% (for a sample of youth that was actually older), the rate of an injury requiring medical attention was only 6.7% (for the overall sample, not the subsample who had been involved in a fight).

With respect to bullying, more than 3 in 10 student report that they were bullied during the past month. And even more concerning is that the form of bullying was harsh. Over 1 in 4 students who had been bullied reported that they were hit, kicked, pushed, shoved around or locked indoors!

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[11] Nutting PA, Dickinson LM, Rubenstein LV, Keeley RD, Smith JL, Elliott CE. (2005). Improving detection of suicidal ideation among depressed patients in primary care. *Annals of Family Medicine*, 3(6): 529-536.

[12] Catalano, R.F., Hawkins, J. D., Berglund, M. L., Pollard, J. A., and Arthur, M. W. (2002). Prevention science and positive youth development: competitive or cooperative frameworks? *Journal of Adolescent Health*, 31, 230-239

[13] Roth, J., Brooks-Gunn, J., Murray, L., & Foster, W. (1998). Promoting healthy adolescents: synthesis of youth development program evaluations. *Journal of Research on Adolescence,* 8(4), 423-459.

A further frightening result is that of sexual harassment. Almost 2 in 10 student report being sexually harassed. Contrary to expectation, males are more likely to report sexual harassment than females.

*Violence and bullying and sexual harassment are also not included in the Lebanese integrated K-12 curriculum (the curriculum for third grade includes instruction on not playing violently – pushing others on the stairs, etc.; and not going anywhere with strangers). The results reported here suggest the **vital** need to include such education at an early age – before 7th grade. The results for 'physically attacked by teacher' suggest that as children get older, this victimization decreases, further supporting the need to intervene as early as possible.*

The only non-intentional injury asked about in the survey was seat belt use. A very low percent of students (14.3%) report using seat belts most of the time or always when riding in a motor vehicle driven by someone else. Sibai and Kanaan (1997) report that 76.5% of students in their sample reported rarely or never using a seat belt when riding in the front seat. The curriculum includes instruction in the 1st grade on the importance of wearing a seat belt. However, the peer and parental influences related to this behavior are scarce. And the vast majority of school buses are not equipped with seat belts. Therefore, the transmission of such knowledge is for naught in an environment that is non-supportive.

Sexual and reproductive health attitudes

About half of the students supported the discussion of sexual and reproductive health in schools, but only about a fifth thought it could take place 'just like other topics.' Also, the majority of students felt that this discussion should take place after puberty. A recent UNFPA report indicated support for the teaching of sexual and reproductive health by teachers as well.[14]

Supporting previous research that has suggested that friends/the media are the greatest source of information about sex for youth[15] [16], the majority of students did not ask either their teacher or their parents about reproductive and sexual health issues. In a study conducted with secondary school students (mean age:17.15 years), 30% had discussed sex with their parents, and 29% with teachers. [15] On the more positive side, for the small percentage of student who had asked wither their teacher or their parents, most got an answer to their question (rather than get scolded, referred, or refused). Perhaps the students who did not ask were worried they would get scolded or refused an answer. *Thus the objective of any intervention in this area needs to focus not only to get youth to ask their parents and teachers these questions (instead of their friends/get information from the media), but also to prepare the parents and teachers to be able to respond.*

Despite the international focus on HIV/AIDS in the last three decades, about 1 in 4 students has not even heard about HIV or AIDS. The Lebanese integrated health curriculum includes this instruction including prevention in grade 8; 38% the sample was in grade 7. About a third of the students reported having been taught about HIV/AIDS this year in school. And only about 50% of students knew that one could protect themselves from AIDS by not having

[14] Afifi Soweid R, Manayan T. (2004). Inventory of KAP studies related to sexual and reproductive health of young persons in the Arab states & needs assessment related to research and intervention for sexual and reproductive health of young persons in the Arab states. UNFPA sponsored study.
[15] El Kak F, Afifi Soweid R, Taljeh C, Kanj M., Shediac-Rizkallah M. (2001). High school students in postwar Lebanon: Attitudes, information sources, and perceived needs related to sexual and reproductive health. *Journal of Adolescent Health*, 29: 153-155.
[16] Jurjus A. (1994). Survey of knowledge, attitudes, beliefs, and practices of secondary school students in relation to HIV/AIDS. Report to the National AIDS Control Program in Lebanon.

sexual intercourse. About 62 percent of the sample was in grades 8 or 9. However, it is possible that those in grade 8 had not yet received the lesson plans on HIV/AIDS. A study conducted by the National AIDS Program (NAP) in 1994 among secondary school children in grades 10-12 indicated that 96% knew about HIV/AIDS[15]. A more recent study of "Knowledge, attitudes, beliefs, and practices of the Lebanese population concerning HIV/AIDS"[17] includes 15 year olds, but the data we could compare with is not analyzed by age. *The results suggest the need for renewed attention in the curriculum to the teaching of sexual and reproductive health topics, including HIV/AIDS. This set of questions were the only ones that were consistently significantly different at every grade level, suggesting that one might want to consider providing the education earlier.*

Despite the fact that the curriculum does not include refusal skills for sex, about half of the students felt they could tell someone they did not want to have sexual intercourse with them. *In addition to providing knowledge, the health education curriculum, should provide skills (in peer resistance among others) to students to facilitate their implementation of their knowledge. All the behaviors discussed in this report are subject to peer pressure, and therefore social inoculation[18] skills are critical to include in the curriculum.*

Comparison by gender, school type, and grade level
The most frequent significant differences in the results were between boys and girls. This suggests the need to tailor intervention programs to boys and girls differentially. Whereas boys are more likely to drink alcohol and get involved in fights, girls are more likely to experience mental health (psychosocial) problems. *To ensure relevance to their problems and continued attention to the curriculum, the health education curriculum may need to offer different topics for girls and boys.*

There were very few significant differences between private and public schools. This is an important statement which supports the quality of public schools in Lebanon, vis-a-vis health education. As mentioned earlier in the report, the Ministry of Education has an active and dedicated health education team. Their jurisdiction over public schools is stronger than over private schools, and they have engaged schools as much as possible.

There were some significant differences between grade levels. Although 7th graders eat better than their older counterparts and are more likely to wear a seat belt, they are also unfortunately more likely to be attacked by a family member and a teacher. Older students in 9th grade are more likely to experience mental health symptoms and more likely to be knowledgeable and supportive of reproductive and sexual health education. *As discussed above, it is recommended that education related to all attitudes and behaviors explored in the GSHS take place as early as possible by 7th grade or earlier.*

Comparison with other countries of the Eastern Mediterranean Region (EMR)
The GSHS website (http://www.cdc.gov/GSHS/results/index.htm accessed Sept. 30th 2006) provides fact sheets for all countries who have implemented the GSHS. Data for four EMR countries (including Lebanon) are available. Table 10 compares frequencies for selected survey items. Graphs V1-3, MH1-3, PF 1-3, H1-3, & DB1-3 beginning on page 65 also visually indicate differences between countries of the EMR.

The prevalence ranges for items related to violence and mental health are relatively consistent across countries of the region. Lebanon has the highest frequency of students

[17] Jurjus A & Kahhaleh J (2004). Knowledge, attitudes, beliefs, and practices of the Lebanese population concerning HIV/AIDS. A report to the National Aids Control Program in Lebanon.
[18] Pfau M. (1995). Designing messages for behavioral inoculation. Chapter 6 in Mailbach E. & Parrott RL (eds). *Designing health messages: Approaches from communication theory and public health practice.* Sage Publications: Thousand Oaks, CA.

being physically attacked on one or more days of the last 30 days. For being involved in a physical fight in the last 30 days, the rate in Lebanon is similar to that of Jordan's. The rate of bullying in Lebanon is lower than that of Oman and Jordan but higher than that of UAE.

With respect to mental health, Lebanon has the lowest of three countries of students feeling lonely, and the lowest percent of students who feel they have no close friends. However, Lebanon has the highest (slightly) prevalence of students who seriously considered suicide.

Related to protective factors, Lebanon has at least half the prevalence of students who missed classes without permission in the last month, and the lowest rate of students who state that students in their school were never or rarely kind and helpful in past 30 days. However, it has the highest prevalence of students who report that their parents or guardian never or rarely knew what they were doing with their free time in past 30 days.

Hygienic behaviors are well established In Lebanon. Students in Lebanon had the lowest rate among the other EMR countries to report never or rarely washing their hands before eating, or after using the toilet. However, they had more than twice the number of students as Oman stating that they brushed their teeth less than one time per day.

Finally, with respect to dietary behaviors. Lebanon had the fewest students by far that reported they went hungry most of the time or always in the last month. They also had the lowest rate of student who were overweight, but a rate of at risk for overweight that was close to that of Jordan's.

Table 10 - Comparison between Lebanon and other Eastern Mediterranean Region Countries who have completed the GSHS and have fact sheets on the web http://www.cdc.gov/GSHS/results/index.htm accessed Sept. 30th 2006

Selected Survey Item*	Lebanon – 2005	Jordan - 2004	Oman – 2005	UAE – 2005
Violence				
Percent of students who were physically attacked one or more times in the last 12 months	40.5 ± 2.1	Not reported	38.6 ± 3.7	31.9 ± 2.1
Percent of students who were in a physical fight one or more times in the last 12 months	45.9 ± 2.3	46.6 ± 5.0	41.6 ± 3.4	43.2 ± 2.8
Percent of students who were bullied on one or more days during past 30 days	33.9 ± 2.2	46.4 ± 2.9	36.0 ± 3.5	20.9 ± 1.4
Mental health				
Percent of students who felt lonely most of the time or always in last 12 months	12.0 ± 1.6	15.8 ± 1.9	Not reported	14.4 ± 0.8
Percent of students who seriously considered suicide	15.8 ± 1.4	15.1 ± 2.2	Not reported	12.7 ± 1.2
Percent of students who have no close friends	3.2 ± 0.6	4.9 ± 0.9	Not reported	6.2 ± 0.6
Protective factors				
Percent of students who missed classes without permission on one or more days during past 30 days	14.9 ± 1.5	36.3 ± 2.8	31.5 ± 3.5	30.0 ± 1.9
Percent of students who reported that most of the students in their school were never or rarely kind and helpful in past 30 days	18.2 ± 1.6	36.7 ± 3.3	25.5 ± 3.0	19.0 ± 1.6
Percent of students whose parents or guardian never or rarely knew what they were doing with their free time in past 30 days	39.7 ± 2.4	38.5 ± 2.7	31.4 ± 2.7	24.9 ± 1.3
Hygiene				
Percent of students who cleaned or brushed their teeth less than one time per day in past 30 days	12.4 ± 1.3	Not reported	5.3 ± 2.0	19.5 ± 1.8
Percent of students who never or rarely washed their hands before eating in past 30 days	4.4 ± 0.8	7.5 ± 1.3	6.2 ± 1.4	6.6 ± 0.6
Percent of students who never or rarely washed their hands after using the toilet in last 30 days	2.3 ± 0.6	5.6 ± 1.4	7.7 ± 1.6	4.0 ± 0.5
Dietary behavior				
Percent of students who went hungry most of the time or always in last 30 days because their was not enough food in their home	2.7 ± 0.5	10.3 ± 1.9	7.5 ± 1.2	9.0 ± 0.8
Percent of students who are overweight	2.7 ± 0.8	3.5 ± 1.2	Not reported	11.8 ± 0.9
Percent of students at risk for becoming overweight	15.7 ± 1.4	13.9 ± 1.6	Not reported	21.3 ± 1.4

* the selected items are those that are common among the countries and available on the web

Implications

Recommendations are based on assessed need. Need can be assessed in a variety of ways[19]. Felt need is assessed through asking persons what they need, expressed need is assessed based on use of services; comparative need assesses one population/country/area to another to determine need (as in table 10); and normative need assesses available services/programs against preset norms to ascertain needs.

Although the *comparative analysis* of Lebanon may suggest optimism, the absolute percentages, an indication of *felt need*, give rise to much worry.

Overall, the Lebanese Integrated Health Curriculum needs to be reassessed and edited in light of this report. *Content for some risk behaviors needs to be enhanced and taught at earlier ages (this applies to alcohol and drug prevention education for example). Other content must be added as it is not originally in the curriculum (this applies to the critical areas of mental health and violence and sexual harassment). For still other health risks (such as tobacco), different strategies must be implemented as the current strategies do not seem to be effective in stemming an ever-increasing use of tobacco. In general, an ecological approach[20] to school health – focusing on a comprehensive school health program must be adopted.*

The concept of a comprehensive school health programs – as already mentioned in the introduction, leads us to *normative need*. Since the early 80s, the concept of a health promoting school has emerged. In 1995, the World Health Organization launched its Global School Health Initiative[21] with the goal of increasing the number of schools who are truly health promoting schools, or schools who ' can be characterised as a school constantly strengthening its capacity as a healthy setting for living, learning and working.' At that same time, the WHO defined a health promoting school as "one in which all members of the school community work together to provide pupils with integrated and positive experiences and structures, which promote and protect their health. This includes both the formal and informal curriculum in health, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health." (World Health Organization, 1995).

A comprehensive school health program linked to a health promoting school focuses on increasing knowledge for health significant decisions, changing attitudes to become pro-health, providing skills to enact behaviors, and changing behaviors influencing behavior. Targets of change in a comprehensive school health program are thus - not only students, but teachers, parents, administrators, and even the larger community. In addition, a health promoting school strives to enhance environments to become more supportive of healthy choices. Environments include both physical (cafeteria, buildings, playgrounds, classrooms), and social (teachers, parents, staff, administrators, students). Reviews of school health promotion programs have indicated that knowledge only programs do not by necessity lead to behavior change even when information is transmitted effectively. In addition, affective approaches, which focus on attitudes, values, and feelings (self esteem for example) also have not made much impact on behavior change. Program, however, that are based on

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[19] Grant J. (2002). Learning needs assessment: assessing the need. *British Medical Journal*, 324: 156-159.

[20] McLeroy KR, Bibeau D, Steckler A & Glanz K (1988). An ecological perspective on health promotion programs. *Health Education Quarterly, 15(4):* 351-377.

[21] http://www.who.int/school_youth_health/gshi/en/

social psychological theory (for example, Social cognitive Theory[22]) have been evaluated to decrease risk taking health behavior.[23]

A recent review of health promoting schools and health promotion in schools stated that: "The evidence available to support the health promoting schools was … promising." [24] School health planners and implementers should refer to the **evidence based** literature on school health. [25] [26] [27]

It is recommended that Lebanon move towards supporting schools to become health promoting schools. This can begin with pilot programs in a few selected schools, and diffuse as possible to all schools. An Arab NGO, focused on school health recently held a competition in the regions for model health promoting schools. At least one private school in Lebanon was among the winners.

More specifically, *the data point to an urgent need to implement school health programs in the area of violence prevention and mental health promotion.* Such programs are most effective when implemented as part of a comprehensive school health program within a 'health promoting school.' [28] Several evidence-based programs in both violence prevention and mental health promotion are now available.[29] [30] However, effort and time need to be exerted to ensure the adaptation of such programs to the local context.

Youth health concerns everyone. Schools need to play a central role in influencing healthy attitudes and behaviors, but given their academic responsibilities, cannot be expected to alone be responsible for health promotion.[20] Stakeholders who should be included in the development (or in discussions about) of a comprehensive ecologic school health program include: the Ministries of Education and Health and Environment and Social Affairs, representatives of schools (public, private, semi-private, religious, non religious, from all areas of Lebanon), parents, teachers, students (very important to include participation of students), the World Health Organization, UNICEF, other International agencies whose mandate includes children or health or education, local NGOs whose mandate includes

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[22] Baranowski T, Perry CL, & Parcel GS. (2002). How individuals, environment, and health behavior interact. Social Cognitive Theory. Chapter 8 in Glanz K, Rimer BK, & Lewis FM (eds). Health Behavior and Health Education: Theory, Research, and Practice, 3rd edition. Jossey-Bass: San Francisco, CA.

[23] Parcel GS, Kelder SH, Basen-Engquist K. (2000). The school as a setting for health promotion. In Poland BD, Green LW, & Rootman I (eds). Settings for Health Promotion. Sage publications: Thousand Oaks, CA.

[24] Lister-Sharp D, Chapman S, Stewart-Brown S, Sowden A. Health promoting schools and health promotion in schools: two systematic reviews. *Health Technol Assess* 1999;**3**(22).

[25] Stewart-Brown S (2006). What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach? Copenhagen, WHO Regional Office for Europe (Health Evidence Network report; http://www.euro.who.int/document/e88185.pdf, accessed October 1 2006).

[26] Keleher, H & Armstrong, R 2005, Evidence-based mental health promotion resource, Report for the Department of Human Services and VicHealth, Melbourne.

[27] Mytton J, et al. School-based secondary prevention programmes for preventing violence (Review). The Cochrane Database of Systematic Reviews 2006, Issue 3.

[28] http://www.sofweb.vic.edu.au/hps/

[29] Greenberg MT, Domitrovich C, & Bumbarger B. (2000). Preventing mental disorders in school-age children: A review of the effectiveness of prevention programs. http://www.prevention.psu.edu/pubs/docs/CMHS.pdf

[30] http://www.ucalgary.ca/resolve/violenceprevention/English/index.htm ; http://www.colorado.edu/cspv/blueprints/

children or health or education, other Ministries whose mandate includes children or health or education, religious leaders, among others.

Limitations

Two main limitations to the conclusion drawn are noted. First, although a pilot test was conducted prior to implementation of the GSHS, the author of this report is not sure that students fully understood the questions as asked. This is supported by reports from field workers indicating that –despite careful and well thought out definitions of terms included in the survey students often answered questions without reading such definitions. *It is recommended that a series of focus groups be conducted with youth of the same age,* and from various parts of Lebanon, to explore the local meeting of some of the terms used in the GSHS survey. Data from such qualitative research would validate and strengthen findings.

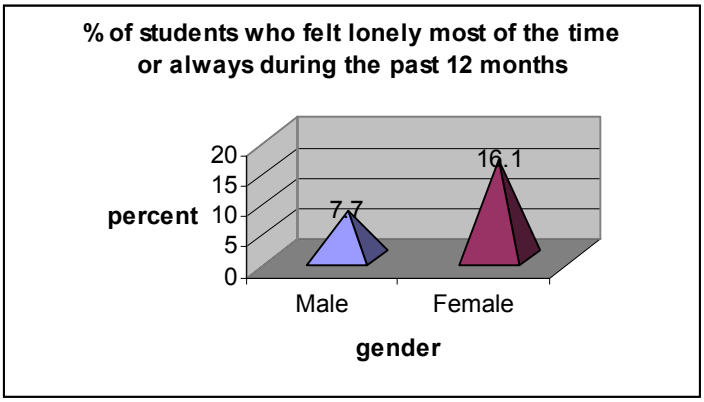
Second, although the integrated school health curriculum has been implemented since 1997, no systematic (or non systematic) evaluation of its implementation and outcome ahs been conducted. A review of the content of books used for health objectives required in the curriculum suggested gaps.[31] The suggested implications of any survey such as the GSHS on the curriculum (or school health programs more generally) is quite limited in the absence of knowledge of extent of implementation of the current curriculum. *It is recommended that the extent of implementation of the current curriculum be evaluated through a variety of methods including observations and surveys of teachers and students.*

[31] Makhoul, J. (2001) Report on the Review of the National Schoolbooks for the Curriculum on Health and Environmental Education WHO-UNESCO-Ministry of Education, Beirut.

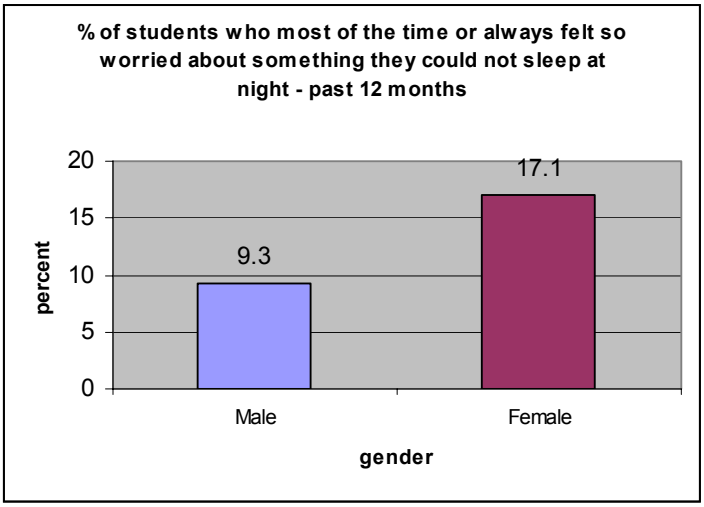
GRAPHS

Comparison between sexes on mental health-related GSHS items

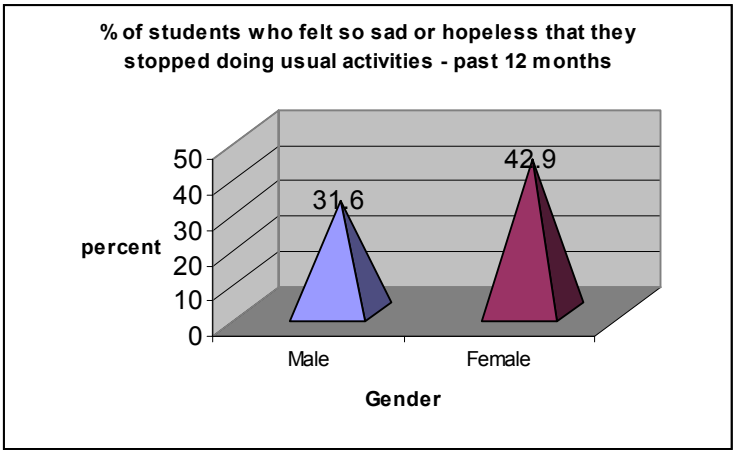
Graph GMH1



Graph GMH2



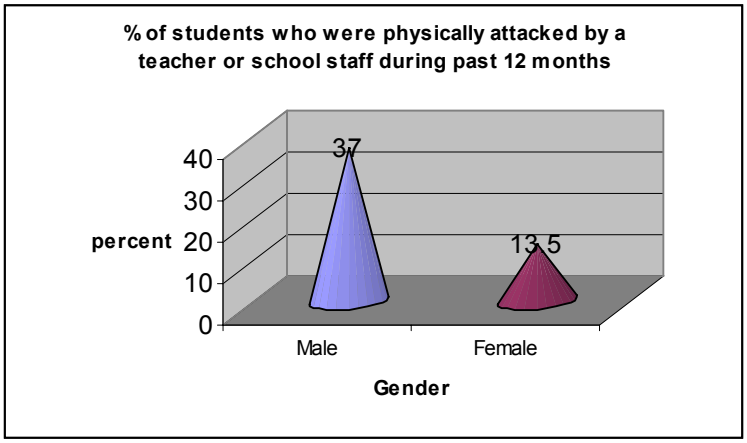
Graph GMH3*



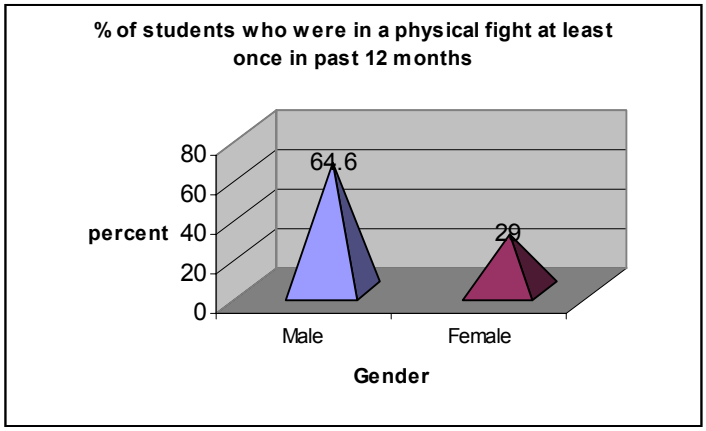
* see table 5a for complete wording of questions

Comparison between sexes on violence-related GSHS items

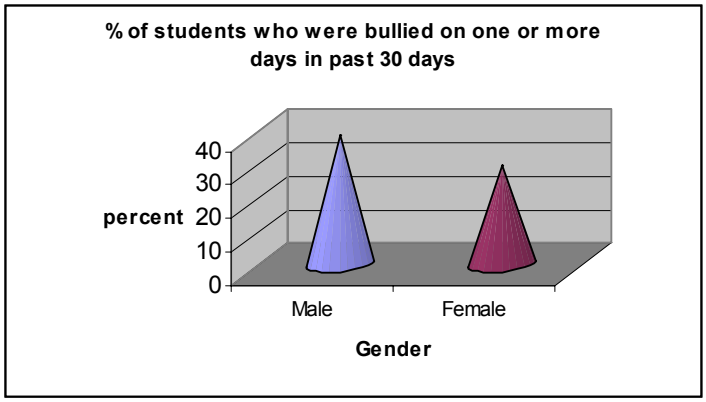
Graph GV1



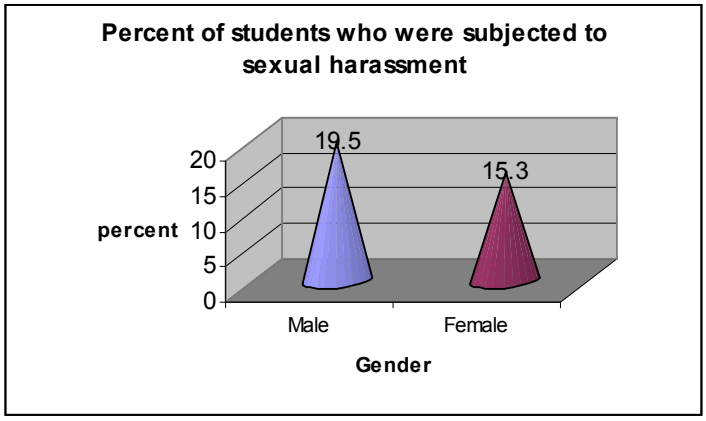
Graph GV2



Graph GV3

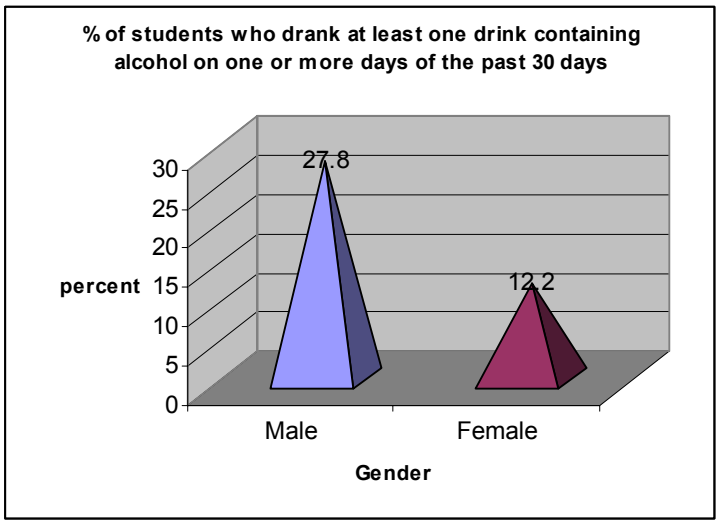


Graph GV4

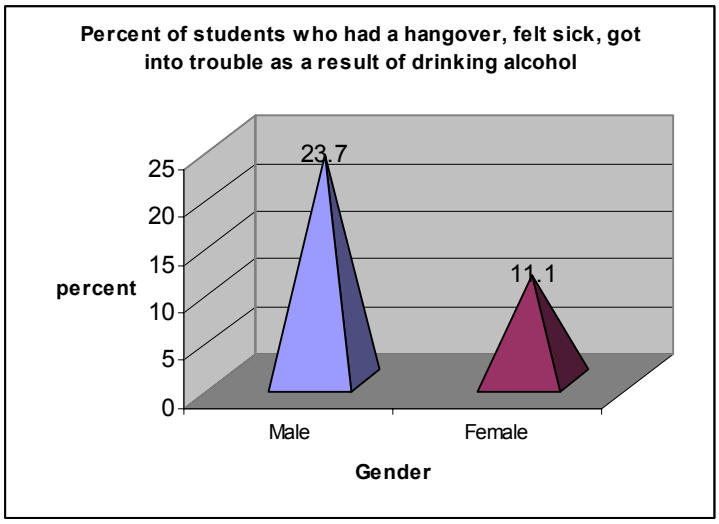

Percent of students who were subjected to sexual harassment
19.5
15.3
20
15
10
5
0
percent
Male
Female
Gender

Comparison between sexes on alcohol-related GSHS items

Graph GA1

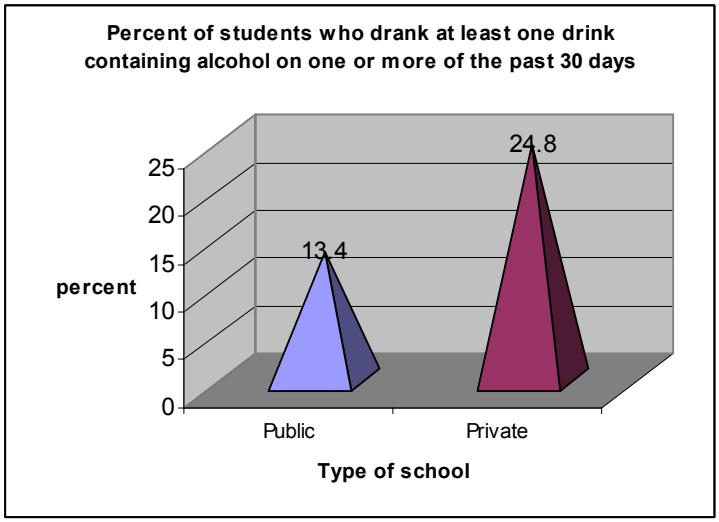


Graph GA2*



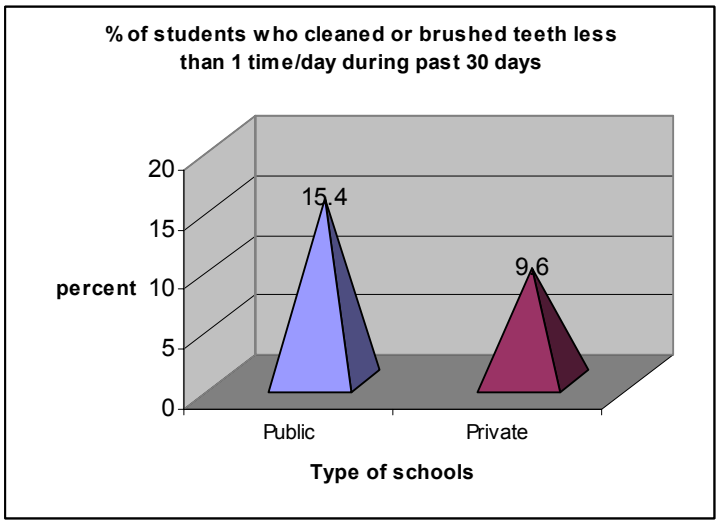
* refer to table 2a for complete wording of question

Graph PPA1

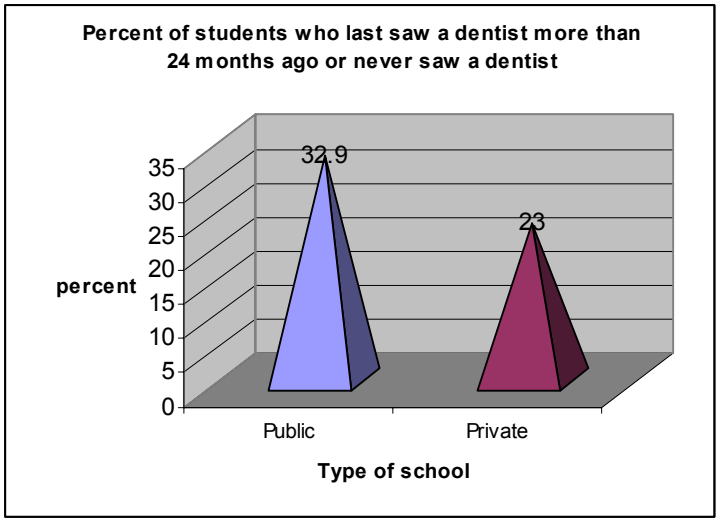


Comparison between types of school on hygiene-related GSHS items

Graph PPH1

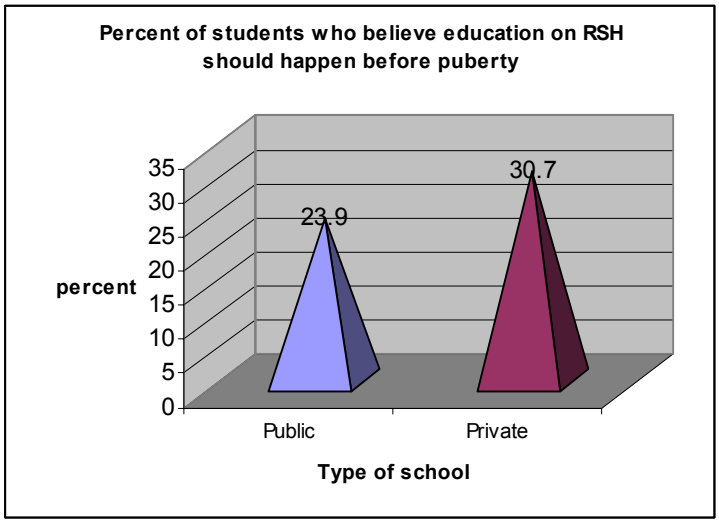


Graph PPH2



Comparison between types of school on reproductive and sexual health-related GSHS items

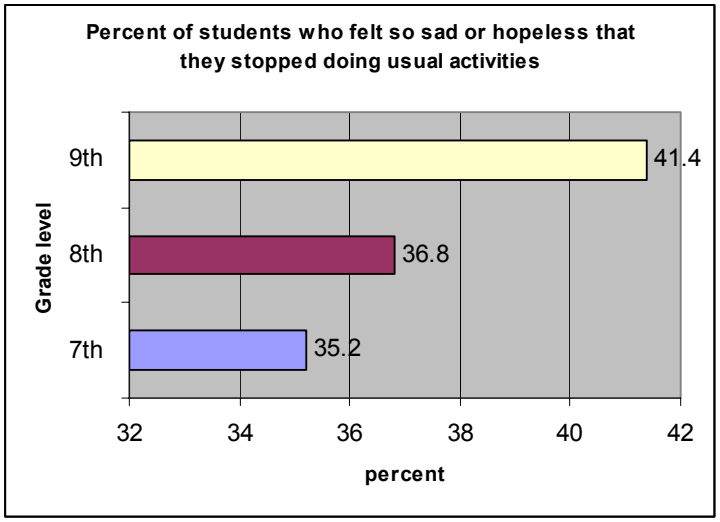
Graph PPRSH1*



* Refer to table 8b for complete wording of question

Comparison between grade levels on mental health-related GSHS items

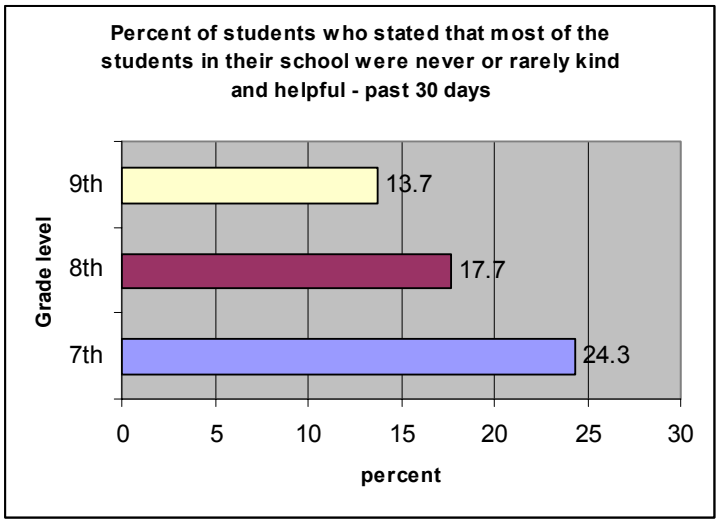
Graph GLMH1*



* refer to table 5c for complete wording of question

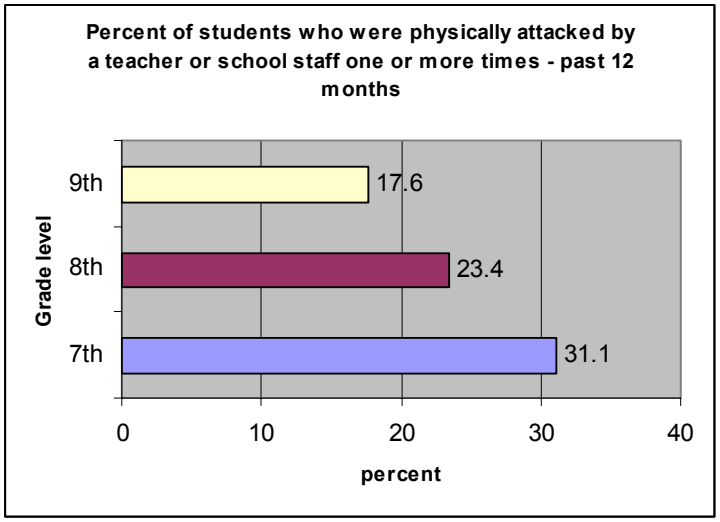
Comparison between grade levels on protective factor-related GSHS items

Graph GLPF1



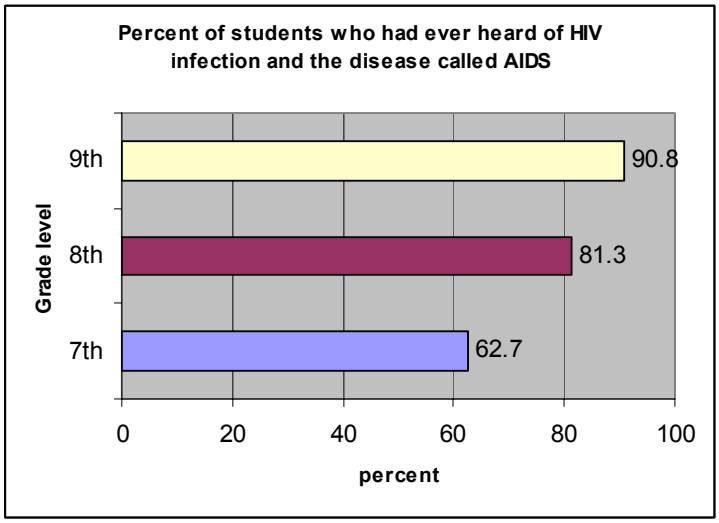
Comparison between grade levels on violence-related GSHS items

Graph GLV1

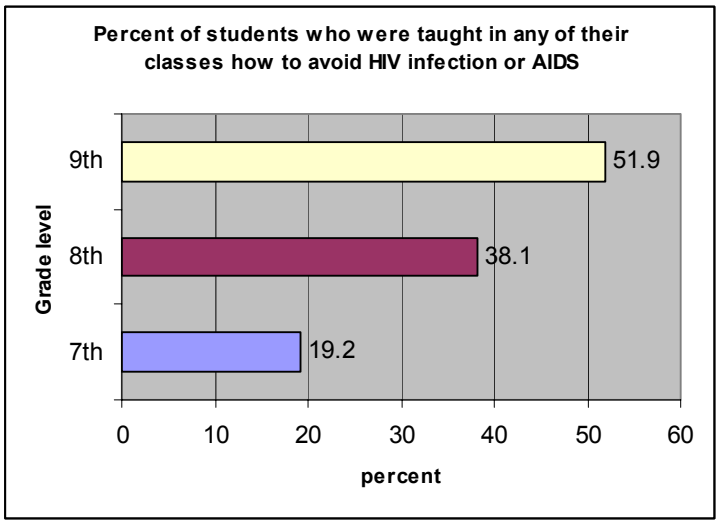


Comparison between grade levels of reproductive and sexual health-related GSHS items

Graph GLRSH1



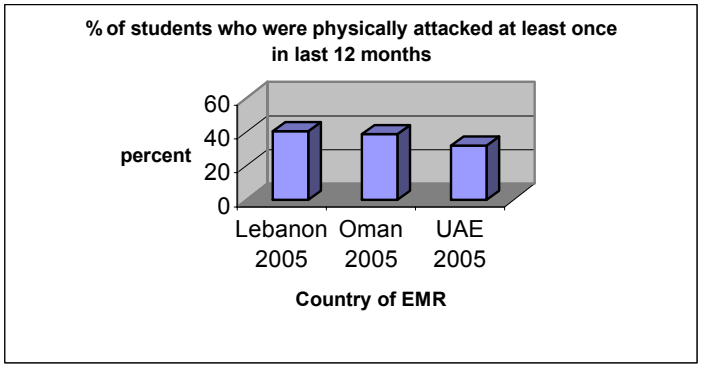
Graph GLSRH2*



* Refer to table 8c for complete wording of question

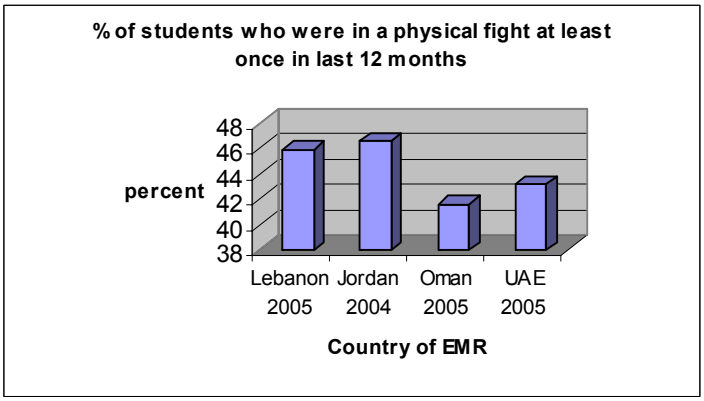
Comparison between countries of the Eastern Mediterranean Region (EMR) on Violence-related GSHS items

Graph V1

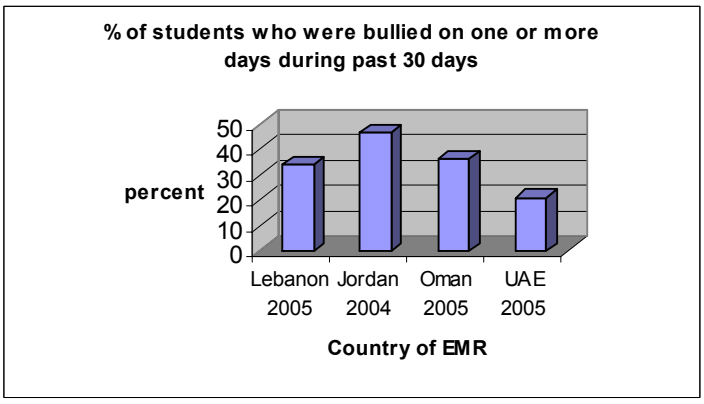


* Jordan did not report data for this question

Graph V2

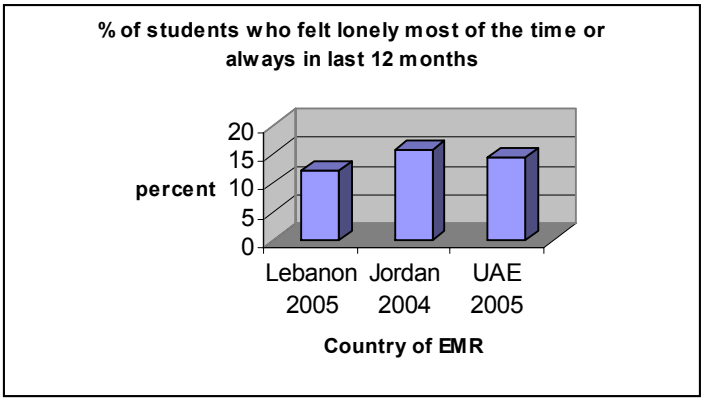


Graph V3



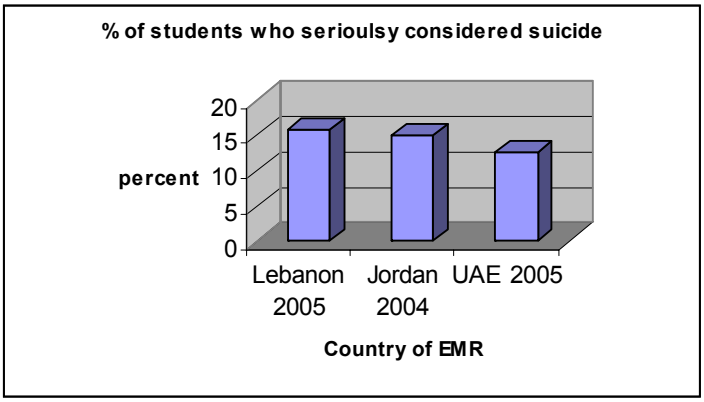
Comparison between countries of the Eastern Mediterranean Region (EMR) on mental health-related GSHS items

Graph MH1



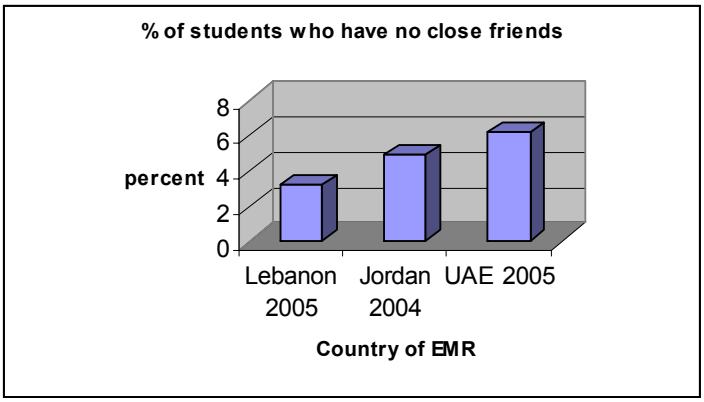
* Oman did not report data for this question

Graph MH2



* Oman did not report data for this question

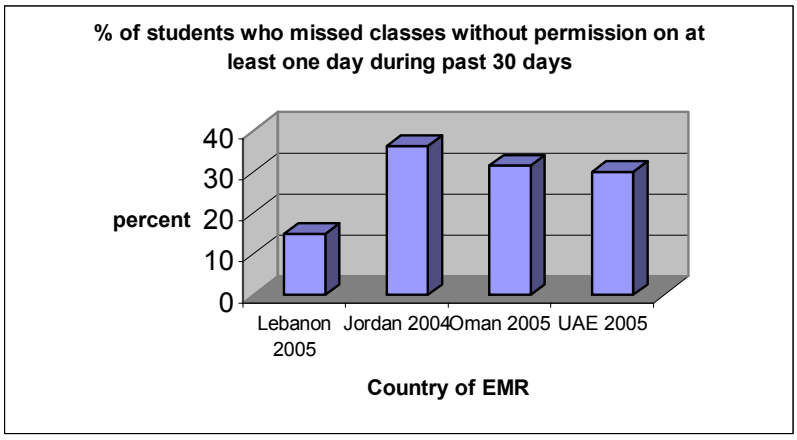
Graph MH3



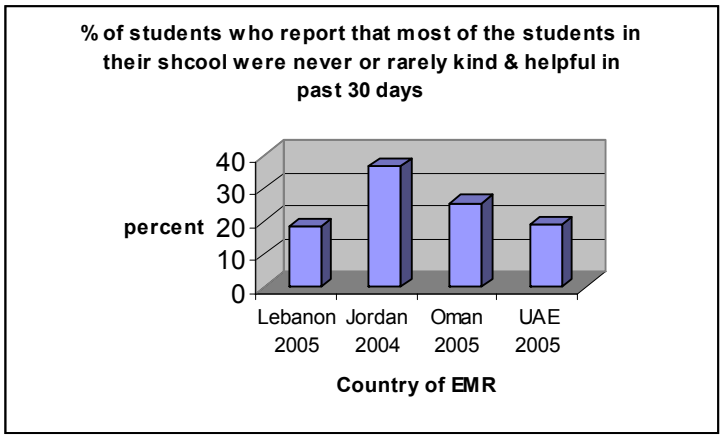
* Oman did not report data for this question

Comparison between countries of the Eastern Mediterranean Region (EMR) on protective factor-related GSHS items

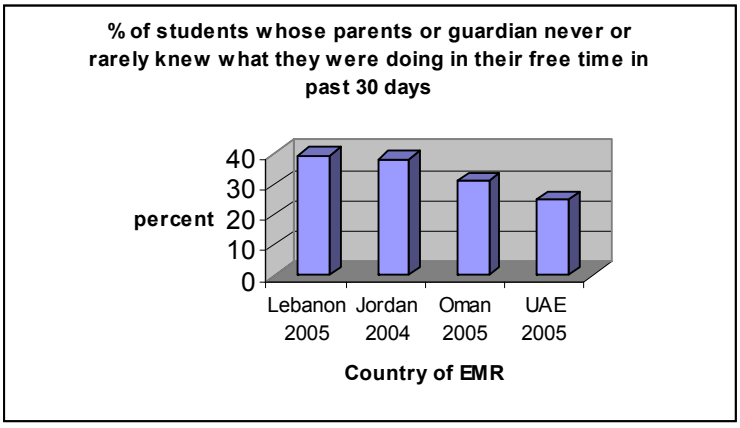
Graph PF1



Graph PF2

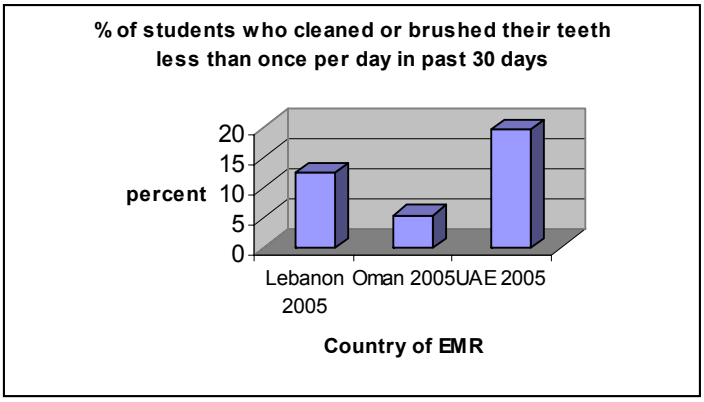


Graph PF3



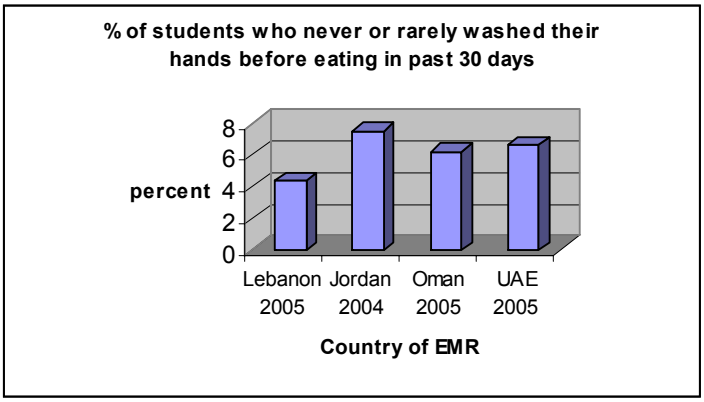
Comparison between countries of the Eastern Mediterranean Region (EMR) on hygiene-related GSHS items

Graph H1

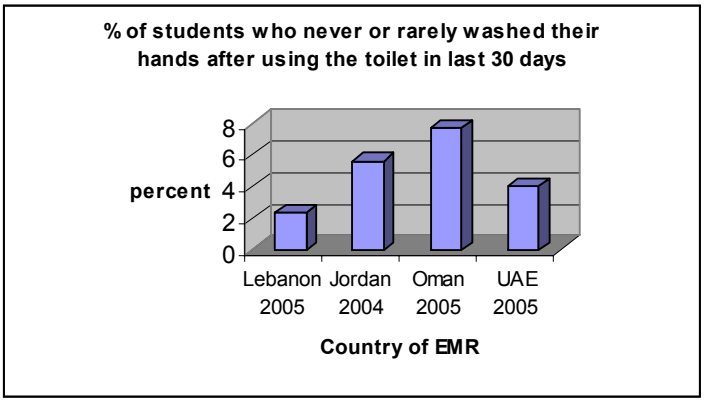


* Jordan did not report data for this question

Graph H2

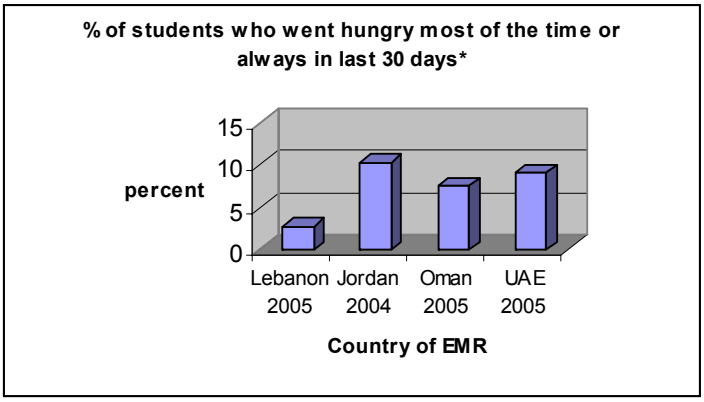


Graph H3



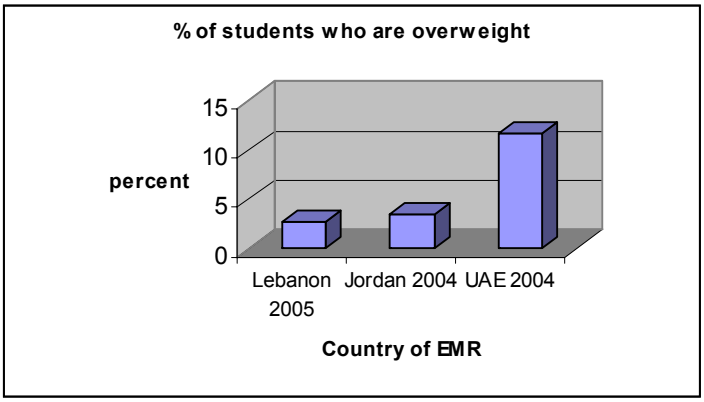
Comparison between countries of the Eastern Mediterranean Region (EMR) on dietary behavior-related GSHS items

Graph DB1



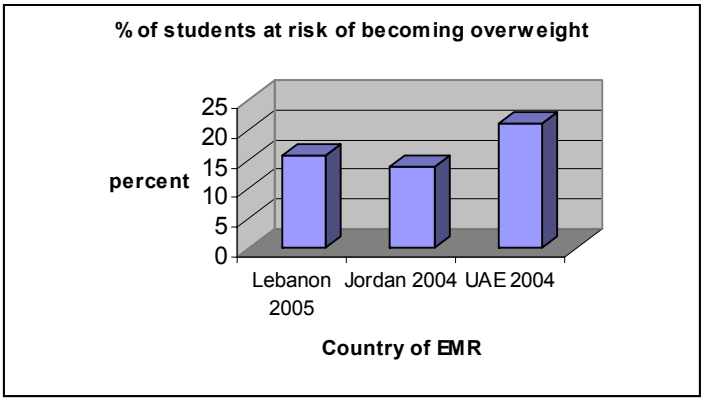
* see table 10 for complete wording of question

Graph DB2



* Oman did not report data for this question

Graph DB3



* Oman did not report data for this question

APPENDICES

APPENDIX A
2005 LEBANON 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. A B C D E F G H

Thank you very much for your help.

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

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

3. In what grade are you?
   A. 7th grade
   B. 8th grade
   C. 9th grade

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

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

Example

Height (cm)		
1	***5***	***3***
I do not know		

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

Example

Weight (kg)		
0	***5***	***2***
I do not know		

6. How do you describe your weight?
   A. Very underweight
   B. Slightly underweight
   C. About the right weight
   D. Slightly overweight
   E. Very overweight

7. Which of the following are you trying to do about your weight?
   A. I am **not trying to do anything** about my weight
   B. **Lose** weight
   C. **Gain** weight
   D. **Stay** the same weight

8. During the past 30 days, how often did you go hungry because there was not enough food in your home?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

The next 9 questions ask about foods you might eat.

9. During the past 30 days, how many times per day did you **usually** eat fruit, such as apples, bananas, and oranges?
    A. I did not eat fruit during the past 30 days
    B. Less than one time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 times per day
    G. 5 or more times per day

10. During the past 30 days, how many times per day did you **usually** eat vegetables, such as salads, spinach, eggplant, tomatoes, and cucumbers?
    A. I did not eat vegetables during the past 30 days
    B. Less than one time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 times per day
    G. 5 or more times per day

11. During the past 30 days, how many times per day did you usually eat cereals and carbohydrates, such as potato, wheat, rice, or maize and their products like bread cornflakes ,etc,?
    A. I did not eat cereals during the past 30 days
    B. Less than 1 time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 times per day
    G. 5 or more times per day

12. During the past 30 days, how many times per day did you usually drink milk or eat milk products, such as yogurt, labneh, cheese, and cream?
    A. I did not drink milk or eat milk products during the past 30 days
    B. Less than one time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 times per day
    G. 5 or more times per day

13. During the past 30 days, how many times per day did you **usually** drink carbonated soft drinks, such as Pepsi, Coca Cola, Fanta, and Seven-Up?
    A. I did not drink carbonated soft drinks during the past 30 days
    B. Less than 1 time per day
    C. 1 time per day
    D. 2 times per day
    E. 3 times per day
    F. 4 times per day
    G. 5 or more times per day

14. During the past 30 days, how often did you eat breakfast?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

15. What is the **main** reason you do not eat breakfast?
    A. I always eat breakfast
    B. I do not have time for breakfast
    C. I cannot eat early in the morning
    D. There is not always food in my home
    E. Some other reason

16. During the past 30 days, how often did you bring your lunch to school?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

17. During the past 7 days, on how many days did you eat at or order from a restaurant that serves fast food such as burgers, shawarma, pizza, falafel, thyme, or pastries?
    A. 0 days
    B. 1 day
    C. 2 days
    D. 3 days
    E. 4 days
    F. 5 days
    G. 6 days
    H. 7 days

The next 5 questions ask about personal health activities.

18. 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

19. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?
    A. During the past 12 months
    B. Between 12 and 24 months ago
    C. More than 24 months ago
    D. Never
    E. I do not know

20. 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

21. 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

22. 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 3 questions ask about physical attacks. A physical attack occurs when one or more people hit or strike someone, or when one or more people hurt another person with a weapon (such as a stick, knife, or gun). It is not a physical attack when two students of about the same strength or power choose to fight each other.

23. 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

24. During the past 30 days, how many times were you physically attacked by an adult family member?
    A. 0 times
    B. 1 time
    C. 2 or 3 times
    D. 4 or 5 times
    E. 6 or 7 times
    F. 8 or 9 times
    G. 10 or 11 times
    H. 12 or more times

25. During the past 12 months, how many times were you physically attacked by a teacher or school staff?
    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.

26. 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 <u>the most serious injury</u> 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.

27. 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

28. 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, scooter, or (OTHER COUNTRY SPECIFIC NON-MOTORIZED FORM OF TRANSPORTATION)
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

29. 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

30. 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

31. 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.

32. 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

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

The next 3 questions ask about other types of violence and injury.
Sexual harassment occurs when someone makes comments of sexual natures, touches you in private body parts, and/or tries to force on you a sexual relationship

34. Have you ever been subjected to sexual harassment?
    A. Yes
    B. No
    C. I don't know

35. During the past 30 days, how many times has someone stolen or deliberately damaged your property, such as your car, clothing, or books, **on school property**?
    A. 0 times
    B. 1 time
    C. 2 or 3 times
    D. 4 or 5 times
    E. 6 or 7 times
    F. 8 or 9 times
    G. 10 or 11 times
    H. 12 or more times

36. During the past 30 days, how often did you use a seat belt when **riding** in a car or other motor vehicle driven by someone else?
    A. I did not ride in a motor vehicle driven by someone else
    B. Never
    C. Rarely
    D. Sometimes
    E. Most of the time
    F. Always

The next 8 questions ask about your feelings and friendships.

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

38. 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

39. During the past 12 months, how often have you had a hard time staying focused on your homework or other things you had to do?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

40. 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

41. During the past 12 months, did you ever **seriously** consider attempting suicide?
    A. Yes
    B. No

42. During the past 12 months, did you make a plan about how you would attempt suicide?
    A. Yes
    B. No

43. How many close friends do you have?
    A. 0
    B. 1
    C. 2
    D. 3 or more

44. Are you satisfied with the number of close friends you have?
    A. Yes
    B. No

The next 6 questions ask about drinking alcohol. This includes drinking beer, arak, whisky, wine, vodka, or alcohol containing juices such as Bacardi and Smirnoff. Drinking alcohol does not include drinking a few sips of wine in church for religious purposes.

45. During the past 30 days, on how many days did you have at least one drink containing alcohol?
    A. 0 days
    B. 1 or 2 days
    C. 3 to 5 days
    D. 6 to 9 days
    E. 10 to 19 days
    F. 20 to 29 days
    G. All 30 days

46. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink per day?
    A. I did not drink alcohol during the past 30 days
    B. Less than one drink
    C. 1 drink
    D. 2 drinks
    E. 3 drinks
    F. 4 drinks
    G. 5 or more drinks

47. During the past 30 days, how did you **usually** get the alcohol you drank? SELECT ONLY ONE RESPONSE.
    A. I did not drink alcohol during the past 30 days
    B. I bought it in a store, shop, or from a street vendor
    C. I gave someone else money to buy it for me
    D. I got it from my friends
    E. I got it from home
    F. I stole it
    G. I got it some other way

48. 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

49. 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

50. If one of your best friends offered you a drink of alcohol, would you drink it?
    A. Definitely not
    B. Probably not
    C. Probably yes
    D. Definitely yes

The next 2 questions ask about drugs and what you have been taught in school.

51. During your life, how many times have you used drugs, such as marijuana (hashish), cocaine, heroin, ecstasy, medical tranquilizers, or stimulants without prescription?
    A. 0 times
    B. 1 or 2 times
    C. 3 to 9 times
    D. 10 or more times

52. During this school year, have you been taught at school about the dangers of drinking alcohol and using drugs?
    A. Yes
    B. No
    C. I do not know

The next 9 questions ask about topics related to education on reproductive and sexual health.

53. In your opinion, when should education on reproductive and sexual health start?
    A. Before the age of puberty
    B. During the age of puberty
    C. When one is getting ready for marriage
    D. I do not know

54. Are you with the discussion of reproductive and sexual health topics in school classes?
    A. Yes
    B. No
    C. I do not know

55. Do you prefer that the discussion of reproductive and sexual health topics to be in “boys only” or “girls only” classes?
    A. I am against the discussion of reproductive and sexual health topics in school classes
    B. I prefer that the discussions take place in “boys only” or girls only” classes
    C. I prefer that the discussions take place just as other subjects are taught
    D. I have no preference
    E. I do not know

56. How did your teacher react when you asked him/her about reproductive and sexual health topics?
    A. I did not ask the teacher
    B. The teacher scolded me
    C. The teacher refused to answer
    D. The teacher referred me to ask somebody else
    E. The teacher answered my question

57. How did your parent/s react when you asked them about reproductive and sexual health topics?
    A. I did not ask my parents
    B. My parent/s scolded me
    C. My parent/s refused to answer
    D. My parent/s referred me to ask somebody else
    E. My parent/s answered my question

58. Have you ever heard of HIV infection or AIDS?
    A. Yes
    B. No

59. During this school year, were you taught in any of your classes how to avoid HIV infection or AIDS?
    A. Yes
    B. No
    C. I do not know

60. Can people protect themselves from HIV infection or AIDS by not having sexual intercourse?
    A. Yes
    B. No
    C. I do not know

61. Do you know how to tell someone you do not want to have sexual intercourse with them?
    A. Yes
    B. No
    C. I do not know

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

62. 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

63. 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

64. During the past 30 days, how often did your parents or guardians check to see if your homework was done?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

65. During the past 30 days, how often did your parents or guardians understand your problems and worries?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

66. During the past 30 days, how often did your parents or guardians **really** know what you were doing with your free time?
    A. Never
    B. Rarely
    C. Sometimes
    D. Most of the time
    E. Always

appendix B_

المسح الصحي العالمي المرتكز على تلامذة المدارس

لبـنان -2005

ان محور هذه الدراسة هو صحتك لذا نسأل عن التصرفات التي تقوم ا والتي قد تؤثر عليها .

ان تلامذة على كل الأراضي اللبنـانية يشاركون ذه الدراسة، كما وان تلامذة في بلدان اخرى حول العالم ينفذو ا .

ان المعلومات التي ستقدمها سوف تستخدم لتطوير البرامج الصحية المتعلقة بالشباب الذين في عمرك . والمعلومات التي تتعلق بك شخصيا ستبقى سرية ولن يسمح لأحد بالاطلاع عليها وانما ستستخدم فقط لأهداف هذا المسح . والمطلوب فقط هو الاجابة عن ماذا تعرف بالفعل، و كيف تتصرف فعليا ، كما وانه ليس هناك أجوبة صحيحة وأخرى غير صحيحة ..

ان المشاركة ذا المسح هي طوعية ولن تتأثر علاماتك في الصف اذا أجبت عن الأسئلة او لم تجب . اذا اردت عدم الإجابة عن اي سؤال اترك مكان الإجابة فارغا .

. اتبع تعليمات المشرف على تنفيذ هذا المسح :

1- لا تذكر اسمك على وثيقة الأسئلة ولا على بطاقة الاجابة .

2- تأكد من قراءة كل سؤال

3- ضع اجاباتك على الورقة المخصصة خلال الوقت المحدد.

4- استعمل القلم الذي اعطي لك للإجابة على بطاقة الاجابة

5- املأ خانات الإجابات هكذ● وليس هكذ  

مثال

سؤال :

1 .هل يعيش السمك في الماء :

A . نعم

B . لا

على بطاقة الإجابة :

1 . ● Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ

نحن نشكرك ونقدر لك هذه المشاركة

1). كم عمرك؟

A. 11 سنة أو اقل
B. 12 سنة
C. 13 سنة
D. 14 سنة
E. 15 سنة
F. 16 سنة أو اكثر

(2). هل انت ذكر ام انثى؟

A. ذكر
B. انثى

(3). في أي صف انت؟

A. السابع الأساسي
B. الثامن الأساسي
C. التاسع الأساسي

تستفسر الأسئلة الخمسة التالية عن طولك ووزنك واحساسك بالجوع.

(4). كم يبلغ طولك بدون ارتداء حذائك؟ إكتب طولك في المستطيل المظلل في أعلى الجدول، ثم إملا الأشكال البيضاوية تحت كل رقم..

مثـ ـال: اذا كان طولك 153 سم، اكتب الرقم واملأ الدوائر كالتالي:

الطول (سم)		
3	**5**	**1**
⓪	⓪	⓪
①	①	●
②	②	②
●	③	
④	④	
⑤	●	
⑥	⑥	
⑦	⑦	
⑧	⑧	
⑨	⑨	
لا أعرف		⑨

(5). كم يبلغ وزنك بدون ارتداء حذائك؟ إكتب وزنك في المستطيل المظلل في أعلى الجدول، ثم إملا الأشكال البيضاوية تحت كل رقم.

مثـ ـال: اذا كان وزنك 52 كيلوغرام (كجم)، اكتب الرقم واملأ الدوائر كالتالي:

الوزن (كجم)		
2	**5**	**0**
⓪	⓪	●
①	①	①
●	②	②
③	③	
④	④	
⑤	●	
⑥	⑥	
⑦	⑦	
⑧	⑧	
⑨	⑨	
لا أعرف		⑨

(6). كيف تصف وزنك؟

A. أقل كثيرا من الوزن المناسب
B. اقل قليلا من الوزن المناسب
C. مقارب للوزن المناسب
D. اكثر قليلا من الوزن المناسب
E. اكثر كثيرا من الوزن المناسب

(7). ما الذي تحاول أن تفعله بشأن وزنك؟

A. لا أحاول أن افعل اي شيء بشأن وزني
B. أحاول التخفيف من وزني
C. أحاول زيادة وزني
D. أحاول الاحتفاظ بنفس وزني

(8). خلال الثلاثين يوما الماضية، كم عدد المرات التي شعرت فيها بالجوع لعدم وجود طعام كافٍ في منزلك؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

الأسئلة التسعة التالية عن انواع الأطعمة والوجبات الغذائية التي تتناولها.

(9). خلال الثلاثين يوما الماضية، كم مرة تقريباً في اليوم الواحد تناولت فاكهة مثل التفاح والموز والبرتقال...الخ؟

A. لم أتناول الفواكه خلال الثلاثين يوما الماضية
B. أقل من مرة واحدة في اليوم (اي ليس يومياً)
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم
G. 5 مرات في اليوم أو اكثر

(10). خلال الثلاثين يوما الماضية، كم مرة تقريباً في اليوم الواحد تناولت الخضروات ، مثل السلطات والسبانخ والباذنجان والبندورة والخيار...الخ؟

A. لم أتناول الخضروات خلال الثلاثين يوما الماضية
B. أقل من مرة واحدة في اليوم (اي ليس يومياً)
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم
G. 5 مرات في اليوم أو اكثر

(11). خلال الثلاثين يوما الماضية، ، كم مرة تقريباً في اليوم الواحد تناولت النشويات والحبوب، مثل البطاطا والقمح والأرز والذرة اومشتقاتها كالبرغل والخبز والكعك والمعكرونة والcornflakes...الخ؟

A. لم أتناول الحبوب والنشويات خلال الثلاثين يوما الماضية
B. أقل من مرة واحدة في اليوم (اي ليس يومياً)
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم
G. 5 مرات في اليوم أو اكثر

(12). خلال الثلاثين يوما الماضية، كم مرة تقريباً في اليوم الواحد تناولت الحليب او مشتقاته مثل اللبن او اللبنة اوالجبنة او القشدة؟

A. لم أتناول الحليب او مشتقاته خلال الثلاثين يوما الماضية
B. أقل من مرة واحدة في اليوم (اي ليس يومياً)
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم
G. 5 مرات في اليوم أو اكثر

(13). خلال الثلاثين يوما الماضية، كم مرة تقريباً في اليوم الواحد تناولت المشروبات الغازية مثل بيبسي أوكوكا كولا اوفانتا او سفن أب؟

A. لم اتناول المشروبات الغازية مثل بيبسي أو كوكا كولا اوفانتا او سفن أب خلال الثلاثين يوماً الماضية
B. أقل من مرة واحدة في اليوم (اي ليس يومياً)
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم
G. 5 مرات في اليوم أو اكثر

(14). خلال الثلاثين يوما الماضية، كم عدد مرات تناولك للفطور (الترويقة)؟

A. لم أتناوله أبدا
B. نادرا (قليلاً جداً)
C. أحيانا (في بعض الأوقات)
D. في معظم الاحيان
E. دائما

(15). ما هو السبب الرئيسي في عدم تناولك الفطور (الترويقة)؟

A. أنا اتناول الفطور دائما
B. ليس لدي وقت لتناول الفطور
C. لا أستطيع الأكل في الصباح الباكر
D. لا يوجد طعام في منزلنا دائما
E. سبب آخر

(16). خلال الثلاثين يوما الماضية، كم مرة تقريباً احضرت فيها وجبة خفيفة (سناك) من منزلك الى المدرسة؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(17). خلال السبعة أيام الماضية، ما هو عدد الأيام التي تناولت فيها طعامك من مطعم يقدم وجبات سريعة مثل الهمبرغر والشاورما والفلافل والمعجنات مثل البيتزا والمناقيش وغيرها ...الخ (سواء طلبت توصيله الى البيت اوذهبت الى المطعم)؟

A. ولا يوم
B. يوم واحد
C. يومان
D. 3 أيام
E. 4 أيام
F. 5 أيام
G. 6 أيام
H. 7 أيام

الأسئلة الخمسة التالية عن ممارساتك المتعلّقة بالنظافة الشخصية.

(18). خلال الثلاثين يوما الماضية، كم عدد المرات في اليوم التي نظفت فيها أسنانك مستعملاً الفرشاة ومعجون الأسنان؟

A. لم أنظف أسناني او افركها بالفرشاة خلال الثلاثين يوما الماضية
B. اقل من مرة واحدة في اليوم
C. مرة واحدة في اليوم
D. مرتين في اليوم
E. 3 مرات في اليوم
F. 4 مرات في اليوم أو اكثر

(19). متى آخر مرة زرت فيها طبيب الأسنان لكشف دوري او تنظيف اسنان اولأسباب اخرى؟

A. خلال ال12 شهراً الماضية (خلال هذه السنة)
B. بين 12 و 24 شهراً الماضية (السنة الماضية والتي سبقتها)
C. اكثر من 24 شهراً (منذ اكثر من سنتين)
D. ابداً، لم اذهب الى طبيب الأسنان
E. لا اعرف

(20). خلال الثلاثين يوما الماضية، كم مرة تقريباً غسلت فيها يديك قبل الأكل؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(21). خلال الثلاثين يوما الماضية، كم مرة تقريباً غسلت يديك بعد استعمال المرحاض اوالحمّامات؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(22). خلال الثلاثين يوما الماضية، كم مرة تقريباً استخدمت الصابون عند غسل يديك؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

الاسئلة الإثنتا عشرة التالية تسأل عن العنف والإستفواء والاعتداءات الجسدية.

الأسئلة الثلاثة التالية تسألك عن الاعتداءآت الجسدية.
الاعتداء الجسدي يحدث عندما يقوم شخص أو اكثر بالهجوم على شخص آخر، او ضربه او جرحه عمداً بيده او باستخدام سلاح (عصا، سكين ، ...) ولا يعتبر اعتداء جسدياً عندما يختار اشخاص بنفس القوة ان يتعاركوا لعباً او مزحاً.
امثلة عن الإعتداء الجسدي :الضرب، الدفع، النكز، شد الشعر او قرص الأذف او الأذنين.

(23). خلال الاثني عشر شهراً الماضية، كم عدد المرات التي تعرضت فيها للإعتداء الجسدي؟

A. ولا مرة
B. مرة واحدة
C. 2 - 3 مرات
D. 4 - 5 مرات
E. 6 - 7 مرات
F. 8 - 9 مرات
G. 10 - 11 مرة
H. 12 مرة أو اكثر

(24). خلال الاثني عشر شهرا الماضية، كم عدد المرات التي تعرضت فيها للإعتداء الجسدي من قبل أحد أفراد أسرتك الكبار؟

A. ولا مرة
B. مرة واحدة
C. 2 - 3 مرات
D. 4 - 5 مرات
E. 6 - 7 مرات
F. 8 - 9 مرات
G. 10 - 11 مرة
H. 12 مرة أو اكثر

(25). خلال الاثني عشر شهراً الماضية، كم عدد المرات التي تعرضت فيها للإعتداء الجسدي من قبل المعلم او احد العاملين في المدرسة؟

A. ولا مرة
B. مرة واحدة
C. 2 - 3 مرات
D. 4 - 5 مرات
E. 6 - 7 مرات
F. 8 - 9 مرات
G. 10 - 11 مرة
H. 12 مرة أو اكثر

السؤال التالي هو حول العراك الجسدي .

نعني بالعراك الجسدي في هذا السؤال عندما يقرر شخصان أو اكثر أن يتعاركا على ان يكونا متعادلين تقريبا بالقوة او بالقدرة. ،.

(26). خلال الاثني عشر شهرا الماضية، كم عدد المرات التي تعاركت فيها جسديا؟

ولا مرة
مرة واحدة
2 - 3 مرات
4 - 5 مرات
6 - 7 مرات
8 - 9 مرات
10 - 11 مرة
12 مرة أو اكثر

الاسئلة الخمسة التالية تسألك عن أخطر اصابة حدثت لك خلال الاثني عشر شهرا الماضية.

تعتبر الاصابة خطيرة عندما تعطلك يوما كاملا على الاقل عن انشطتك المعتادة (مثل الحركة او الذهاب الى المدرسة) اوعندما تحتاج الى علاج طبي على الأقل.

(27). خلال الاثني عشر شهرا الماضية، كم عدد المرات التي اصبت فيها بإصابات خطيرة؟

ولا مرة
مرة واحدة
2 - 3 مرات
4 - 5 مرات
6 - 7 مرات
8 - 9 مرات
10 - 11 مرة
12 مرة أو اكثر

(28). خلال الاثني عشر شهرا الماضية، **ماذا كنت تفعل** عندما حدثت لك اشد الإصابات خطورة؟

A. لم تحدث لي اصابة خطيرة خلال الاثني عشر شهرا الماضية
B. كنت ألعب أو اثناء ممارسة الرياضة
C. كنت أمشي أو أركض (ليس كجزء من اللعب او اثناء الممارسة الرياضة)
D. كنت اقود دراجة او سكوتر أو لوحة بعجلات Skateboard
E. كنت أركب او أقود سيارة أو مركبة أخرى ذات محرك
F. كنت أقوم بعمل مقابل أجر أو بدون أجر، بما في ذلك العمل المنزلي او العمل الزراعي او المطبخ
G. لم أكن أعمل شيئاً
H. غير ذلك

(29). خلال الاثني عشر شهرا الماضية، ماذا كان السبب الرئيسي الذي تسبب في اشد الإصابات خطورة التي حدثت لك؟

A. لم تحدث لي اصابة خطيرة خلال الاثني عشر شهرا الماضية
B. كنت في سيارة صدمتها سيارة أخرى او صدمتني احد السيارات
C. سقطت
D. سقط علي شيء أو ارتطم (خبط) بي شيء
E. كنت أتعارك مع أحد الاشخاص
F. هجم علي شخص ما
G. كنت بالقرب من حريق أو قريب جدا من لهب أو شيء ساخن
H. غير ذلك

(30). خلال الاثني عشر شهرا الماضية، كيف اصبت بأشد الإصابات خطورة**؟**

A. لم تحدث لي اصابة خطيرة خلال الإثني عشر شهراً الماضية
B. أصبت نفسي عن غير قصد
C. أصابني شخص آخر عن غير قصد
D. أصبت نفسي عمداً
E. أصابني شخص آخر عمداً

(31). خلال الاثني عشر شهرا الماضية، ماذا كانت اشد الإصابات خطورة التي حدثت لك؟

A. لم تحدث لي اصابة خطيرة خلال الإثني عشر شهراً الماضية
B. أصبت بكسر في إحدى العظام أو بخلع في أحد المفاصل
C. أصبت بجرح أو طعنة بأداة حادة
D. أصبت بارتجاج أو إصابة أخرى في الرأس والعنق، أو أغمي علي، أو لم أستطع التنفس
E. أصبت بطلق ناري او مواد متفجرة
F. أصبت بحروق شديدة
G. فقدت قدما أو ساقا أو ذراعا أو جزءا منها
H. حدث لي شيء آخر

السؤالان التاليان هما حول الاستفواء .
يحدث الإستفواء عندما يقوم شخص أو مجموعة من الأشخاص بقول أوبعمل يسيئ لشخص آخر بقصد الإيذاء.

(32). خلال الثلاثين يوما الماضية، كم عدد الأيام التي تعرضت فيها للإستفواء؟

A. ولا مرة
B. يوم او اثنين
C. ثلاثة او خمسة ايام
D. ستة او تسعة ايام
E. عشر او تسعة عشر يوما
F. عشرين او تسع وعشرين يوما
G. ثلاثين يوما

(33). خلال الثلاثين يوما الماضية، ما هي انواع الإستفواء التي تعرضت لها؟

A. لم أتعرض للإستقواء خلال الثلاثين يوما الماضية
B. تعرضت للضرب – للدفع (للدفش)- للحبس في مكان مغلق
C. تعرضت للسخرية بسبب انتمائي المناطقي/اصلي العائلي/ انتمائي السياسي
D. تعرضت للسخرية بسبب ديني او طائفتي
E. تعرضت للسخرية بتعليقات جنسية (مزحات اوحركات بذيئة)
F. تم استثنائي من الانشطة عمدا وتم اهمالي كلياً
G. تعرضت للسخرية بسبب مظهري
H. تعرضت للإستقواء بطرق أخرى

الأسئلة الثلاث التالية تسألك عن انواع اخرى من العنف والتعرض للخطر.

(34). هل تعرضت في حياتك للتحرش الجنسي (من اللمس غير المرغوب فيه الى فرض علاقات جنسية)؟

A. نعم
B. لا
C. لا أعرف

(35). خلال الثلاثين يوما الماضية، كم عدد المرات التي قام بها شخص ما بسرقة أو تحطيم ممتلكاتك عمدا، مثل ملابسك أو كتبك، داخل المدرسة؟

A. ولا مرة
B. مرة واحدة
C. 2 - 3 مرات
D. 4 - 5 مرات
E. 6 - 7 مرات
F. 8 - 9 مرات
G. 10 - 11 مرة
H. 12 مرة أو اكثر

(36). خلال الثلاثين يوما الماضية، ما معدل استخدامك لحزام الأمان عند ركوبك السيارة؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

ومشاعرك. تدور الأسئلة الثمانية التالية حول صدافاتك

(37). خلال الاثني عشر شهرا الماضية، كم مرة تقريباً شعرت بالوحدة؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(38). خلال الاثني عشر شهرا الماضية، كم مرة تقريباً شعرت بها بالقلق حيال شيء ما لدرجة انك لم تستطع النوم في الليل؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(39). خلال الاثني عشر شهرا الماضية، كم مرة تقريباً واجهت فيها صعوبات في التركيز على فروضك ومسؤولياتك الأخرى؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(40). خلال الإثني عشر شهرا الماضية، هل شعرت بالحزن اواليأس تقريبا يوميا ولمدة اسبوعين متواصلين، حتى انك لم تعد تمارس نشاطاتك الاعتيادية؟

A. نعم
B. لا

41). خلال الاثني عشر شهرا الماضية، هل فكّرت جدياً في الانتحار؟

A. نعم
B. لا

(42). خلال الاثني عشر شهرا الماضية، هل اعددت خطّة لمحاولة انتحار؟

A. نعم
B. لا

(43). ماهو عدد اصدقاءك المفضلين بمن فيهم اصحاب وجيران واقارب؟

A. صفر
B. 1
C. 2
D. 3 أو اكثر

(44). هل تعتقد ان عدد اصدقاءك المقربين كافي؟

A. نعم
B. لا

تسألك في الأسئلة الستة التالية عن تناول الكحول مثل البيرة، والعرق والويسكي والنبيذ والفودكا، والعصائر التي تحتوي على الكحول Smirnoff, Bacardi، الخ. <u>ملاحظة:</u> لا يشمل تناول الكحوليات شرب بضع رشفات من الخمر في الطقوس الدينية مثل المناولة في الكنيسة.

(45). خلال الثلاثين يوماً الماضية، كم عدد الأيام التي تناولت فيها كحولاً (كأس على الأقل)؟

A. ولا يوم
B. 1-2 يوم
C. 3-5 أيام
D. 6-9 أيام
E. 10-19 يوماً
F. 20–29 يوماً
G. ثلاثون يوما كاملة

(46). خلال الثلاثين يوماً الماضية، عندما تناولت الكحول، <u>ما هو عدد</u> الكؤوس التي تناولتها في اليوم الواحد؟

A. لم اتناول اي كحول في الأيام الثلاثين الماضية
B. اقل من كأس واحد
C. كأس واحد
D. كأسين
E. 3 كؤوس
F. 4 كؤوس
G. 5 كؤوس او اكثر

(47). خلال الثلاثين يوماً الماضية، <u>كيف كنت تحصل</u> **عادةً** على الكحول التي كنت تتناولها؟

A. لم اتناول اي كحول في الأيام الثلاثين الماضية
B. اشتريتها من احد المتاجر
C. اعطيت شخصاً آخر نقوداً كي يشتريها لي
D. حصلت عليها من اصدقائي
E. حصلت عليها من المنزل
F. قمت بسرقتها
G. طلبتها في ملهى ليلي اومطعم
H. حصلت عليه بطرق اخرى

(48). لغاية الآن، كم عدد المرات التي اكثرت فيها في شرب الكحول، حتى اصبحت ثملاً (سكران)؟

A. لم اتناول اي كحول في حياتي ولا مرة
B. مرة اومرتين
C. من 3 الى 9 مرات
D. 10 مرات او اكثر

(49). لغاية الآن، كم عدد المرات التي عانيت فيها من صداع، اوغثيان (لعيان)، او تورطت في مشاكل مع عائلتك اوالأصدقاء، اوتغيبت فيها عن المدرسة،او تشاجرت مع احد**، نتيجة تناولك الكحول**؟

A. لم اتناول اي كحول في حياتي ولا مرة
B. مرة اومرتين
C. من 3 الى 9 مرات
D. 10 مرات او اكثر

(50). في حال عرض عليك واحد من افضل اصدقائك الكحول، هل تتناوله؟

A. ابداً لن اتناوله
B. ممكن ان لا اتناوله (اتردد في تناوله)
C. ممكن ان اتناوله
D. اكيد اتناوله

يدور السؤالان التاليان حول موضوع المخدرات والتوعية في المدرسة حول الكحول والمخدرات .

(51). كم مرة في حياتك تناولت المخدرات مثل (الحشيشةMarijuana، الكوكاين، الهيروين، الاكستازي، و كافة الأدوية المهدئة والمنشطة للأعصاب دون وصفة طبية)؟

A. ولا مرة
B. مرة اومرتين
C. من 3 الى 9 مرات
D. 10 مرات او اكثر

(52). خلال الإثني عشر شهراً الماضية، هل علمك احد في المدرسة مخاطر تناول الكحول و/ او تعاطي المخدرات؟

A. نعم
B. لا
C. لا اعرف

الأسئلة التسعة التالية تسألك عن مواضيع التربية المتعلقة بالصحة الإنجابية والتربية الجنسية وهي تشمل معلومات عن (1)التحولات خلال المراهقة ،(2)البلوغ، (3)الصحة والنظافة الشخصية في المراهقة بما فيها تقييم المخاطر والقدرة على اتخاذ القرارات المناسبة،(4)الحمل،(5) الأمراض المنقولة جنسياً مثل مرض نقص المناعة المكتسب (أوالإيدز) والوقاية منه.

(53). برأيك متى يجب ان تبدأ التربية حول الصحة الإنجابية/ الجنسية؟

A. قبل سن البلوغ
B. عند سن البلوغ
C. عند التحضير للزواج
D. لا اعرف

(54). هل تؤيد ان تتم مناقشة مواضيع الصحة الإنجابية/ التربية الجنسية خلال الحصص المدرسية؟

A. نعم
B. لا
C. لا اعرف

(55).هل تفضل ان تتم مناقشة مواضيع الصحة الانجابية /التربية الجنسية عندما يكون الطلاب مقسمين في مجموعات للشبان فقط وللبنات فقط (اي غير مختلطة)؟

A. لا أؤيد ابدا ان تتم مناقشة مواضيع الصحة الانجابية خلال الحصص المدرسية
B. افضل ان تتم المناقشة خلال مجموعات للشبان فقط او للشابات فقط
C. افضل ان تتم المناقشة خلال مجموعات مختلطة
D. لا تفضيل لدي
E. لا أعرف

(56). كيف كان تجاوب المدرس(ة) عندما سألته(ها) عن مواضيع متعلقة بالصحة الإنجابية/ التربية الجنسية؟

A. لم اسأل المدرس (ة)
B. وبخني
C. رفض(ت) الإجابة
D. طلب(ت) منّي طرح السؤال على شخص آخر
E. اجابني بكل رحابة صدر

(57). كيف كان تجاوب احد والديك او اولياء امرك عندما سألته(ها) عن مواضيع متعلقة بالصحة الإنجابية/ التربية الجنسية ؟

A. لم اسأل احد والدي او اولياء امري
B. وبخني
C. رفض(ت) الإجابة
D. طلب(ت) منّي طرح السؤال على شخص آخر
E. اجابني بكل رحابة صدر

(58). هل سمعت عن فيروس نقص المناعة المكتسب أو مرض الإيدز/ السيدا؟

A. نعم
B. لا

(59). خلال الإثني عشر شهرا الماضية، هل علمك احد في أي من الحصص كيفية تجنب الإصابة بفيروس نقص المناعة المكتسب ومرض الإيدز/ السيدا؟

A. نعم
B. لا
C. لا أعلم

(60). هل الإمتناع عن الاتصال الجنسي هو احد وسائل الوقاية من مرض الإيدز/السيدا؟

A. نعم
B. لا
C. لا أعلم

(61). اذا عرض شخص عليك ممارسة جنسية هل انت واثق(ة) من قدرتك على القول له (لها) بأنك لا تريد ذلك؟

A. نعم
B. لا
C. لا أعلم

الاسئلة الخمسة التالية تسأل عن امورك في المدرسة وفي المنزل.

(62). خلال الثلاثين يوما الماضية، كم يوم تقريباً تغيبت عن الصف اوعن المدرسة بدون موافقة الأهل؟

A. ولا يوم
B. 1-2 يوم
C. 3-5 أيام
D. 6-9 أيام
E. 10 أيام أو اكثر

(63). خلال الثلاثين يوما الماضية، الى اي مدى كان فيها تلامذة مدرستك لطفاء ومتعاونين معك؟

A. أبدا لم يكونوا لطفاء اومتعاونين
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(64). خلال الثلاثين يوما الماضية، كم مرة تقريباً قام والديك او ولي امرك بالتأكد من انك قمت باداء واجباتك المدرسية المنزلية؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(65). خلال الثلاثين يوما الماضية، كم مرة تقريباً تفهم والديك او اولياء امرك لمشاكلك وهمومك؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

(66). خلال الثلاثين يوما الماضية، كم مرة تقريباً كان يعرف والديك او ولي أمرك **حقيقة** ماذا كنت تفعل في اوقات فراغك؟

A. أبدا ولا مرة
B. نادرا (قليلاً جداً)
C. احيانا (في بعض الأوقات)
D. في اكثر الاحيان
E. دائما

Appendix C
Comments and suggestions of the Lebanon Survey Administration team
GSHS 2005

1. *Related to survey administration*

√ The process was easier in the public schools where the letter from the Minister was enough. In private schools, survey administrators had to navigate many layers of bureaucracy to get permission to implement the survey. Private schools in Beirut were the hardest schools vis-avis the survey administration process.
√ The children liked the pencils that were provided.
√ They asked why their class had been selected and the survey administrators explained the selection process (underscores the imprecate of training the administrators on all phases of the survey process)
√ The timeline for data collection (3 months) was too short.
√ Students needed more time to complete the survey than a class session. Survey administrators were given a class period of 50 minutes. It took 20 minutes to go over the instructions. Thirty minutes was not enough to complete the survey.

2. *Related to the survey items*

√ Students in the 7th grade had difficulty understanding the term sexual harassment
√ Some students in 7th grade had a difficult time understanding the nutrition questions
√ Some students in the 7th grade had difficulty understanding the AIDS questions
√ The height and weight questions needed follow-up and in-depth explanation
√ Survey administrators noticed that some (or many) students did not read the instructions. This is why they had some difficulty with terms that are not common: bullying, sexual harassment – even though they were explained in the survey.
√ The question about alcohol – beer could be non-alcoholic.

3. Other

√ Students had difficulty as the number of questions (that could be answered) on the answer sheet was different than the number of questions in the survey.
√ Administrators – upon arriving at the school to conduct the survey, found that the number of children in schools/classes was different than originally reported by the school.
√ Principals were accepting of the survey
√ Teachers were accepting of the survey and did not interfere in the survey administration process

4. Recommendations for next time

√ Involve more schools in the process from the beginning
√ Distribute the survey ahead of time to schools
√ Have a page which describes all terms (survey dictionary)
√ Have the answer sheet be language appropriate (left to right)

Appendix D

GSHS team

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GSHS National Coordinator

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References

[i] WHO. *World Health Report 2002*. Geneva, Switzerland: WHO, 2002.

[ii] WHO. *Global Status Report on Alcohol.* Geneva, Switzerland: WHO, 2004.

[iii] Poikolainen K, Tuulio-Henriksson A, Aalto-Setala T, Marttunen M, Lonnqvist J. Predictors of alcohol intake and heavy drinking in early adulthood: a 5-year follow-up of 15-19 year-old Finnish adolescents, *Alcohol and Alcoholism.* 36(1): 85-88, 2001.

[iv] Hibell B, Andersson B, Ahlstrom S, Balakireva O, Bjarnason T, Kokkevi A, Morgan M. The 1999 ESPAD Report: Alcohol and Other Drug Use Among Students in 30 European Countries. Stockholm, Sweden: Council of Europe, 2000.

[v] Bonomo Y, Coffey C, Wolfe R, Lynskey M, Bowes G, Patton G. Adverse outcomes of alcohol use in adolescents. *Addiction* 96 (10): 1485-1496, 2001.

[vi] *Health and Health Behaviour Among Young People*. Currie C, Hurrelmann K, Settertobulte W, Smith R, Todd J, eds. Copenhagen, Denmark: WHO Regional Office for Europe, 2000.

[vii] Facy F. *La place de làlcool dans la morbidite et mortalite des jeunes [Place of alcohol morbidity and mortality of young people] in Actes du colloque les jeunes et Làlcool en Europe.* Navarro F, Godeau E, Vialas C. eds, Toulouse, France : Universitaires du Sud, Toulouse, 2000.

[viii] Taras, H. Nutrition and student performance at school. *Journal of School Health* 75 (6): 199-213, 2006.

[ix] CDC. Nutrition for Everyone: Fruits and Vegetables. Atlanta, Georgia: CDC, 2006. Available on-line at http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition_for_everyone/fruits_vegetables/index.htm

[x] Petersen EP, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. The global burden of oral diseases and risks to oral health. *Bulletin of the World Health Organization* 83: 661-669, 2005.

[xi] Kwan SYL, Petersen PE, Pine CM, Borutta A. Health-promoting schools: an opportunity for oral health promotion. *Bulletin of the World Health Organization* 83: 677-685, 2005.

[xii] Jones S, Burt BA, Petersen PE, Lennon MA. The effective use of fluorides in public health. *Bulletin of the World Health Organization* 83: 670-676, 2005.

[xiii] WHO. Water, Sanitation, and Hygiene Links to Health. Fast Facts. Geneva, Switzerland: WHO, 2004. Available on-line at: http://www.who.int/water_sanitation_health/factsfigures2005.pdf

[xiv] Luong TV. De-worming school children and hygiene intervention. *International Journal of Environmental Health Research* 13: S153-S159, 2003.

[xv] WHO. Child Mental Health Atlas. Geneva, Switzerland: WHO, 2005. Available on-line at: http://www.who.int/mental_health/resources/Child_ado_atlas.pdf

[xvi] Kessler RC, Berglund PMBA, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Study Replication. Arch Gen Psychiatry 62(6):593-602, 2005.

[xvii] WHO. Mental Health Fact Sheet. Geneva, Switzerland: WHO, 2001. Available on-line at: http://www.who.int/child-adolescent-health/New_Publications/ADH/mental_health_factsheet.pdf

[xviii] WHO. *The World Health Report 2001 – Mental Health: New Understanding, New Hope.* Geneva, Switzerland: WHO, 2001.

[xix] WHO. Protective Factors Affecting Adolescent Reproductive Health in Developing Countries. Geneva, Switzerland, 2004. Available on-line at: http://www.who.int/child-adolescent-health/New_Publications/ADH/ISBN_92_4_159227_3.pdf
[xx] WHO. Broadening the horizon: Balancing protection and risk for adolescents. Geneva, Switzerland, 2002. Available on-line at: http://www.who.int/child-adolescent-health/New_Publications/ADH/WHO_FCH_CAH_01_20.pdf
[xxi] WHO Regional Office for Europe. Young people's health in context Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/2002 survey. Copenhagen, Denmark, 2004. Available on-line at: http://www.hbsc.org/publications/reports.html
[xxii] Barber BK. *Regulation, connection, and psychological autonomy: Evidence from the Cross-National Adolescen Project (C-NAP).* Paper presented at the WHO-sponsored meeting Regulation as a Concept and Construct for Adolescent Health and Development. WHO Headquarters, Geneva, Switzerland, April 16-18, 2002.
[xxiii] WHO and UNICEF. Child and adolescent injury prevention: a global call to action. Geneva: WHO, 2005.
[xxiv] WHO. Global Estimates of Health Consequences due to Violence against Children. 2005. Background paper to the UN Secretary-General's Study on Violence against Children. (unpublished)
[xxv] WHO. World Report on Violence and Health. 2002. chapter on youth violence.
[xxvi]Anti-Bullying Centre. School Bullying: Key Facts. Trinity College, Dublin: Anti-Bullying Centre, 2002. Availabe on-line at www.abc.tcd.ie/school.htm.
[xxvii] UNAIDS & WHO. 2005 AIDS Epidemic Update. Geneva, Switzerland, 2005. Available on-line at: http://www.who.int/hiv/epi-update2005_en.pdf