

Oman Global School-based Student Health Survey

2015

GSHS Country Report

Prepared by: Dr. Nahida Raouf Al-Lawati

Acknowledgment

Many thanks go to persons who contributed to the success of Oman-Global School-based Health Survey (GSHS).

- From Ministry of Health (MOH) Oman, the author would like to thank H.E. DR. Ahmed bin Obaid Al Saidi, Minister of Health.
- Gratitude and appreciation are conveyed to all the colleagues in the Ministry of Education (MOE) for their efforts in facilitating the implementation of the survey in the schools.
- The author would like to thank Dr. Abdullah Assaedi, World Health Organization (WHO) Representative Oman and Dr. Ruth Mabry, Technical Officer, Office of the WHO Representative Oman for their unlimited support.
- Many thanks and appreciations are due to Ms. Leanna Riley, World Health Organization-Geneva, Prevention of Non-Communicable Diseases (NCDs) Department and Dr. Laura Kann, Centers for Disease Prevention and Control (CDC) for their continuous support through all the stages of the survey.
- The author would like to expand thanks and appreciation to all the Research Team for their valuable inputs and feedbacks.
- Special thanks are extended to the staff of School Health Department, MOH, Survey administrators, School health nurses and doctors who were recruited to conduct the survey at schools.
- Last but not least thanks and appreciation are due to students and principles of the participating sampled schools who assisted in making this study possible.

Oman GSHS-2015 Research Team

- Dr. Nahida Raouf Al-Lawati, Principle Investigator/Director-Department of School Health. Ministry of Health.
- Dr. Salah Nasser Al-Muzahmi, Assisting Director General-Planning and Studies. Ministry of Health.
- Dr. Adhra Al-Mawli, Director-Department of Research and Studies. Ministry of Health.
- Dr. Halima Al-Ghanami, Department of School Health. Ministry of Health.
- Mr. Khalid Saud Al-Wahibi, Dietition-Department of School Health. Ministry of Health.
- Mrs. Afrah Juma Al-Jamai, Nurse-Department of School health. Ministry of Health.
- Mr. Waleed Al-Shakili, Statistition-Department of Research and Studies. Ministry of Health.
- Mr. Ahmed Al-Balushi, Head of Health Awareness Section. Ministry of Education.

List of Oman 2015-GSHS Survey Co-coordinators and Survey Administrators

Survey Coordinators:

Name	Governorate
Dr. Ibrahim Taha	Adhahira Governorate
Dr. Asma Al-Aamri	Buraimi Governorate
Dr. Salah Mahmood	Al-Wusta Governorate
Dr. Abu Bakir Adim	North Batinah Governorate
Dr. Tawfeeq Asham	Dhofar Governorate

Survey Administrators:

Name	Governorate
Ms. Amal Al-Yaqobi Ms. Aysha Al-Gassasi	Adhahira Governorate
Ms. Raya Al-Manai	Buraimi Governorate
Mr. Alamjad Alahi	Al-Wusta Governorate
Ms. Fakhria Al-Noufali Mr. Saleh Al-Khanbashi Ms. Rahma Al-Balushi Ms. Fathiya Al-Balushi Ms. Khadija Al-Balushi	North Batinah Governorate
Ms. Basima Al-Hatrooshi Ms. Aysha Al-Mukhaini Mr. Abdullah Al-Jaafari	South Sharqiya Governorate
Ms. Asma Al-Shuabi Ms. Fatima Al-Hijri Mr. Yousif Al-Habsi	North Sharqiya Governorate
Ms. Munaira Al-Hinai Ms. Aysha Al-Malki Ms. Buthaina Al-Balushi	South Batinah Governorate
Mr. Fahad Barakat Ms. Eiman Jadad	Dhofar Governorate
Ms. Intisar Al-Sadri Ms. Salma Al-Toya Ms. Khalsa Al-Yahyai Ms. Hanan Al-Hsani	Muscat Governorate

Abbreviation

GSHS	Global School-based Health Survey
MOH	Ministry of Health
MOE	Ministry of Education
WHO	World Health Organization
NCDs	Non-Communicable Diseases
CDC	Centers for Disease Prevention and Control
STIs	Sexually Transmitted illnesses
HIV	Human Immune deficiency Virus
AIDS	Acquired Immune Deficiency Syndrome
UNAIDS	The Joint United Nations Program on HIV/AIDS
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UNICEF	The United Nations International Children's Emergency Fund
CI	Confidence Interval

Table of Tables

Table 1: Demographic characteristics of the sample, Oman-2015	16
Table 2: Dietary behaviors, by sex, Oman-2015	16
Table 3 Hygiene-related behaviors, by sex, Oman, 2015.	17
Table 4: Violence and unintentional injury among students, by sex, Oman, 2015.....	18
Table 5: Mental health issues among students, by sex, Oman, 2015.	20
Table 6: Tobacco use among students, by sex, Oman, 2015.....	20
Table 7: Drug-use behaviors, by sex, Oman 2015.	22
Table 8: STI-related knowledge, by sex,Oman, 2015.	23
Table 9: Physical activity among students, by sex, Oman, 2015.	24
Table 10: Protective factors among students, by sex, Oman, 2015.	25
Table 11: HIV-related knowledge, by sex, Oman, 2015.....	26
Table 12: Comparison of some important indicators along the three surveys, GSHS-2005, 2010 and 2015	33
Table 13: Comparison between students' behaviors in Oman 2015-GSHS and Kuwait 2015- GSHS.....	34

Table of Contents

Acknowledgment	1
Oman GSHS-2015 Research Team	2
List of Oman 2015-GSHS Survey Co-coordinators and Survey Administrators	3
Abbreviation.....	4
Table of Tables	5
Table of Contents.....	6
Executive Summary.....	8
Introduction	12
Methods.....	14
Results.....	16
Demographics	16
Dietary Behaviors.....	16
Hygiene	17
Violence and unintentional Injuries.....	18
Mental health.....	20
Tobacco Use	20
Drug Use.....	22
STI-Related Knowledge	23
Physical Activity	24
Protective Factors	25

HIV-Related Knowledge	26
Conclusions and Recommendations.....	28
Appendices.....	36
GSH Questionnaire	36
References:	52

Executive Summary

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

- Dietary behaviors
- Drug use
- Hygiene
- Mental Health
- Physical activity
- Protective factors
- STI-related knowledge
- HIV-related knowledge
- Tobacco use
- Violence and unintentional injury

The 2015 OMAN GSHS employed a two-stage cluster sample design to produce a representative sample of students in grades 8th to 12th.

All schools containing 8th, 9th, 10th, 11th and 12th grades were included in the sampling frame. In the first stage, schools were selected systematically with probability proportional to enrolment in all grades from 8th to 12th using random start. Total of 63 schools were sampled.

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

The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending grades from 8th to 12th in the Sultanate of Oman.

The study showed the following results:

- A total of 3,468 questionnaires were completed in 62 schools. The school response rate was 98%. The student response rate was 94%, and the over all response rate was 92%.
- **Dietary behaviors:** Around 36.9% of students ate fruit two or more times per day and 17.2% only ate vegetables three or more times per day during the past 30 days. Nearly half of the students (43.5%) drank carbonated soft drinks one or more times, and

similarly (52.7%) of them had energy drinks one or more times per day during the past 30 days. Almost 24% of the students ate from fast food restaurants on three or more days during the past 7 days and only 45% of the students ate breakfast most of the time or always during the past 30 days.

- **Physical activity:** During the seven days prior to the survey, only 15.5% of the students met the 60 minutes per day recommendations of physical activity on five or more days. Almost three quarters of the students (70.7%) did not walk or ride bicycle to the school and nearly 39.9% of the students spent three or more hours doing sitting activities.
- **Hygiene:** Almost 86% of the students usually cleaned or brushed their teeth one or more times per day during the past 30 days. 8.1% of the students never or rarely washed their hand before eating and 9.3% never or rarely washed their hands after using toilet during the past 30 days. Similarly, 7.7% never or rarely used soap when washing their hands during the last 30 days. Generally, female students showed better hygiene practices than male students.
- **Violence and unintentional injuries:** During the past 12 months of the survey, nearly one third of the students (28.3%) were physically attacked and 44.2% were in a physical fight one or more times. 37.9% of the students were seriously injured one or more times and broken bones or dislocated joints accounted for almost one third (31.7%) of the injuries. Motor vehicle accidents or being hit by a motor vehicle were responsible for 9.1% of the serious injuries. Nearly 43.6% of the students were bullied one or more times during the past 30 days of the survey.
- **Mental health:** Nearly one fifth of the students mentioned that they felt so worried about something most of the time or always that they could not sleep at night during the 12 months before the survey. Females were more likely to this behavior. Around 15.7% of the students felt lonely most of the time or always. Only 7.6% of the students had no close friends.
- **Tobacco use:** Overall 6.8% of the students smoked cigarettes and 6.3% used any tobacco products on one or more days during the past 30 days of the survey. Almost three quarters of the student who ever smoked cigarettes (72.6%), have first tried a cigarette before age of 14 years. Nearly one quarter of the students (26.1%) reported people smoked in their presence on one or more days during the 7 days prior to the survey and 10.3% had parents or guardians who used any form of tobacco.
- **Drug use:** Similarly to smoking, almost three quarter (74.6%) of the students who ever used drugs, first used it before the age of 14 years. 3% of the students reported use of marijuana and 2.5% reported use of amphetamines one or more times during their life. One third of the students in Oman (30.5%) used solvents or inhalants one or more times during their life.
- **STI-related knowledge:** Only half of the students (51.2%) have ever heard about STIs and only quarter of them (27.1%) were taught in any of their classes about STIs and how to avoid them (27.2) during the current school year. Only 12.4% of the students ever talked about STI with their parents and this was more common among male students.

- **HIV-related knowledge:** Around three quarters of the students (76.5%) have ever heard about HIV, female students were more likely to know about HIV than male students. Total of 59.1% of the them were taught about HIV and 53.2% only were taught how to avoid HIV in any of their classes during the current school year. Only quarter of the students (25.3%) ever talked about HIV with their parents or guardians.
- **Protective factors:** Overall, 38.4% of the students missed classes or school without permission on or more days of the past 30 days, this was more common among male students. Nearly half of the students (49.3%) reported that their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Around 57.9% of the students reported that most of the students in their school were kind and helpful most of the time. 40.4% of the students reported that their parents or guardians understood their problems and worries most of the time and 42.1% mentioned that their guardians really knew what they were doing with their free time most of the time or always during the past 30 days. Female students were more likely to report this compared to male students.

Recommendations:

- Conduct a qualitative study on the reasons behind students' unhealthy dietary habits and what are the barriers for opting for healthy food.
- Incorporate practical dietary information in the peer education program on the dangers of energy drinks, carbonated soft drinks and fast food.
- Continue the health education efforts on the importance of basic hygiene measures with an emphasis at the early stage of adolescents.
- Activation and implementation of Peer Education program with all of its components: diet and physical activity, violence, tobacco use, road safety and sexually transmitted diseases including AIDS, taking into consideration the gender difference in the pattern of the risk factors.
- Establish school mental health programs taking into account involvement of the school staff and the family. The program should also consider the different needs at different stages of students/adolescents' life.
- Train school personnel on how to deal with mental health issues at school.
- Establish anti bullying policies at schools ant train the students and the staff on how to deal with it.
- Increase the awareness of the family members on the psychological needs of the adolescents.
- Strengthen counseling services for adolescents either at school level or at health care levels.
- Consider initiating anti-tobacco programs at a lower age.
- Importance of early initiation of anti-drug programs with clear illustration of the different types of drugs and their addiction and dependent tendency.

- All health education programs should enforce life skills training to enable the students on obtaining and practicing healthy life styles and incorporate the practices within their daily activities.
- Involvement of the family and the community with all the health education programs to help into creating an enabling environment.
- Introduction of creative methods into health education to attract the target groups, for example using social media or digital techniques.
- Enforce legislations that limits the availability and affordability of unhealthy food.
- Collaborate with the concerned sectors to impose physical activity in the schools and the community.

Introduction

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

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

Oman conducted the first GSHS in 2005 and the second GSHS in 2010. This report describes results from the third GSHS conducted in Oman by the Ministry of Health and Ministry of Education during 2015.

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

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

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

- Dietary behaviors
- Drug use
- Hygiene
- Mental Health
- Physical activity
- Protective factors
- STI-related knowledge
- HIV-related knowledge
- Tobacco use
- Violence and unintentional injury

Many studies have been conducted in Oman to measure knowledge, attitude and behaviors of adolescents. The very first study addressing this group was done in the year 2001 and

was followed by the study of depressive symptoms among adolescent secondary school students in the year 2004. In the year 2008, a KAP survey on life style among students in universities, colleges and other higher education institutes was conducted. All of these studies, in addition to the three GSHS surveys conducted in Oman, helped in building the information on the main issues for challenge among the adolescents in Oman.

Based on these results, so many programs and interventions were designed within the school health program in the country. Peer Education program is one of these interventions which was designed with the help of UNICEF and ministry of education. The program addresses the following risk factors: road safety, violence, nutrition and physical activity, sexually transmitted diseases including AIDS and tobacco use. The program uses interactive techniques such as role plays, scenarios and stories. Additionally, the package includes a module on life skills which focuses on building the skills of the adolescents and training them on how to take the right decision.

“Health Promoting Schools” is another important strategy, which was adapted by the ministry of health and Ministry of education Oman in the year 2004 where 19 schools were trained and started implementing the strategy. The work on health promoting schools continued with regular follow up and monitoring of the process and by the academic year 2014-2015 total of 432 schools in Oman out of 1053 were health promoting schools which accounts for 41% of the total public schools in the country.

Methods

The 2015 Oman GSHS employed a two-stage cluster sample design to produce a representative sample of students in grades eight to twelve.

The first-stage sampling frame consisted of all school containing any of grades eight to twelve. Schools were selected with probability proportional to school enrolment size. 63 schools were selected to participate in the Oman GSHS.

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

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. This is done by using the following formula:
 $W=W1*W2*f1*f2*f3$

The below table shows what each variable in the formula represents:

Variable		Represents
Base weight	W1	The inverse of the probability of selecting each school
	W2	The inverse of the probability of selecting each class room
Non response adjustments	f1	A school-level non response adjustments factor
	f2	A student-level non response adjustment factor calculated by class room
Post stratification adjustments	f3	A post stratification adjustment factor calculated by sex within grade

For the 2015 Oman GSHS, 3468 questionnaires were completed in 62 schools. The school response rate was 98%, the student response rate was 94%, and the overall response rate was 92%.

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

Survey administration occurred during December 2015. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet. Approximately, 29 Survey Administrators were specially trained to conduct the GSHS.

The Oman GSHS questionnaire contained 59 questions addressing the following topics: dietary behaviors, hygiene, mental health, physical activity, protective factors, knowledge about STI and HIV infection, violence and unintentional injuries, drug use and Tobacco use.

The questionnaire was developed by a joint team consisted of staff from MOH and MOE. The questionnaire was developed in English with a corresponding translation in Arabic, the national language in the country.

Results

Demographics

Table 1: Demographic characteristics of the sample, Oman-2015

Sex		Age			Grade				
Males	Females	12 or younger	13-17	18 or older	8th	9th	10th	11th	12th
49.8%	50.2%	2.3%	90%	7.7%	20.1%	20.4%	20.2%	19.9%	19.5%

Dietary Behaviors

Table 2: Dietary behaviors, by sex, Oman-2015

Behavior or health outcome	All age group			
	Total (CI)*	Male (CI)	Female (CI)	Difference
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	4.9% (3.9-6.1)	5.9% (4.6-7.6)	3.7% (2.8-4.8)	No
Usually ate fruit two or more times per day during the past 30 days	36.9% (33.9-40.1)	42.2% (38.6-45.8)	32% (28.4-35.9)	Yes Males are more
Usually ate vegetables three or more times per day during the past 30 days	17.2% (15.3-19.2)	19.7% (17.0-22.7)	14.8% (12.8-17.0)	No
Usually drank carbonated soft drinks one or more times per day during the past 30 days	43.5% (39.1-48.0)	49.7% (44.6-54.8)	37.4% (32.8-42.2)	Yes Males are more
Ate food from fast food restaurant on three or more days during the past 7 days	23.9% (21.3-26.8)	25.1% (22.3-28.0)	23.1% (18.8-28.0)	No
Usually drank energy drinks one or more times per day during the past 30 days	52.7% (47.3-58.1)	54.5% (48.4-60.5)	47.8% (39.8-55.8)	No
Did not eat snack at school during the past 30 days	12.1% (10.6-13.5)	14.1% (12.1-16.1)	10.1% (8.0-12.1)	No
Ate breakfast most of the time or always during the past 30 days	45% (42.1-47.9)	50.9% (47.3-54.4)	39.6% (35.9-43.5)	Yes Males are more

Availability of foods at home:

Overall, 4.9% of all students went hungry most of the time or always because there was not enough food in their home during the past 30 days.

Fruits and vegetables intake:

Overall, 36.9% of students usually ate fruit, such as dates, apples, oranges or bananas, two or more times per day during the last 30 days. Male students are more likely to eat fruits than female students.

Overall, 17.2% of students usually ate vegetables, such as tomatoes, cucumbers, carrots or lettuce, three or more times per day during the past 30 days.

Other dietary behaviors:

Overall, 43.5% of students drank carbonated soft drinks, such as Pepsi, Cola or Mountain Dew, one or more times per day during the past 30 days. This behavior is more common in males compared to females.

Overall, 23.9% of students ate food from a fast food restaurant, such as Burger, Pizza or Shawrma, on three or more days during the past 7 days.

Overall, 12.1% of students did not eat snack at school during the past 30 days.

Overall, 45% of students ate breakfast most of the times or always during the past 30 days. Male students are more likely to eat breakfast than female students.

Hygiene

Table 3 Hygiene-related behaviors, by sex, Oman, 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Usually cleaned or brushed their teeth one or more times per day during the past 30 days	86% (82.6-88.8)	80.2% (75.9-83.8)	92.2% (89.6-94.2)	Yes Female are more
Never or rarely washed their hands before eating during the past 30 days	8.1% (6.6-9.9)	10.7% (8.8-13.1)	5.3% (3.9-7.2)	Yes Males are more
Never or rarely washed their hands after using the toilet or latrine during the past 30 days	9.3% (7.5-11.4)	11.7% (9.2-14.7)	6.4% (5.2-8.0)	Yes Males are more

Never or rarely used soap when washing their hands during the past 30 days	7.7% (6.3-9.4)	10.1% (7.7-13.1)	4.6% (3.7-5.8)	Yes Males are more
--	-------------------	---------------------	-------------------	-----------------------

In **Oman**, the percentage of students who usually cleaned or brushed their teeth one or more times per day during the past 30 days was 86%. Females are more likely to this behavior than males.

Overall, 8.1% of students never or rarely washed their hands before eating during the past 30 days. Males are more likely to this behavior than females.

Overall, 9.3% of students never or rarely washed their hands after using toilet or latrine during the past 30 days.

Overall, 7.7% of students never or rarely used soap when washing their hands during the past 30 days.

Generally, female students demonstrated better hygiene behavior than male students.

Violence and unintentional Injuries

Table 4: Violence and unintentional injury among students, by sex, Oman, 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Were physically attacked one or more times during the past 12 months	28.3% (25.3-31.5)	33.1% (29.0-37.5)	23.2% (20.3-26.3)	yes Males are more
Were in a physical fight one or more times during the past 12 months	44.2% (41.9-46.5)	48.4% (44.6-52.2)	39.9% (36.3-43.5)	Yes Males are more
Were seriously injured one or more times during the past 12 months	37.9% (34.2-41.6)	48.1% (45.5-50.6)	27.8% (25.8-29.9)	Yes Males are more
Among students who were seriously injured during the past 12 months, those whose most serious injury was a broken bone or dislocated joint	31.7% (28.2-35.4)	36.6% (31.6-41.8)	24.4% (19.6-29.9)	Yes Males are more

Among students who were seriously injured during the past 12 months, those who most serious injury was caused by a motor vehicle accident or being hit by a motor vehicle	9.1% (7.4-11.2)	11.7% (9.1-14.9)	4.7% (2.6-8.1)	Yes Males are more
Were bullied on one or more days during the past 30 days	43.6% (41.9-45.3)	44.6% (41.8-47.4)	42.1% (39.2-44.9)	No
Among students who were bullied during the past 30 days, those who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors	10.5% (8.1-13.4)	13.7% (10.5-17.7)	7% (5.2-9.3)	Yes Males are more

In **Oman**, 28.3% of students were physically attacked one or more times during the past 12 months. Males are more likely to this behavior than females.

Overall, 44.2% of students were in a physical fight one or more times during the past 12 months. Males are more likely to this behavior than females.

Overall, 37.9% of students were seriously injured one or more times during the past 12 months. Males are more likely to this behavior than females.

Among students who were seriously injured during the past 12 months, a broken bone or dislocated joint was the most serious injury among 31.7% of students. This was more common in males when compared to females.

Among students who were seriously injured during the past 12 months, a motor vehicle accident or being hit by a motor vehicle was the cause of the most serious injury among 9.1%. This was more common in males when compared to females.

Overall, 43.6% of students were bullied on one or more days during the past 30 days with no significant difference between males and females.

Among students who were bullied during the past 20 days, being hit, kicked, pushed, shoved around, or locked indoors was the most common form of bullying among 10.5% of students. This was more common in males when compared to females.

Mental health

Table 5: Mental health issues among students, by sex, Oman, 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Most of the time or always felt lonely during the past 12 months	15.7% (14.5-16.9)	15.2% (13.3-17.4)	16.1% (14.3-18.0)	No
Most of the time or always were so worried about something that they could not sleep at night during the past 12 months	18.3% (16.3-20.5)	13.2% (11.6-15.0)	23.2% (20.8-25.7)	Yes Females are more
Had no close friends	7.6% (6.6-8.8)	8.1% (6.8-9.5)	6.9% (5.6-8.6)	No

In **Oman**, 15.7% of the students most of the time or always felt lonely during the past 12 months with no significant difference between males and females.

Overall, 18.3% of students most of the time or always were so worried about something that they could not sleep at night during the past 12 months. Females are more likely to this behavior than males.

Overall, 7.6% of students had no close friends.

Tobacco Use

Table 6: Tobacco use among students, by sex, Oman, 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Among students who ever smoked cigarettes, those who first tried a cigarette before age of 14 years	72.6% (66.5-77.8)	70.1% (63.3-76.0)	77.3% (68.7-84.2)	No
Smoked cigarettes on one or more days during the past 30 days	6.8% (5.1-9.0)	10.7% (8.8-13.0)	2.5% (1.5-4.1)	Yes Males are more
Used any tobacco products other than cigarettes on one or	6.3% (4.7-8.6)	10% (7.8-12.6)	1.9% (1.1-3.2)	Yes Males are more

more days during the past 30 days				
Used any tobacco on one or more days during the past 30 days	9.4% (7.1-12.2)	14.7% (12.1-17.8)	3.2% (2.1-4.9)	Yes Males are more
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes during the past 12 months	62.6% (52.5-71.6)	62.9% (50.9-73.5)	-	Yes Males are more
Reported people smoked in their presence on one or more days during the past seven days	26.1% (22.8-29.6)	32.2% (28.7-36.0)	19.4% (15.7-23.8)	Yes Males are more
Had parents or guardians who used any form of tobacco	10.3% (8.6-12.2)	11% (8.7-13.7)	9.4% (7.4-11.8)	No

In **Oman**, among students who ever smoked cigarettes, 72.6% of students first tried a cigarette before age of 14 years with no significant difference between males and females.

Overall, 6.8% of students smoked cigarettes on one or more days during the past 30 days. Males are more likely to this behavior than females.

Overall, 6.3% of students used any tobacco products other than cigarettes on one or more days during the past 30 days. Males are more likely to this behavior than females.

Overall, 9.4% of students used any tobacco on one or more days during the past 30 days. Males are more likely to this behavior than females.

Among students who smoked cigarettes during the past 12 months, 62.6% of students tried to stop smoking cigarettes during the past 12 months.

Overall, 26.1% of students reported that people smoked in their presence on one or more days during the past seven days. Males are more likely to this behavior than females.

Overall, 10.3% of students had parents or guardians who used any form of tobacco.

Drug Use

Table 7: Drug-use behaviors, by sex, Oman 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Among students who ever used drugs, those who first used drugs before age 14 years	74.6% (67.2-80.7)	73.3% (63.6-81.1)	–	Yes Males are more
Used marijuana one or more times during their life	3% (1.9-4.6)	4.8% (3.1-7.3)	0.8% (0.4-1.8)	Yes Males are more
Used marijuana one or more times during the past 30 days	2.8% (1.9-4.1)	4.9% (3.4-6.9)	0.7% (0.4-1.3)	Yes Males are more
Used amphetamines or methamphetamines one or more times during their life	2.5% (1.8-3.6)	3.9% (2.7-5.7)	0.9% (0.6-1.3)	Yes Males are more
Used solvents or inhalants one or more times during their life	30.5% (28.1-33.1)	29.2% (26.0-32.6)	31.1% (28.0-34.8)	No
Students who reported tobacco was substance used most often by young people	81.8% (79.6-83.8)	82.6% (79.6-85.3)	81.5% (78.6-84.1)	No

In **Oman**, among students who ever used drugs, 74.6% of students first used drugs before age 14 years. Males are more likely to this behavior than females.

Overall, 3% of students used marijuana one or more times during their life. Males are more likely to this behavior than females.

Overall, 2.8% of students used marijuana one or more times during the past 30 days. Males are more likely to this behavior than females.

Overall, 2.5% of students used amphetamines or methamphetamines one or more times during their life. Males are more likely to this behavior than females.

Overall, 30.5% of students used solvents or inhalants one or more times during their life with no significant difference between males and females.

Overall, 81% of students reported that tobacco was substance used most often by young people.

STI-Related Knowledge

Table 8: STI-related knowledge, by sex, Oman, 2015.

STI-related knowledge	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Ever heard about STIs (gonorrhoea, syphilis, hepatitis B, genital herpes)	51.2% (48.1-54.3)	51.5% (48.0-54.9)	50.7% (45.6-55.9)	No
Taught in any of their classes during this school year about STIs (gonorrhoea, syphilis, hepatitis B, genital herpes)	27.1% (23.9-30.6)	26.1% (22.8-29.7)	28% (22.3-34.5)	No
Taught in any of their classes during this school year how to avoid STIs (gonorrhoea, syphilis, hepatitis B, genital herpes)	27.2% (23.9-30.7)	27.3% (23.9-30.9)	27% (21.7-33.0)	No
Ever talked about STIs with their parents or guardians	12.4% (10.7-14.4)	15.5% (12.9-18.5)	9.6% (8.1-11.4)	Yes Males are more

In **Oman**, 51.2% of students had ever heard of sexually transmitted infections like (gonorrhoea, syphilis, hepatitis B, genital herpes) with no significant difference between males and females.

Overall, 27.1% of students were taught in any of their classes during this school year about sexually transmitted infections like (gonorrhoea, syphilis, hepatitis B, genital herpes).

Overall, 27.2% of students had been taught in any of their classes during this school year how to avoid sexually transmitted infections like (gonorrhoea, syphilis, hepatitis B, genital herpes).

Overall, 12.4% of students ever talked about sexually transmitted infections with their parents or guardians. Males are more likely to talk to their parents than females.

Physical Activity

Table 9: Physical activity among students, by sex, Oman, 2015.

Behavior	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Were physically active for a total of at least 60 minutes per day on five or more days during the past seven days	15.5% (13.5-17.7)	20% (17.3-22.9)	11.4% (9.8-13.2)	Yes Males are more
Were physically active for a total of at least 60 minutes per day on all seven days during the past seven days	11.5% (9.8-13.4)	14.9% (12.6-17.5)	8.2% (6.7-9.9)	Yes Males are more
Did not walk or ride a bicycle to or from school during the past seven days	70.7% (67.5-73.7)	65.6% (61.3-69.7)	76.1% (73.0-79.0)	Yes Females are more
Went to physical education classes on three or more days each week during this school year	49.8% (46.0-53.5)	49.5% (45.4-53.6)	49.8% (45.0-54.6)	No
Went to physical education classes on five or more days each week during this school year	34.1% (30.6-37.7)	35% (31.0-39.4)	33.1% (28.7-37.9)	No
Spent three or more hours per day during a typical or usual day doing sitting activities	39.9% (37.3-42.5)	40.9% (37.4-44.6)	38.9% (34.1-43.9)	No

In **Oman**, 15.5% of students were physically active for a total of at least 60 minutes per day on **five or more** days during the past seven days. Males are more likely to show this behavior than females.

Overall, 11.5% of students were physically active for a total of at least 60 minutes on all **seven days** during the past seven days. Males are more likely to this behavior than females.

Overall, 70.7% of students did not walk or ride bicycle to or from school during the past seven days. Females are more likely to this behavior than Males.

Overall, 49.8% of students went to physical education class on **three or more** days each week during this school year.

Overall, 34.1% of students went to physical education class on **five or more** days each week during this school year.

Overall, 39.9% of students spent three or more hours per day during a typical or usual day doing sitting activities, such as watching television, playing computer games, talking with friends or reading.

Protective Factors

Table 10: Protective factors among students, by sex, Oman, 2015.

Protective factor	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Missed classes or school without permission on one or more of the past 30 days	38.4% (35.5-41.4)	42% (39.4-44.6)	34.3% (29.9-39.0)	Yes Males are more
Reported most of the students in their school were kind and helpful most of the time or always during the past 30 days	57.9% (55.4-60.3)	53.2% (50.0-56.5)	63.1% (59.9-66.3)	Yes Females are more
Parents or guardians checked to see if their homework was done most of the time or always during the past 30 days	49.3% (46.9-51.7)	47.1% (43.7-50.6)	51.3% (48.0-54.6)	No
Parents or guardians understood their problems and worries most of the time or always during the past 30 days	40.4% (37.4-43.4)	36% (32.6-39.6)	44.7% (41.0-48.4)	Yes Females are more
Parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days	42.1% (39.6-44.6)	36.9% (34.4-39.4)	47.4% (44.4-50.4)	Yes Females are more
Parents or guardians never or rarely went through their things without their approval during the past 30 days	84.7% (82.6-86.6)	81.4% (78.6-83.9)	88.6% (86.2-90.6)	Yes Females are more

In **Oman**, 38.4% of students missed classes or school without permission on one or more of the past 30 days. Males are more likely to this behavior than females.

Overall, 57.9% of students reported that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Females were more than males.

Overall, 49.3% of students reported that their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days.

Overall, 40.4% of students reported that their parents or guardians understood their problems and worries most of the time or always during the past 30 days. Females were more than males.

Overall, 42.1% of students reported that their parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days. Females were more than males.

Overall, 84.7% of students reported that their parents or guardians went through their things without their approval never or rarely during the past 30 days. Females were more than males.

HIV-Related Knowledge

Table 11: HIV-related knowledge, by sex, Oman, 2015

HIV-related knowledge	All age group			
	Total % (CI)	Sex		Males Different than Females (Yes or No)
		Male % (CI)	Female % (CI)	
Ever heard about HIV infection or the disease called AIDS	76.5% (72.9-79.7)	71% (66.1-75.5)	81.8% (78.2-84.9)	Yes Females are more
Taught in any of their classes during this school year about HIV infection or AIDS	59.1% (55.0-62.9)	54.8% (48.9-60.5)	63.2% (56.4-69.4)	No
Taught in any of their classes during this school year how to avoid HIV infection or AIDS	53.2% (49.5-56.9)	49.8% (44.1-55.5)	56.5% (49.3-63.5)	No
Ever talked about HIV infection or AIDS with their parents or guardians	25.3% (23.5-27.2)	24.5% (21.9-27.2)	25.9% (23.4-28.6)	No

In **Oman**, 76.5% of students had ever heard of HIV infection or the disease called AIDS. Females were more likely know about HIV compared to males.

Overall, 59.1% of students were taught in any of their classes during this school year about HIV infection or AIDS.

Overall, 53.2% of students had been taught in any of their classes during this school year how to avoid HIV infection or AIDS.

Overall, 25.3% of students ever talked about HIV infection or AIDS with their parents or guardians with no difference between males and females.

Conclusions and Recommendations

Oman-GSBHS 2015 is the third survey conducted in Oman. The previous two surveys were conducted in the years 2005 and 2010. Both GSHS 2005 and 2010, included students aged 13-15 years, whereas, the age range of the sample in the current survey was extended to 13-17 years. These series of surveys give a good opportunity to track changes in health knowledge and behavior of the school students over the years. Moreover, as the survey is conducted in so many regions using the same methodology and standard questionnaire, it enables us to make cross country comparisons of prevalence and other related issues concerning health behaviors.

The third Omani GSHS measures the following health issues: dietary behavior, hygiene, violence and unintentional injury, physical activity, protective factors and HIV-related to knowledge. In addition, three more factors were included for the first time in the current survey, namely: drug use, mental health and STI-related knowledge as a country-specific modules.

Dietary Behavior:

It is noticed in this survey that percentage of students who reported that they went hungry most of the time or always because there was not enough food in their home during the past 30 days has dropped to almost half the percentage in the GSHS-2010 which is a good indicator. However, other dietary behavior indicators did not show much improvement. Despite the continuous health education efforts in the schools on the importance of eating breakfast and the disadvantages of unhealthy diet, there is no improvement in the behavior when compared to the previous results. Only 46.8% of the students ate breakfast most of the time or always and similarly, a low percentage of students had their daily recommendations of fruits/vegetables. In addition, 43.9% of students drank carbonated soft drinks one or more times per day and 52.7% of the students had energy drinks for one or more times per day and 23.3% of the students reported that they ate from a fast food restaurant on three or more days during the past 7 days. The last figure has almost tripled when compared to GSHS-2005, when only 7.7% of the students reported the same. The increase in the number of students who eat from fast food restaurants might be proportional to the increase in the number of fast food restaurants in the country for the last 10 years. This raises an important question, weather health educational efforts and programs on the importance of healthy diet and the dangers of junk food are fair enough to lead to a remarkable change in the behavior, or should this be accompanied with other changes such as, legislative changes that controls the availability and affordability of fast food restaurants.

Hygiene:

Most of the students (86%) reported that they usually cleaned or brushed their teeth one or more times per day, however, a considerable percentage still lacked some basic hygiene interventions like washing hand before eating or after using the latrine. Moreover, this

behavior did not show an improvement over the years. Nor a significant difference when compared to neighbor countries like Kuwait where 84.8% of the students reported the same. It is worthy to mention that females in Oman were more likely to show positive hygiene behaviors when compared to males.

Violence and Unintentional Injury:

Violence and unintentional injuries indicators in Oman are not promising. Nearly half of the students (44.2%) were involved in a physical fight one or more times during the past 12 months and 37.9% were seriously injured one or more times. Broken bones and dislocated joints were the most common forms of injuries. Generally, males were more involved in violence than females. 43.6% of students were bullied one or more times during the past 30 days. A small reduction in the percentage of students who were physically attacked one or more times was noted when compared to the results of GSHS-2010 and GSHS-2005. Serious injuries were more common in Kuwaiti students when compared to Omani. Whereas, Omani students were more likely to be bullied when compared to Kuwaiti students. Generally, Violence related indicators did not show any improvement over the years, which raises the concern over the efficiency of anti-violence programs in the school. More focus on such programs and their implementation is of high priority.

Physical Activity:

The trend in some of the physical activity indicators shows a considerable difference when compared with GSHS-2005. Only 17.6% of students aged 13-15 were physically active for at least 60 minutes per day on five or more days during the past 7 days, compared to 29.4% in the year 2005. Generally, males showed higher level of physical activity when compared to male students. Although the indicators are not good, yet better than the physical activity indicators of students in Kuwait. 49.4% of Omani students versus 15.4% of Kuwaiti students only attended physical education classes on three or more days each week during this school year. This could be explained by the introduction of physical education curriculum as one of the essential subjects in Oman with its mandatory attendance and examination setting. Furthermore, 65% of students in Kuwait compared to nearly 40% of students in Oman spent three or more hours per day doing sitting activities. This illustrates the negative effect of the technology and the social media on one of the important risk factors of non-communicable diseases and the future implications on the NCD in our region.

Protective Factors:

A considerable number of students (38.4%) missed classes or school without permission on one or more days of the past 30 days, males were more prone to this behavior than females. This behavior was more common among students in Kuwait as it was reported by 47.6% of the students. More than half of the students (57.9%) reported that that the students in their school were kind and helpful most of the time or always and this was reported by females more than

males. Around 40.4% of the total students thought that their parents or guardians understood their problems and worries most of the time or always. This was less common in Kuwaiti students as only 33.2% reported the same. Similarly, nearly 42% of the students mentioned that their parents or guardians really knew what they were doing with their free time most of the time or always. This was more common in female students compared to male students.

Mental Health:

Mental health issues were addressed for the first time in the GSHS in Oman. 15.7% of the students felt lonely most of the time or always during the past 12 months with no significant difference between male and female students. Similarly, 18.3% of the students were most of the time or always so worried about something that they could not sleep at night during the past 12 months. This was higher among female students. This figure is consistent with Study of “Depressive Symptoms among Adolescent Secondary School Omani Students”, which illustrated that: depressive symptoms are 17% prevalent in secondary school Omani students aged 16-18 years.

Tobacco use:

Around 6.8% of the students in Oman currently smoke cigarette. Males were more than females. This figure is considered to be low when compared to Kuwait as 20.8% of the students are current cigarette smokers. Furthermore, 72.6% of the students who ever smoked cigarettes, first tried a cigarette before the age of 14 years. Another alarming figure shows that 9.4% of the students used any tobacco on one or more days during the past 30 days. This was again significantly higher in males compared to females. Percentage of students who currently used any tobacco products are also much higher in Kuwait (27.6%) when compared to Oman (8.4%). Nearly quarter of the students (26.1%) reported that people smoked in their presence on one or more days during the last 30 days, and this was significantly higher in male students. Similarly, this figure is much higher among students in Kuwait (64.3%). All these figures indicate the importance of introducing anti-tobacco programs at an early age as this program used to target students from the age of 13 years. The program should focus more on, but not limit to, male students.

Drug Use:

Similar to smoking, 74.6% of students who ever used drugs, have first used it before the age of 14 years. This emphasizes on the importance of initiating anti-drug and anti-tobacco program at an early stage. Early initiation of drug use was more likely in male students. Three percent of students used marijuana one or more times during their life and 2.8% reported use of marijuana during the past 30 days. This might indicate that students who try marijuana will probably continue taking it. This was again more common among male students. Likewise, 2.5% of the students used amphetamine or methamphetamines one or more times during their life. Male students were more likely than female student to experience these drugs.

HIV-Related knowledge:

HIV awareness programs has always been very active in the schools. In the 2015-GSHS, only 72.7% of the students aged 13-15 years have ever heard about HIV infection or the disease called AIDS. This shows a significant drop when compared to the results of 2005-GSHS (97.4%). Female students in Oman were more likely to know about HIV compared to male students. When students were asked about HIV/AIDS related educational activities at school, only 48.9% of the students aged 13-15 years mentioned that they were taught in any of their classes during this school year about HIV infection or Aids. This indicator also illustates a significant decline when compared to GSHS-2010 and GSHS-2005 when nearly 64% of the students reported the same. Similarly, 43.7% of 13-15 years students reported that they taught how to avoid HIV infection or Aids during this school year compared to nearly 59% in GSHS-2010 and GSHS-2005. Data indicates possible reduction in the HIV/AIDS related teaching and health education activities at school.

STI-Related Knowledge:

Most of the studies conducted earlier to explore knowledge, attitudes and practices of adolescents and school children explored about HIV/AIDS, however, none of them intended to explore adolescent's knowledge toward other sexual transmitted diseases. In Oman GSHS-2015, questions on students' knowledge of STIs were introduced. Only 51.2% of the students have ever heard about STIs, and only nearly 27% of them were taught in any of their classes during this school year about STIs and how to avoid them. Morbidity statistics shows that STIs in Oman are more prevalent than HIV/AIDS, therefore education programs in schools should focus on providing students with the important information on STIs equally to, or even more than, HIV/AIDS.

Recommendations:

- Conduct a qualitative study on the reasons behind students' unhealthy dietary habits and what are the barriers for opting for healthy food.
- Incorporate practical dietary information in the peer education program on the dangers of energy drinks, carbonated soft drinks and fast food.
- Continue the health education efforts on the importance of basic hygiene measures with an emphasis at the early stage of adolescents.
- Activation and implementation of Peer Education program with all of its components: diet and physical activity, violence, tobacco use, road safety and sexually transmitted diseases including AIDS, taking into consideration the gender difference in the pattern of the risk factors.
- Establish school mental health programs taking into account involvement of the school staff and the family. The program should also consider the different needs at different stages of students/adolescents' life.

- Train school personnel on how to deal with mental health issues at school.
- Establish anti bullying policies at schools and train the students and the staff on how to deal with it.
- Increase the awareness of the family members on the psychological needs of the adolescents.
- Strengthen counseling services for adolescents either at school level or at health care levels.
- Consider initiating anti-tobacco programs at a lower age.
- Importance of early initiation of anti-drug programs with clear illustration of the different types of drugs and their addiction and dependent tendency.
- All health education programs should enforce life skills training to enable the students on obtaining and practicing healthy life styles and incorporate the practices within their daily activities.
- Involvement of the family and the community with all the health education programs to help into creating an enabling environment.
- Introduction of creative methods into health education to attract the target groups, for example using social media or digital techniques.
- Enforce legislations that limits the availability and affordability of unhealthy food.
- Collaborate with the concerned sectors to impose physical activity in the schools and the community.

Table 12: Comparison of some important indicators along the three surveys, GSHS-2005, 2010 and 2015

Behavior	GSHS 2015 (13-15 years)	GSHS 2010 (13-15 years)	GSHS 2005 (13-15 years)
Dietary behavior			
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	4.4% (3.4-5.8)	8.9% (6.9-11.6)	7.5% (6.3-8.7)
Ate breakfast most of the time or always during the past 30 days	46.8% (42.6-51.0)	44.8% (39.7-50.0)	52.7% (46.7-58.7)
Usually drank carbonated soft drinks one or more times per day during the past 30 days	43.9% (39.7-48.3)	49.9% (43.8-54.9)	59% (56.4-61.2)
Ate food from a fast food restaurant on three or more days during the past 7 days	23.3% (19.6-27.6)	23.1% (18.5-28.4)	7.7% (6.1-9.4)
Hygiene			
Never or rarely washed their hands before eating during the past 30 days	7.8% (5.8-10.5)	10.2% (7.6-13.6)	6.2% (4.8-7.6)
Never or rarely washed their hands after using the toilet or latrine during the past 30 days	8.6% (6.7-11.0)	9.4% (6.7-12.9)	7.7% (6.1-9.3)
Never or rarely used soap when washing their hands during the past 30 days	7.6% (5.6-10.1)	12.3% (9.5-15.7)	9.5% (7.7-11.3)
Violence and Unintentional Injury			
Were physically attacked one or more times during the past 12 months	29.6% (25.4-34.3)	40.7% (35.8-45.8)	38.6% (34.9-42.1)
Were in a physical fight one or more times during the past 12 months	47.8% (44.1-51.6)	50% (45.4-54.5)	41.6% (38.2-45.0)
Were seriously injured one or more times during the past 12 months	38% (33.5-42.7)	41.6% (35.4-48.1)	26.6% (22.5-30.7)
Were bullied one or more days during the past 30 days	42.3% (40.2-44.5)	47.4% (43.7-51.2)	36% (32.5-39.5)
Physical Activity			
Were physically active for a total of at least 60 minutes per day on five or more days during the past 7 days	17.6% (15.1-20.5)	22.2% (17.3-28.0)	29.4% (25.0-33.9)
Were physically active for a total of at least 60 minutes per day on all seven days during the past 7 days	13.2% (10.8-16.1)	15.7% (11.8-20.5)	23.1% (19.3-26.9)
Did not walk or ride a bicycle to or from school during the past seven days	70.3% (65.5-74.7)	67.9% (62.0-73.2)	62.7% (58.7-66.7)
Spent three or more hours per day during a typical or usual day doing sitting activities	38.1% (34.4-41.9)	32.6% (28.9-36.5)	34.1% (30.8-37.4)
Protective Factors			
Missed classes or school without permission on one or more of the past	35.5% (31.8-39.3)	43.4% (38.9-48.0)	31.5% (28.0-35.0)

30 days			
Reported most of the students in their school were kind and helpful most of the time or always during the past 30 days	57.4% (53.8-61.0)	50.7% (45.5-55.9)	52.4% (48.8-56.0)
Parents or guardians checked to see if their homework was done most of the time or always during the past 30 days	52.2% (49.0-55.4)	49.4% (44.8-54.0)	51.6% (48.1-55.1)
Parents or guardians understood their problems and worries most of the time or always during the past 30 days	42.6% (38.9-46.3)	41.4% (38.0-45.0)	40.2% (37.1-43.3)
Parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days	44.9% (41.6-48.2)	41.2% (37.0-45.6)	43.5% (40.8-46.3)
Parents or guardians never or rarely went through their things without their approval during the past 30 days	83.1% (79.9-85.9)	80.6% (76.2-84.3)	
HIV-Related Knowledge			
Ever heard about HIV infection or the disease called AIDS	72.7% (67.7-77.2)	80.5% (74.4-85.5)	97.4% (96.3-98.5)
Taught in any of their classes during this school year about HIV infection or AIDS	48.9% (44.9-52.9)	64.2% (57.7-70.2)	64.4% (59.9-69.0)
Taught in any of their classes during this school year how to avoid HIV infection or AIDS	43.7% (39.8-47.6)	59.6% (53.7-65.3)	59.2% (54.3-64.1)
Ever talked about HIV infection or AIDS with their parents or guardians	23.3% (21.5-25.3)	26.8% (24.3-29.5)	34.7% (31.1-38.3)

Table 13: Comparison between students' behaviors in Oman 2015-GSHS and Kuwait 2015-GSHS

Behavior	Oman (13-17)	Kuwait (13-17)
Dietary Behaviors		
Percentage of students who usually drank carbonated soft drinks one or more times per day during the 30 days before the survey	42.7% (38.4-47.0)	53.9% (47.4-60.4)
Drug use		
Percentage of students who ever used marijuana one or more times during their life	2.5% (1.5-4.3)	
Hygiene		
Percentage of students who usually cleaned or brushed their teeth one or more times per day during the 30 days before the survey	86.4% (82.9-89.3)	84.8% (78.7-89.4)
Percentage of students who never or rarely washed their hands after using the toilet or latrine during the 30 days before the survey	8.9% (7.2-10.8)	7.2% (6.1-8.5)
Mental Health		
Percentage of students who did not have any close	7.3%	7.5%

friends	(6.3-8.4)	(6.0-9.4)
Physical Activity		
Percentage of students were physically active at least 60 minutes per day on all 7 days during the 7 days before the survey	11.7% (9.9-13.7)	15.6% (13.3-18.2)
Percentage of students who attended physical education classes on three or more days each week during this school year	49.4% (45.6-53.1)	15.4% (12.4-19.0)
Percentage of students who spent three or more hours per day sitting and watching television, playing computer games, or talking with friends, when not in school or doing homework during a typical or usual day	39.7% (37.1-42.3)	65% (60.8-68.9)
Protective Factors		
Percentage of students who missed classes or school without permission on one or more days during the 30 days before the survey	37.7% (34.5-41.1)	47.6% (41.3-53.9)
Percentage of students who reported that their parents or guardians most of the time or always understood their problems and worries during the 30 days before the survey	41.1% (38.1-44.1)	33.2% (30.1-36.4)
Percentage of students who reported that their parents or guardians most of the time or always really knew what they were doing with their free time during the 30 days before the survey	42.9% (40.2-45.6)	42.2% (38.1-46.8)
Tobacco Use		
Percentage of students who currently used any tobacco products (used any tobacco products on at least 1 day during the 30 days before the survey)	8.4% (6.4-11.1)	27.6% (20.6-35.8)
Percentage of students who currently smoked cigarettes (smoked cigarettes on at least 1 day during the 30 days before the survey)	6.1% (4.5-8.2)	20.8% (15.2-27.8)
Percentage of students who reported that people smoked in their presence on one or more days during the 7 days before the survey	25.5% (22.2-29.1)	64.3% (59.5-68.8)
Violence and unintentional Injury		
Percentage of students who were in a physical fight one or more times during the 12 months before the survey	44.1% (41.6-46.7)	40.2% (33.0-47.9)
Percentage of students who were seriously injured one or more times during the 12 months before the survey	36.9% (33.2-40.8)	54.8% (50.5-59.0)
Percentage of students who were bullied one or more days during the 30 days before the survey	42.8% (41.2-44.5)	30.6% (26.6-34.9)

Appendices

GSHS Questionnaire



وزارة التربية



وزارة الصحة

GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY

Sultanate OF Oman

2015

Global school-based student health survey

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

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

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

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

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

Fill in the circles like this



Not like this



or



Survey

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

Answer sheet

1. (B) (C) (D) (E) (F) (G) (H)

Thank you very much for your help.

Core questions

1. **How old are you?**
 - A. 11 years old or younger
 - B. 12 years old
 - C. 13 years old
 - D. 14 years old
 - E. 15 years old
 - F. 16 years old
 - G. 17 years old
 - H. 18 years old or older
2. **What is your sex?**
 - A. Male
 - B. Female
3. **In what grade/class are you?**
 - A. Eighth
 - B. Ninth
 - C. Tenth
 - D. Eleventh
 - E. Twelfth

Country specific questions

4. **What is your nationality?**
 - A. Omani
 - B. Non Omani

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

Core questions

5. **How tall are you without your shoes on?**
 ON THE ANSWER SHEET, Write your height in the shaded boxes at the TOP of the grid. then fill in the oval below each number.

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

0

1

2

3

4

5

6

7

8

9

9

6. **How much do you weigh without your shoes on?**
 ON THE ANSWER SHEET, Write your weight in the shaded boxes at the top of the grid. Then fill in the oval below each number.

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

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

7. **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 7 questions ask about what you might eat and drink.

Core questions

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

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

cucumbers, carrots or lettuce?

- 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

10. **During the past 30 days, how many times per day did you**

usually drink carbonated soft drinks, such as Pepsi, Cola or Mountain Dew? (Do not include diet soft drinks.)

- 1. I did not drink carbonated soft drinks during the past 30 days
- 2. Less than 1 time per day
- 3. 1 time per day
- 4. 2 times per day
- 5. 3 times per day
- 6. 4 times per day
- 7. 5 or more times per day

11. **During the past 7 days, on how many days did you eat food from a fast food restaurant, such as burger, pizza or shawarma?**

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

Core - Expanded questions

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

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

13. **During a typical or usual school day, what snack do you eat most often at school? (select only one response)**

- A. I do not eat snacks at school
- B. Sandwiches
- C. Fruits
- D. Vegetables
- E. Pastries
- F. Biscuits
- G. Chocolate or Candies

H. Some other kind of snack

14. **During the past 30 days, how many times per day did you**

usually drink energy drinks, such as Power Horse , Red Bull , Star , Bokari Sweet?

- A. I did not drink energy 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

The next 4 questions ask about cleaning your teeth and washing your hands

Core questions

15. **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

16. **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

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

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

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

- A. Never
- B. Rarely
- C. Sometimes

- D. Most of the time
- E. Always

The next question asks about 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.

Core questions

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

The next question asks about physical fights:

A physical fight occurs when two students of about the same strength or power choose to fight each other.

Core questions

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

The next 3 questions ask about serious injuries that happened to you:

An injury is serious when it makes you miss at least one full day of usual activities (such as school, sports, or a job) or requires treatment by a doctor or nurse.

Core questions

21. **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
22. **During the past 12 months, what was the most serious injury that happened to you?**
- A. I was not seriously injured during the past 12 months
 - B. I had a broken bone or a dislocated joint
 - C. I had a cut or stab wound
 - D. I had a concussion or other head or neck injury, was knocked out, or could not breathe
 - E. I had a gunshot wound
 - F. I had a bad burn
 - G. I was poisoned or took too much of a drug
 - H. Something else happened to me
23. **During the past 12 months, what was the major cause of the most serious injury that happened to you?**
- A. I was not seriously injured during the past 12 months
 - B. I was in a motor vehicle accident or hit by a motor vehicle
 - C. I fell
 - D. Something fell on me or hit me
 - E. I was attacked or abused or was fighting with someone
 - F. I was in a fire or too near a flame or something hot
 - G. I inhaled or swallowed something bad for me
 - H. Something else caused my injury

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

Core questions

24. **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
25. **During the past 30 days, how were you bullied most often?**
- A. I was not bullied during the past 30 days
 - B. I was hit, kicked, pushed, shoved around, or locked indoors
 - C. I was made fun of because of my race, nationality, or color
 - D. I was made fun of because of my religion
 - E. I was made fun of with sexual jokes, comments, or gestures
 - F. I was left out of activities on purpose or completely ignored
 - G. I was made fun of because of how my body or face looks
 - H. I was bullied in some other way

The next 4 questions ask about sexual transmitted diseases.

Country specific questions

26. **Have you ever heard about sexually transmitted diseases (gonorrhea , syphilis, hepatitis B, Genital herpes)?**
- A. Yes
 - B. No
27. **During this school year, were you taught in any of your classes about sexually transmitted diseases (gonorrhea , syphilis, hepatitis B, Genital herpes)?**
- A. Yes
 - B. No
 - C. I do not know
28. **During this school year, were you taught in any of your classes how to avoid sexually transmitted diseases (gonorrhea , syphilis, hepatitis B, Genital herpes)?**
- A. Yes
 - B. No
 - C. I do not know
29. **Have you ever talked about sexually transmitted diseases (gonorrhea , syphilis, hepatitis B, Genital herpes) with your parents or guardians?**
- A. Yes
 - B. No

The next 4 questions ask about HIV infection or AIDS.

Core questions

- 30. Have you ever heard of HIV infection or the disease called AIDS?
 - C. Yes
 - D. No
- 31. During this school year, were you taught in any of your classes about HIV infection or AIDS?
 - D. Yes
 - E. No
 - F. I do not know
- 32. During this school year, were you taught in any of your classes how to avoid HIV infection or AIDS?
 - D. Yes
 - E. No
 - F. I do not know
- 33. Have you ever talked about HIV infection or AIDS with your parents or guardians?
 - C. Yes
 - D. No

The next 3 questions ask about physical activity. Physical activity is any activity that increases your heart rate and makes you breathe hard. Physical activity can be done in sports, playing with friends, or walking to school. Some examples of physical activity are running, fast walking, biking, dancing, football, and COUNTRY SPECIFIC EXAMPLES.

Core questions

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

H. 7 days

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

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

G. 6 days

H. 7 days

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

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 or more days

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

Core questions

37. **How much time do you spend during a typical or usual day sitting and watching television, playing computer games, talking with friends, or doing other sitting activities or reading ...?**

A. Less than 1 hour per day

B. 1 to 2 hours per day

C. 3 to 4 hours per day

D. 5 to 6 hours per day

E. 7 to 8 hours per day

F. More than 8 hours per day

The next 6 questions ask about your experiences at school and at home

Core questions

38. **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

39. **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

40. **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

41. **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

42. **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

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

A. Never

B. Rarely

C. Sometimes

D. Most of the time

E. Always

THE NEXT 6 QUESTIONS ASK ABOUT YOUR USE OF TOBACCO.

Core questions

44. **How old were you when you first tried a cigarette?**

A. I have never smoked cigarettes

B. 7 years old or younger

- C. 8 - 9 years old
- D. 10 - 11 years old
- E. 12 - 13 years old
- F. 14 - 15 years old
- G. 16 – 17 years old
- H. 18 years old or older

45. **During the past 30 days , on how many days did you smoke cigarettes?**

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

46. **During the past 12 months, have you ever tried to stop smoking cigarettes?**

- A. I have never smoked cigarettes
- B. I did not smoke cigarettes during the past 12 months
- C. Yes
- D. No

47. **During the past 7 days, on how many days have people smoked in your presence?**

- A. 0 days
- B. 1 or 2 days
- C. 3 or 4 days
- D. 5 or 6 days
- E. All 7 days

48. **During the past 30 days , on how many days did you use any tobacco products other than cigarettes , such as chewing tobacco (Afzalm, Gutka, suwaika, etc)?**

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

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

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

The next 6 questions ask about drug use. This includes using marijuana, amphetamines, cocaine, inhalants, and grass, weed).

Core questions

50. How old were you when you first used drugs?
- A. I have never used drugs
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 or 17 years old
 - H. 18 years old or older
51. During your life, how many times have you used marijuana (also called grass, weed)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times
52. During the past 30 days, how many times have you used marijuana (also called grass, weed)?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times
53. During your life, how many times have you used amphetamines or methamphetamines (also called speed, crystal)?
- 1. 0 times
 - 2. 1 or 2 times
 - 3. 3 to 9 times
 - 4. 10 to 19 times
 - 5. 20 or more times

Core - Expanded questions

54. During your life, how many times have you used the glue sniffing?
- A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 or more times

Country specific questions

55. In your opinion, which of the following substances are most prevalent and used among young people?
- A. Tobacco

- B. Marijuana
- C. Morphine
- D. Heroin
- E. Qat
- F. Glue

The next 4 questions ask about your feelings and friendships:

Core questions

56. **During the past 12 months, how often have you felt lonely?**
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
57. **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
58. **During the past 12 months, did you ever seriously consider attempting suicide?**
- A. Yes
 - B. No
59. **How many close friends do you have?**
- A. 0
 - B. 1
 - C. 2
 - D. 3 or more

References:

Ministry of Health, 2005. Oman Global School Health Survey. Available on http://www.who.int/chp/gshs/2010_Country_Report_OMAN_GSHS_EN.pdf

Ministry of Health, 2010. Oman Global School Health Survey. Available on http://www.who.int/chp/gshs/2010_Country_Report_OMAN_GSHS_EN.pdf?ua=1

Ministry of Health, 2004. The Study of Depressive Symptoms among Adolescent Secondary School Omani Students. Directorate of Research and Studies.

Global School-based Student Health Survey, Kuwait 2015 Fact Sheet. Available on http://www.who.int/chp/gshs/2015_GSHS_Kuwait_Fact_Sheet.pdf?ua=1