**Incorporating an Innovative Health Promoting Model into Lebanese Public Schools:**

**Impact on Adolescents’ Dietary and Physical Activity Practices**

**Comparison of HPS with Other Public and Private Schools in Lebanon**

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**Abstract**

Background: The Health Promoting School Initiative (HPSI) was launched by the World Health Organization (WHO) in 1995 based on the concept of an interrelationship between education and health. In 2010, WHO supported the Lebanese Ministry of Education and Higher Education (MEHE) and established a network of 10 Health Promoting Schools (HPS). This study was undertaken to address the extent to which the HPS model was able to enhance the health of adolescents and prepare them to respond to evolving health challenges.

Methods: A cross-sectional survey was carried out during the academic year 2011-2012 and involved a comparison between the 10 HPS network, and 10 other public and private schools, with a total of 2105 students (Grades 6-9). The Youth Risk Behavior Survey (CDC, 2011) and anthropometric measurements were used for data collection.

Results: Findings revealed that the current School Health program (SHP) failed to address issues of concern to adolescents with prevalence of risk behaviors related to dietary and exercise practices. Neither the HPS nor control schools had a strong impact on students’ health-behaviors. Conclusion: Revision of the health education curriculum is strongly needed in order to integrate issues concerning healthy nutrition and physical activity. Expected learning outcomes need be designed to match students’ age, grade level, and developmental milestones. The HPS network needs reassessment for project outcomes.

 **Keywords:** Health Education, Health Promotion, Health Promoting School, School Health program, Health Behavior, Risk Behavior.

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**Introduction**

 Schools offer unique settings where children and adolescents of all cultural backgrounds spend several years together. Adolescents are usually subject to pressures from peers with strong influences related to puberty and increasing need for independence and autonomy. Negative influences such as violence, family conflicts, drugs and alcohol, teenage pregnancy, absence of love and affection, little attention from home or school for risk behaviors strongly impact their lives (O’ Rourke, 1996). These influences may translate into immediate physical and psycho-social problems or have long term consequences which affect their chances to lead fulfilling and healthy lives (O’ Rourke, 1996; License, 2004). Health Promoting School communities participate to ensure that identified health needs are holistically and collaboratively addressed through the comprehensive HPS framework: curriculum, teaching and learning; school organization, ethos and environment; and partnerships and services (WHO, 1995). This framework is intended to move health education and promotion from being a single and detached health activity delivered in classrooms to a setting-based model that focuses on healthier and supportive environments (WHO, 1996).

**Health Promoting Schools: The framework**

The HPS framework is intended to provide guidance and support to schools and health authorities, with essential stakeholders’ partnerships. It recognizes the needs of students, teachers, parents, health care personnel, and local community to actively participate in shaping and implementing school health promotion programs and policies (WHO, 1995). Within this framework, students’ experience at school is considered crucial in shaping health behaviors during and beyond adolescence (Fig. 1).

**Health Promoting Schools in Lebanon: National Experience**

 School health was known in Lebanon since April 1920, where an Act toward this effect was issued when the country was still under the French colonization. This act mandated that all schools should be subject to health inspection, perform physical examinations, and assure that students received their recommended vaccination and had their health records completed. It was not until 1993 that a ministerial decision number 1/129 was issued for the foundation of the National Committee for School Medicine.

 Lebanon has had a unique experience in school health lead by NGOs and international agencies that provide services across different regions of the country. Their activities include provision of medical screening, healthy meals, and organization of campaigns for oral health and hygiene (WHO, 2005). An important milestone was the Act number 10227/97, on 8 May 1997 which developed the Lebanese Integrated Health Curriculum, from KG till G12. Based on ministerial resolutions numbers 71/m/98 and 73/m/98, the National SHP was launched in November 1998 and included health and environmental messages integrated within curricular and extracurricular activities. However, revision of official school books for health and environmental content revealed several handicaps and lack of consistency in the flow of some subjects across grade levels (Makhoul, 2000). Moreover, school surveys demonstrated that more effort should be invested in the domains of various health practices including accidents and injury prevention (MEHE; WHO, 1999).

 The SHP was reinforced through a memorandum of understanding between the MOPH, MEHE and WHO in 2006 for mobilizing the commitment of both ministries by strengthening national ownership of the program, improving the utilization of national health data, and fostering participation of the private sector (WHO, 2010). Alarming data about Lebanese adolescents was obtained from the Global School-Based Health Survey (GSHS, 2005). It revealed prevalence of alcohol (20%) and other drugs (3.4%); poor dietary behaviors with obesity (5%) and overweight (23.3%); mental health issues (15.8% entertaining suicidal thoughts); violence (45.9%); and bullying (33.9%) among 7th, 8th and 9th grade students. Reassessment of the Lebanese Integrated Health Curriculum was recommended, and content edited for risk behaviors that need to be addressed at earlier ages. The Global Youth Tobacco Survey (GTYS) by Saade et al. (2005) revealed that 60.1% of adolescents aged 13-15 years use tobacco, and the need for urgent awareness programs to stop the growing smoking epidemic. In 2008, the Pompidou Group survey for Lebanese grade nine students demonstrated that 60% of were already smoking, 85% of knew about weed whereas 22% reported knowing someone who used it. Prevention and skills training must be initiated as early as possible during the complementary school cycles.

The GSHS 2010 figures were still alarming highlighting the need for serious consideration of the national SHP. The rate of students who had their first alcohol drink before the age of 14 was 87.5%. Almost one fourth were overweight (24.1%), 6.7% were obese, and 60.2% consumed carbonated beverages. Approximately one third did not practice any physical activity during the past 12 months of the survey. National figures for childhood obesity revealed that 22.5% of boys and 16.1% of girls were overweight (Sibai, 2003). Chakar and Salameh (2006; 2007) further demonstrated this problem among adolescents in Lebanese schools. Moreover, Salameh and Barbour (2011) revealed high rates of obesity and diabetes among Lebanese adolescents (11-18 yrs old). Alarming rates (10.3%) of abnormal random fasting blood sugar (˃140 mg/dl) were documented. Boys had higher rates than girls on the overweight dimension (4.7 vs. 1.3%) and higher risk on the obesity dimension (26.7% vs. 10.7%).

The Lebanese School Health Strategy was developed to improve the health status of children and school personnel; provide a safe learning environment for students and workplace for staff; and, reinforce the relationship between education and health professionals and the community (MEHE, 2009). In 2010, the MEHE and the WHO undertook a joint activity, to establish a network of 10 HPS. This pilot project aimed to transfer public schools from implementing the routine SHP to be health promoting, and reinforce partnerships between the education and health sectors. Thirty five teaching and administrative staffs were trained regarding objectives of the HPS model, its scope and their role in implementation and sustainability. Training included application of the SHP, support for the school health worker, and implementing at least one activity per year. However, no studies have been done to this date to evaluate effectiveness of the training and efficiency of the HPS network in preventing and/or reducing risk behaviors among students or school populations. The objective of the current research was to evaluate the impact of these interventions on students’ behaviors related to dietary physical activity practices.

Methods

**Research Design**

 This research was implemented to explore school health services, students’ practices regarding diet and physical activity, and the extent to which the HPS was actually promoting adolescents’ well-being. It was carried out during the academic year 2011-12 and involved a comparison between 10 public schools which constitute the HPS network, 10 other public and 10 private schools. Control schools were chosen from the same geographic regions (10 Regions) as the HPS and were matched for size and student characteristics (age, gender, and grade levels). A quantitative research design was used by implementing survey questionnaires. Anthropometric measures were also taken to validate subjective data.

**Sampling Procedure**

 The study was a school-based survey of Lebanese public and private schools. Schools containing grades six through nine and had more than 50 students in the designated grade levels were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample of students. All students within the selected grade levels were eligible to participate by responding to the survey questionnaire. The response rate was 96.2%, with 2188 questionnaires distributed and 2105 collected.

**Research Instruments**

**The** **Youth Risk Behavior Survey (YRBS)** developed by the Center for Disease Control and Prevention (CDC, 2011) was used with permission to translate the instrument to Arabic Language. The survey consisted of 47 multiple choice questions addressing prevalent risk behaviors. For purpose of increasing compliance rate, culturally sensitive items were deleted. The MEHE requested removing questions that dealt with sexual practices, contraception and drug addiction, still considered taboo issues. A total of 11 questions were deleted from the questionnaire (Appendix A). It was pilot tested in one randomly chosen public school, few questions were revised, and the questionnaires were back translated to validate content. Original, and translated versions were then matched to ensure accuracy of translation.

**Height and weight measurements** were undertaken on a random number of schools from the sample and included all students within the selected grade levels (703 students). These were obtained for purposes of triangulation with subjective data and used to compute calculate anthropometric measures based on the International Obesity Task Force guidelines (IOTF, 2005). Values were then used to compute the BMI for students in the designated sample.

 Approval of the MEHE was obtained before the study was initiated. Participants were assured that data would be used for research purposes only with no penalty for non-participation. All schools accepted to participate in the survey and appointments were arranged for data collection extending from November 2011 till June 2012. Anonymity and confidentiality of all respondents was respected.

**Data Analysis**

The questionnaires were auto-completed in 30-45 minutes in presence of the surveyor who provided support as needed. Height and weight measurements were obtained during the same visit. Collected data were grouped and analyzed using SPSS for parametric statistics. All variables were described as frequencies and percentages for categorical variables and as means and standard deviations (SD) for continuous variables. Data were described in univariate, bivariate and multivariate analysis to document change in patterns of students’ attitudes and behaviors following the implementation of HPS in Lebanese public schools.

 For bivariate analysis, the Chi2 test was used to compare between group percentages, while ANOVA was used to compare quantitative variables between two or more groups, respectively. Multivariate analysis was carried out to identify multiple predictor variables on the occurrence of the dependent variables under investigation, using a backward descending regression. Sociodemographic characteristics were used as independent potential confounding variables.

**Results**

**Participants’ demographic data.** All students in the school sample grades six to nine participated in the survey. Participants’ ages ranged between 10 and 15 years, with females constituting 58.9% of the sample. Overall, the number of participants was 749 in private schools, 675 in HPS and 678 in public non HPS with p˂0.001. Respondents were almost evenly distributed among school grades six to nine in public schools (HPS and non HPS).

 Participants’ reported heights (Ht) ranged from 59-201 cm. and weights (Wt) ranged between 23-167 kg. Corrected measures of Ht and Wt revealed a significant difference across schools of the sample regarding sample Ht. Private schools had higher mean Ht of 156.611 cm, with p˂0.001. Moreover, BMI values revealed that males in public schools (HPS and non HPS) had higher values for normal weight (69% and 74.9% respectively). Males in private schools had higher values for overweight with (23.3%). Females in private schools, on the other hand, had higher values for normal weight (73%), while higher values of overweight were reported in public schools (22%). Our findings were not significant for neither male (*p*=0.037) nor female students (*p*=0.366) as shown in Table1.

**Diet practices and physical activity.** Most male students reported regular physical activity for 1-2 days during the week with no significant differences among schools. Females in private schools reported more engagement in physical activity for at least 1-2 days during the past seven days of the survey (43.7%) with *p*˂0.001as documented in Table 2.

 Females in private schools also reported spending more time (4≥5 hrs/day) on electronic games than their colleagues in other schools of the sample (12.3%) with *p*˂0.001.

In addition, they reported engaging in physical education for at least 1-2 days per week (60.7%) with *p*˂0.001. Male figures were not significant on these variables. No significant differences were also observed among students (males and females) with respect to participating in team sports as shown in Table 3.

**Multivariate Analysis** was utilized to analyze student dietary practices. When adjusting for obesity with socio-demographic characteristics and receiving “health education” the relationship between “HPS” and obesity remained significant. Students in higher grades (*p*<0.001) and students who used fasting (*p*=0.013), vomiting and laxative products (*p*=0.013) were more likely to be obese (Table 4).

 When adjusting “watching TV” habit to socio-demographic characteristics and receiving “health education”, results revealed that students in non HPS schools watched TV less compared to those in HPS (*p*=0.002). Obligatory physical education at school (though failed to reach significance (*p*=0.083), and utilizing school premises for community sports events were found to be in favor of less “TV watching” with *p*<0.001 as revealed in Table 5.

 Results revealed that risk behaviors were similar among students in all types of schools, indicating no advantage of HPS over others in the sample.

**Discussion**

 Obesity among adolescents was found to be associated with negative psychosocial and health problems such as diabetes and hypertension, which interfere with school performance (Daniels et al., 2005). Musaiger (2004) demonstrated this fact and marked an increase in obesity rates among adolescents, ranging from 7% to 45% relating this to poor health practices also. Our rates revealed that males in public schools (HPS and non HPS) had higher values for normal weight (69% and 74.9% respectively), while those in private schools had higher values for overweight (23.3%). Females in private schools, on the other hand, were higher for normal weight (73%) and overweight (22%). Findings were neither significant for male nor female students (Table1).

 Our findings corroborate with Chakar and Salameh (2006) regarding the prevalence and risk of obesity. They reported an obesity rate of 7.5%, and risk of obesity of 24.4% among 12,299 adolescents. Researchers highlighted the importance of early recognition and management of this condition during adolescence. Findings also corroborate with GSHS (2010) where 24.1% reported to be overweight, and 6.7% obese. Fazah et al. (2010) revealed similar national Lebanese rates for overweight of 22.5% among male and 12.4% among female adolescents and recommended the implementation of effective strategies to increase physical activity and health-related practices for better quality of life. High prevalence rates of overweight and obesity were also reported for boys (22.5%, 7.5%) and girls (16.1%, 3.2%) by Sibai et al (2003). Researchers recommended implementation of interventions at community and individual levels to promote weight control measures.

 Multivariate analysis demonstrated that students belonging to schools that allow using their premises for physical activities (*p*=0.002) and participate in community sports events (*p*<0.046), were less likely to be obese (Table5). Schools which had administrative procedures and evaluative methods for physical activity were protective against student obesity (*p*=0.002), (Table 4). Although 49.6% of our male and 51% female youth sample reported to have ideal body weights, 33.6% males and 45.2% females revealed their desire to lose weight, especially in private schools, highlighting the role of media on youth’s self-image. Adolescents regardless of school type had similar health practices leading to elevated BMI figures. This demonstrates the importance of integrating them in as effective partners in SHP.

 Participation in regular physical activity among young people can help build and maintain body weight, reduce body fat, and eliminate feelings of depression and anxiety; thus improving school performance (Strong et al, 2005). It helps adolescent students develop the knowledge, attitudes and skills necessary to adopt an active life style (Dishman et al., 2005). Physical activity was better practiced by females in private schools (43.7%) with *p*˂0.001 (Table2). On the other hand, 44.7% of our female participants did not attend regular physical education classes, especially those in HPS (46.8%) and non HPS (52.1%) with *p*˂0.001 (Table3). Rates for male students were not significant across schools.

 Screen games are considered sedentary activities, associated with obesity and negative consequences on the health and performance of adolescents (Kaur, et al., 2003). The more adolescents indulge in watching TV, and using the computer, the more they become physically and socially inactive. Fazah et al. (2010) further demonstrated that normal weight adolescents were more active than their obese peers, and correlated more screen time with high obesity and overweight figures. This corroborates with our results where 37.8% of female students reported watching TV for 2-3 hours daily, more so in HPS (*p*˂0.001) (Table2). Also 39.8% reported playing electronic games for at least one hour daily, more so in private schools (*p*˂0.001) (Table 3). Multivariate analysis demonstrated that when adjusting “watching TV” habit with socio-demographic characteristics and receiving “health education”, students in non HPS schools tend to watch TV less compared to HPS schools’ students (*p*=0.002). Moreover, female students (*p*=0.002) and playing electronic games for hours variables were associated with longer TV watching hours. Obligatory physical education at school and the possibility of utilizing school premises for community sports events (*p*<0.001) were found to be in favor of less “TV watching” (Table5). Alarming also, was the consumption of steroids (2.6-3.3%) and enhancers (5-5.7%) by both males and females across different schools of the sample which needs to be further examined.

 Unhealthy weight control behaviors that include fasting, taking dietary products or inducing vomiting were observed in all three types of schools in our sample. Engaging in such behaviors may result in physical and psychological health problems, and eating disorders such as anorexia, bulimia and stunted growth (Golden et al., 2003). These health conditions negatively impact school performance as they cause high levels of stress and depression (Neumark–Sztainer, & Hannan, 2000; Salameh & Barbour, 2011). Prevalent dietary habits include consumption of fast food, sugar sweetened beverages, in addition to caffeine rich drinks. Such foods were associated with long term health consequences including overweight among adolescents, decreased bone density and dental decay (Tahmassebi et al., 2006). Effort should be exerted so that nutrition education includes concepts that promote healthy eating within a supportive school environment.

Sports and social events are mostly sponsored by fast food and beverages companies. Students tend to interpret such advertising to mean that school endorses the use of such products (Wilox et al., 2004). Alverman and Hagwood (2000) recommended providing students with media literacy skills, to counteract unhealthy attitudes and practices. Poor nutritional content of food sold during school sponsored events jeopardizes formal health education regarding healthy nutrition within school curricula (Ozer, 2007). Easy access to non-nutritious snack foods through vending machines, school shops or canteens, combined with limited time allocated to eating a full meal, lead students to select non nutritious snacks. Along these lines, Mahfouz et al. (2011) reported an obesity rate for adolescents (11-19 years) of 23.2% among boys and 29.4% among girls in Saudi Arabia. They recommended the need for a national education program to prevent and control obesity among adolescents. Barriers within the school environment undermine effectiveness of HPS initiatives, and do interfere with program implementation and achievement of desired outcomes. Nasereddine et al. (2012) reported the mean BMI values for 2004 subjects in the 1997 and 3636 in the 2009 among different age and gender groups over a 12-year period. Researchers reported that the prevalence of overweight appeared stable over the study period among 6–19 years age group (20.0% vs. 21.2%). The prevalence of obesity, however, increased significantly from 7.3% to 10.9% with annual rates of change of about 4.1%. They highlighted the alarming increase in obesity prevalence and recommended policies and strategies to counteract this trend. Moreover, Sukarieh and Sidani (2014) demonstrated that with BMI cut-off points 8.9%, 5.1% for males; and 12.7%, and 3.8% for females, they were classified respectively as overweight, and obese. Females had higher scores on emotional and binge eating and were more likely to engage in dramatic dieting and weight loss attempts due to family, peer, and media pressures. Males, on the other hand, were more likely to engage in weight gain attempts. Boys and girls were equally unhappy about their body shape where 59.4% of girls and 56% of boys expressed their desire to lose weight. These figures support our findings where 33.6% of female and 45.2% of male adolescents revealed dissatisfaction with their image and desire to lose weight.

 Absence of information about strengths and weaknesses of the current SHP, and time constraints regarding data collection considering that student’ official exams were scheduled in mid May 2012 were among study limitations, together with biases inherent in self-report methodology. Reported data is all cross-sectional; therefore, no conclusions regarding the direction of causality can be drawn. Moreover, generalizations cannot be made to youth in other settings such as technical schools or school drop outs considering that these populations may have higher levels of risk behaviors.

**Conclusion**

 There is a need to study education and health trajectories and the degree to which they intertwine, and influence each other and the life of individual students through different stages of development. Evidence gathered from this study revealed poor investment at all levels for implementation, sustainability, and evaluation of this comprehensive school initiative. Added is the absence of follow up and process evaluation rendering health education, services and activities within all schools dependent to a great extent on intuition and individual initiatives. Such initiatives cannot have long term longevity as they cannot be duplicated, reproduced, or tailored to needs of specific adolescent groups and communities. Thus, national policies and guidelines should be developed and reinforced to transcend circumstantial obstacles and render the HPS model applicable for different schools and communities.

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**Appendix A**

**2011 MIDDLE SCHOOL**

**YOUTH RISK BEHAVIOR SURVEY**

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

***Thank you very much for your help.***

DIRECTIONS

**Use a #2 pencil only.**

• **Make dark marks.**

• **Fill in a response like this: A B C D**

• **If you change your answer, erase your old answer completely.**

1. How old are you?

A. 10 years old or younger

B. 11 years old

C. 12 years old

D. 13 years old

E. 14 years old

F. 15 years old

G. 16 years old or older

2. What is your sex?

A. Female

B. Male

3. In what grade are you?

A. 6th grade

B. 7th grade

C. 8th grade

D. Ungraded or other grade

4. Are you Hispanic or Latino?

A. Yes

B. No

5. What is your race? **(Select one or more responses.)**

A. American Indian or Alaska Native

B. Asian

C. Black or African American

D. Native Hawaiian or Other Pacific Islander

E. White

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**The next 4 questions ask about safety.**

6. **When you ride a bicycle,** how often do you wear a helmet?

A. I do not ride a bicycle

B. Never wear a helmet

C. Rarely wear a helmet

D. Sometimes wear a helmet

E. Most of the time wear a helmet

F. Always wear a helmet

7. **When you rollerblade or ride a skateboard**, how often do you wear a helmet?

A. I do not rollerblade or ride a skateboard

B. Never wear a helmet

C. Rarely wear a helmet

D. Sometimes wear a helmet

E. Most of the time wear a helmet

F. Always wear a helmet

8. How often do you wear a seat belt when **riding** in a car?

A. Never

B. Rarely

C. Sometimes

D. Most of the time

E. Always

9. Have you ever ridden in a car driven by someone who had been drinking alcohol?

A. Yes

B. No

C. Not sure

**The next 3 questions ask about violence-related behaviors.**

10. Have you ever carried **a weapon**, such as a gun, knife, or club?

A. Yes

B. No

11. Have you ever been in a physical fight?

A. Yes

B. No

12. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?

A. Yes

B. No

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**The next 2 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.**

13. Have you ever been bullied **on school property**?

A. Yes

B. No

14. Have you ever been **electronically** bullied? (Include being bullied through e-mail, chat rooms, instant messaging, Web sites, or texting.)

A. Yes

B. No

**The next 3 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.**

15. Have you ever **seriously** thought about killing yourself?

A. Yes

B. No

16. Have you ever made a **plan** about how you would kill yourself?

A. Yes

B. No

17. Have you ever **tried** to kill yourself?

A. Yes

B. No

**The next 8 questions ask about tobacco use.**

18. Have you ever tried cigarette smoking, even one or two puffs?

A. Yes

B. No

19. How old were you when you smoked a whole cigarette for the first time?

A. I have never smoked a whole cigarette

B. 8 years old or younger

C. 9 years old

D. 10 years old

E. 11 years old

F. 12 years old

G. 13 years old or older

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20. 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

21. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?

A. I did not smoke cigarettes during the past 30 days

B. Less than 1 cigarette per day

C. 1 cigarette per day

D. 2 to 5 cigarettes per day

E. 6 to 10 cigarettes per day

F. 11 to 20 cigarettes per day

G. More than 20 cigarettes per day

22. During the past 30 days, how did you **usually** get your own cigarettes? (Select only **one** response.)

A. I did not smoke cigarettes during the past 30 days

B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station

C. I bought them from a vending machine

D. I gave someone else money to buy them for me

E. I borrowed (or bummed) them from someone else

F. A person 18 years old or older gave them to me

 G. I took them from a store or family member

H. I got them some other way

23. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

A. Yes

B. No

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24. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip,** such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

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, on how many days did you smoke **cigars, cigarillos, or little cigars**?

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

**The next 2 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.**

26. Have you ever had a drink of alcohol, other than a few sips?

A. Yes

B. No

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

A. I have never had a drink of alcohol other than a few sips

B. 8 years old or younger

C. 9 years old

D. 10 years old

E. 11 years old

F. 12 years old

G. 13 years old or older

**The next 2 questions ask about marijuana use. Marijuana also is called grass or pot.**

28. Have you ever used marijuana?

A. Yes

B. No

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29. How old were you when you tried marijuana for the first time?

A. I have never tried marijuana

B. 8 years old or younger

C. 9 years old

D. 10 years old

E. 11 years old

F. 12 years old

G. 13 years old or older

**The next 4 questions ask about other drugs.**

30. Have you ever used **any** form of cocaine, including powder, crack, or freebase?

A. Yes

B. No

31. Have you ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high?

A. Yes

B. No

32. Have you ever taken **steroid pills or shots** without a doctor's prescription?

A. Yes

B. No

33. Have you ever taken a **prescription drug** (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?

A. Yes

B. No

**The next 4 questions ask about sexual intercourse.**

34. Have you ever had sexual intercourse?

A. Yes

B. No

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

A. I have never had sexual intercourse

B. 8 years old or younger

C. 9 years old

D. 10 years old

E. 11 years old

F. 12 years old

G. 13 years old or older

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36. With how many people have you ever had sexual intercourse?

A. I have never had sexual intercourse

B. 1 person

C. 2 people

D. 3 people

E. 4 people

F. 5 people

G. 6 or more people

37. The **last time** you had sexual intercourse, did you or your partner use a condom?

A. I have never had sexual intercourse

B. Yes

C. No

**The next 5 questions ask about body weight.**

38. How do **you** describe your weight?

A. Very underweight

B. Slightly underweight

C. About the right weight

D. Slightly overweight

E. Very overweight

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

A. **Lose** weight

B. **Gain** weight

C. **Stay** the same weight

D. I am **not trying to do anything** about my weight

40. Have you ever **gone without eating for 24 hours or more** (also called fasting) to lose weight or to keep from gaining weight?

A. Yes

B. No

41. Have you ever **taken any diet pills, powders, or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do **not** include meal replacement products such as Slim Fast.)

A. Yes

B. No

42. Have you ever **vomited or taken laxatives** to lose weight or to keep from gaining weight?

A. Yes

B. No

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**The next 5 questions ask about physical activity.**

43. 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 that increased your heart rate and made you breathe hard some of the time.)

**A. 0 days**

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

G. 6 days

H. 7 days

44. On an average school day, how many hours do you watch TV?

 A. I do not watch TV on an average school day

 B. Less than 1 hour per day

C. 1 hour per day

D. 2 hours per day

E. 3 hours per day

F. 4 hours per day

G. 5 or more hours per day

45. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Xbox, PlayStation, Nintendo DS, iPod touch, Facebook, and the Internet.)

 A. I do not play video or computer games or use a computer for something that is not

 school work

 B. Less than 1 hour per day

C. 1 hour per day

D. 2 hours per day

E. 3 hours per day

F. 4 hours per day

G. 5 or more hours per day

46. In an average week when you are in school, on how many days do you go to physical education (PE) classes?

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

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47. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)

A. 0 teams

B. 1 team

C. 2 teams

D. 3 or more teams

**The next 3 questions ask about other health-related topics.**

48. Have you ever been taught about AIDS or HIV infection in school?

A. Yes

B. No

C. Not sure

49. Has a doctor or nurse ever told you that you have asthma?

A. Yes

B. No

C. Not sure

50. Do you still have asthma?

A. I have never had asthma

B. Yes

C. No

 D. Not sure

**This is the end of the survey.**

**Thank you very much for your help**

**Healthy Appearances in Lebanese Schools – 2011**

**Youth Risk Behavior Survey**

**DIRECTIONS**

* **Circle the correct answer**
* **USE a pencil only.**
* **If you change your answer, erase your previous answer completely.**
1. **How old are you?**
2. 10 years old or younger
3. 11 years old
4. 12 years old
5. 13 years old
6. 14 years old
7. 15 years old or older
8. **What is your Sex?**
9. Female
10. Male
11. **In what grade are you?**
12. 6th grade
13. 7th grade
14. 8th grade
15. 9th grade
16. **How tall are you without your shoes?**

-------- m -------- cm

1. **How much do you weigh without your shoes?**

-------- kg -------- gm

**The next questions ask about safety.**

1. **When you ride a bicycle, how often do you wear a helmet?**
2. I do not ride a bicycle
3. Never wear a helmet
4. Rarely wear a helmet
5. Sometimes wear a helmet
6. Most of the time wear a helmet
7. Always wear a helmet
8. **When you use a rollerblade or ride a skateboard, how often do you wear a helmet?**
9. I do not rollerblade or ride a skateboard
10. Never wear a helmet
11. Rarely wear a helmet
12. Most of the time wear a helmet
13. Always wear a helmet
14. **How often do you wear a seat belt when riding in a car?**
15. Never
16. Rarely
17. Sometimes
18. Most of the time
19. Always
20. **Have you ever ridden in a car driven by someone who had been drinking alcohol?**
21. None
22. Once
23. 2 or 3 times
24. 4 or 5 times
25. 6 or more times

**The next questions ask about violence-related behavior.**

1. **Have you ever carried a weapon, such a gun, knife, or club?**
2. Yes
3. No
4. **Have you ever been in a physical fight?**
5. Yes
6. No
7. **Have you ever been in a physical fight where you were hurt and had to be treated by a doctor or nurse?**
8. Yes
9. No

**The next questions ask about bullying. Bullying is when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not considered bullying when two students of the same strength argue or fight or tease one another in a friendly way.**

1. **Have you ever been bullied on school campus?**
2. Yes
3. No
4. **Have you ever been electronically bullied? (Include being bullied through e-mail, text messaging, Web sites, etc…)**
5. Yes
6. No

**The next questions ask about suicide. Sometimes people feel depressed about the future that they may consider attempting suicide or do something to end their lives.**

1. **Have you ever seriously thought about killing yourself?**
2. Yes
3. No
4. **Have you ever put a plan about how you would kill yourself?**
5. Yes
6. No
7. **Have you ever tried to actually kill yourself?**
8. Yes
9. No

**The next questions ask about tobacco use, alcohol and other drug use.**

1. **Have you ever tried cigarette smoking, even one or two puffs?**
2. Yes
3. No
4. **How old were you when you smoked a whole cigarette for the first time?**
5. I have never smoked a whole cigarette
6. 8 years old or younger
7. 9 years old
8. 10 years old
9. 11 years old
10. 12 years old
11. 13 years old or older
12. **During the past 30 days, on how many days did you smoke cigarettes?**
13. 0 days
14. 1 or 2 days
15. 3 to 5 days
16. 6 to 9 days
17. 10 to 19 days
18. 20 to 29 days
19. All 30 days
20. **During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?**
21. I did not smoke cigarettes during the past 30 days
22. Less than 1 cigarette per day
23. 1 cigarette per day
24. 2 to 5 cigarettes per day
25. 6 to 10 cigarettes per day
26. 11 to 20 cigarettes per day
27. More than 20 cigarettes per day
28. **During the past 30 days, how did you usually get your cigarettes? (Select only one response.)**
29. I did not smoke cigarettes during the past 30 days
30. I bought them from a convenience store, supermarket, shop or gas station.
31. I bought them from a vending machine
32. I gave someone else money to buy them for me
33. I borrowed or took them from someone else
34. A person 18 years old or older gave them to me
35. I took them from a family member
36. I got them some other way
37. **Have you ever smoked cigarettes daily, that is, at least one cigarette everyday for 30 days?**
38. Yes
39. No
40. **During the past 30 days, on how many days did you use chewing tobacco or snuffs?**
41. 0 days
42. 1 or 2 days
43. 3 to 5 days
44. 6 to 9 days
45. 10 to 19 days
46. 20 to 29 days
47. All 30 days
48. **During the past 30 days, on how many days did you smoke cigars, cigarellos, little cigars, or Arguile?**
49. 0 days
50. 1 or 2 days
51. 3 to 5 days
52. 6 to 9 days
53. 10 to 19 days
54. 20 to 29 days
55. All 30 days
56. **Have you ever had a drink of alcohol, other than a few sips?**
57. Yes
58. No
59. **How old were you when you had your first drink of alcohol other than a few sips?**
60. I have never had a drink of alcohol other than a few sips
61. 8 years old or younger
62. 9 years old
63. 10 years old
64. 11 years old
65. 12 years old
66. 13 years old or older
67. **Have you ever used marijuana?**
68. Yes
69. No
70. **Have you ever used any form of cocaine?**
71. Yes
72. No

1. **Have you ever sniffed glue, inhaled the contents of spray cans, or any paints?**
2. Yes
3. No
4. **During the current school year, did you receive instruction regarding the dangers of smoking, drinking alcohol or using drugs?**
5. Yes
6. No

**The next questions ask about body weight.**

1. **How do you describe your weight?**
2. Very underweight
3. Slightly underweight
4. About the right weight
5. Slightly overweight
6. Very overweight
7. **Which of the following are you trying to do about your weight?**
8. Loseweight
9. Gainweight
10. Stay the same weight
11. I am not trying to do anything about my weight
12. **Have you ever gone without eating for 24 hours or more (fasting) to lose weight or to keep from gaining weight?**
13. Yes
14. No
15. **Have you ever taken any diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)**
16. Yes
17. No
18. **Have you ever vomited or taken laxatives to lose weight or to keep from gaining weight?**
19. Yes
20. No

**The next questions ask about physical activity.**

1. **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 that increased your heart rate and made you breathe hard some of the time.)**
2. 0 days
3. 1 day
4. 2 days
5. 3 days
6. 4 days
7. 5 days
8. 6 days
9. 7 days
10. **On a regular school day, how many hours do you watch TV?**
11. I do not watch TV on an average school day
12. Less than 1 hour per day
13. 1 hour per day
14. 2 hours per day
15. 3 hours per day
16. 4 hours per day
17. 5 or more hours per day
18. **On a regular school day, how many hours do you play video or computer games or use a computer for something that is not for school work? (Include activities such as Xbox, PlayStation, Nintendo, iPod, Facebook and the Internet.)**
19. I do not play video or computer games or use a computer for something that is not school work
20. Less than 1 hour per day
21. 1 hour per day
22. 2 hours per day
23. 3 hours per day
24. 4 hours per day
25. 5 or more hours per day
26. **In an average week when you are in school, on how many days do you go to physical education classes (PE)?**
27. 0 days
28. 2 days
29. 3 days
30. 4 days
31. 5 days
32. **During the past 12 months, on how many sports teams did you play? (Count any school teams, or community or neighborhood teams.)**
33. 0 teams
34. 1 team
35. 2 teams
36. 3 or more teams
37. **Have you ever taken steroid pills or injections without a doctor’s proscription for the purpose of enhancing body shape?**
38. Yes
39. No
40. **Have you ever taken tranquilizers or enhancer drugs without a doctor’s prescription to improve your physical performance?**
41. Yes
42. No

**The next questions ask about other health – related topics.**

1. **Have you ever been taught about AIDS or HIV infection in school?**
2. Yes
3. No
4. Not sure
5. **During the current school year, did you receive education or instruction material concerning AIDS or HIV prevention?**
6. Yes
7. No
8. **Has a doctor or nurse ever told you that you have asthma?**
9. Yes
10. No
11. Not sure
12. **Do you still have asthma?**
13. I have never had asthma
14. Yes
15. No
16. Not sure

**This is the end of the survey.**

**Thank you very much for your cooperation.**