IMPLEMENTATION AND EVALUATION OF SCHOOL-BASED ANTI-SMOKING HEALTH EDUCATION PROGRAM: GRANT PROPOSAL

Master of Public Health Thesis Project Utilizing Community Service Grant Proposal Framework

Anush G. Gevorgyan, BS MPH Candidate

College of Health Sciences American University of Armenia

Primary Advisor: *Grace B. Sullivan*, PhD, APRN, Bc PNP Secondary Advisor: *Varduhi Petrosyan*, MS, PhD Candidate

Yerevan, Armenia October 2003

Executive Summary

In Armenia on the main causes of life-threatening disease is smoking: in 1985 smoking was responsible for 10% of all death, and in 1995 this number increased to 16%. According to the 1994 study, more than 90% of boys and 51% of girls started smoking before the age of 16; the majority of them first tried smoking at the ages of 10 to 12.

This project is a Grant Proposal for the Implementation and Evaluation of a School-Based Antismoking Education Program. The main goal of the program is smoking prevention in school-age children to be accomplished by increasing knowledge about the adverse effects of smoking, and changing attitude toward smoking and smoking behavior.

The target population for this program will be children of school grades 6-8th (13-15 years of age) where similar educational programs have been shown to be most effective. The schools for the implementation of the program will be chosen from Yerevan. The curriculum education program is designed for 4 classes. Educational materials are developed using existing modules in Armenian and some modules used in other countries. Schoolteachers will be trained as health educators to lead the anti-smoking classes.

The antismoking education program will be conducted in 4 schools, among 300 students of 6th, 7th, and 8th grades (intervention group). From the same schools, as well as from 2 schools where the program will not be conducted 450 students will be chosen as controls. A quazi-experimental non-equivalent control group design will be applied for program evaluation. As an instrument for assessing variables of interest a special self-administered anonymous Smoking Information Questionnaire will be used.

If the program is successful, a proposal will be made to the Ministry of Health and Ministry of Education to adopt the anti-smoking program in the state school curriculum.

Table of contents

EXECUTIVE SUMMARY	II
TABLE OF CONTENTS	
1. INTRODUCTION	1
1.1. Literature Review/Background Information	1
1.2. Description of the Proposed Project	4
2. METHODOLOGY	5
2.1. Conceptual Framework	5
2.2. Implementation Plan Synopsis.2.2.1. Program.2.2.2. Personnel.2.2.3. Education Materials.	6 7
 2.3. Evaluation Plan Synopsis 2.3.1. Sampling Scheme 2.3.2. Evaluation Study Design 2.3.3. Sample Size Considerations 2.3.4. Variables/Measurements/Analysis 2.3.5. Questionnaire 	
3. VALIDATION OF THE INSTRUMENT AND THE CURRICULU	JM13
4. ETHICAL ISSUES CONSIDERATION	14
4.1. Human Subject	14
4.2. Community Support	
5. TIME FRAMEWORK	16
6. BUDGET	16
7. REFERENCES	
Appendix 5	53

Acknowledgements

I would like to express my gratitude to my primary advisor, Dr. Grace Sullivan, for being always helpful, encouraging and supporting me in all my initiatives in preparing this proposal.

I am extremely thankful to my secondary advisor Varduhi Petrosyan for the timely comments and suggestions, for her readiness to support and for the time devoted to my project.

I would like to express my gratitude to Dr. Michael Thompson for being always responsive, and for the technical support and valuable advice provided to me.

I also would like to thank the administration and teachers of school N83 for assisting me in the pretest of the project.

Finally, I am thankful to my friends and my family for understanding and being always supportive.

1. Introduction

1.1. <u>Literature Review/Background Information</u>

"The convention of the rights of the Child, our moral obligations, and plain, nationaleconomic logic, all commits us to do our utmost to prevent millions of children and young adults becoming victims of the tobacco epidemic"

Gro Harlem Brundtlund, Director General, World Health Organization (WHO, 2001).

According to the World Health Organization (WHO) tobacco is responsible for the premature death of around 4 million people each year. This number is increasing. Today's children are at risk to become future victims of tobacco: "If current trends continue, 250 million children alive today will be killed by tobacco." At the same time, "there is no cause of premature death more preventable than the use of tobacco" declared Carol Bellamy, UNICEF Executive Director (1).

In Armenia one of the main causes of life-threatening diseases is smoking (2). It was found that in Armenia in 1985 smoking was responsible for 10% of all death, and in 1995 this number increased to 16%. The number of deaths due to tobacco continues to increase in Armenia as well as all over the world (3).

According to the WHO no precise data are available on smoking prevalence among adults in Armenia (3). Existing data suggest that "smoking is about 50% or greater among males, low among middle-aged women, and starting to increase among young women" (3). According to the 1994 study, more than 90% of boys and 51% of girls started smoking before the age of 16; the majority of them first tried smoking at the ages of 10 to12 (3).

Another harmful aspect of smoking is passive smoking or involuntary smoking. In Armenia, although 87% of population knows that smoking is dangerous for the health of smokers, only 0.8% is aware about passive smoking (4).

The statistical data about smoking in Armenia lead to a conclusion that there is an urgent need for a comprehensive antismoking campaign. As a first step, the issues in the struggle against smoking will be included in the program of healthy lifestyle promotion.

Tobacco control measures according to the WHO include smoking cessation programs, special community intervention programs, educational programs, and smoking prevention programs. Smoking prevention programs are more effective if they target people early in life (3). The 1993 World Bank Development Report identified school health programs as key cost-effective health interventions (3). Different countries have already started implementation of these kinds of programs (5). Positive results have been achieved in several countries, including the United States. From 1970 to 1992, overall consumption of cigarettes in the United States decreased by 31,5%; the number of cigarettes smoked per day has also decreased (3). The factors related to the decline were antismoking TV commercials, banning advertisement, prohibiting smoking in public and private facilities, warning on packages, and educative measures (5).

All over the world tobacco companies spend billions of dollars a year for promoting their "deadly product" using images that create a positive attitude among children and adolescents toward smoking. According to the UN Convention on the Rights of the Child adopted in November 1989, States are obligated to provide children with information from a diversity of sources, "especially those aimed at the promotion of his or her social, spiritual and moral wellbeing and physical and mental health". Children should be provided with information about "immediate and long-term health effects of tobacco use, the addictiveness of the product, the

way the tobacco industry targets young people and the manner in which tobacco industry is misleading "(1).

Many governments have established successful programs using the mass media to provide strong messages designed to counter the image promoted by cigarette companies of tobacco use as sexy, glamorous and normal. Equally important are school-based and community-based programs to teach children about the dangers of tobacco use and to teach them the skills they need to resist tobacco marketing efforts and peer pressure (6).

"Of the world's 6 billion people, about one billion are enrolled in schools. Eighty percent of the developing world's children now enroll in school and 60% complete at least 4 years.

There are more than five times as many teachers in the developing world as there are health workers, and these teachers often have regular and long-term contact with pupils. Thus, the formal education system is an important channel for disseminating information" (7).

The School Health Education Evaluation reviewed four different health curricula for 30,000 children from 4th through 7th grades in 20 states of the United States. This evaluation revealed that students receiving health instruction had higher knowledge scores than students with no health instruction, with the greatest differences seen in knowledge of substance use and abuse. Knowledge, attitudes, and skills improved even with minimal instruction, but gains were most apparent when students received at least 50 hours of health instruction per school year. More hours were needed to improve attitudes than to enhance health knowledge and practices (6).

Armenia has started implementation of some antismoking programs. According to the WHO, health authorities have identified legislation and health education as the main means of antismoking programs. The Institute of Public Health is the key organization working toward tobacco control in Armenia. The Department of Public Health of the American University of

Armenia and the Scientific Association of Medical Students of Armenia are also actively involved in tobacco control. The World No-Tobacco Day is celebrated in Armenia (3). However currently there is no systematic healthy lifestyle education in the school curriculum. Studies have shown that Armenian adolescents' primary sources of health information are press and mass media (2).

1.2. <u>Description of the Proposed Project</u>

This project is a Grant Proposal for the Implementation and Evaluation of a School-Based Antismoking Education Program. The main goal of the program is smoking prevention in school-age children by increasing their knowledge about the adverse effects of smoking, changing attitude toward smoking and smoking behavior. These goals will be accomplished through several antismoking classes conducted in school settings. Another goal of the program is to evaluate the effectiveness of anti-smoking health education in school-settings. If the program is shown to be effective, it could be used as a source for implementation of a national school-based antismoking health education program. The basic assumption used in the program is that there is a perception among Armenian adolescents that most teens and adults smoke, and smoking is an acceptable behavior that doesn't harm health. Thus, the program aims to change perception that smoking is normative.

Specific measurable objectives are set based on previous experience. They are the following:

• At the end of the program the knowledge score of participants will be increased by 50% compared to the baseline data; and the post-test data after 1 year will be 30% higher compared to the baseline data.

- At the end of the program the attitude score of participants will be increased by 30% compared to the baseline data; and the post-test data after 1 year will be 20% higher compared to the baseline data.
- One year after the implementation of the program, the behavior score of participants will be increased by 30% compared to the baseline data.
- One year after the implementation of the program, the number of smokers in the intervention group will be 10% lower than among controls.

The interested non-governmental/non-profit organization, or an individual may implement the program. The funding for the program could be obtained from international or local organizations and agencies.

2. Methodology

2.1. Conceptual Framework

The basic assumption for the project implemented is that increasing knowledge concerning substance use leads to a change in attitude toward unhealthy habits, such as smoking, alcohol and drug use, and consequently leads to a change in behavior (8, 9). Thus, through education it is possible to reduce substance use. An important assumption is that health education is particularly effective and sustainable among adolescents, since they are more open to the knowledge introduced and more likely to demonstrate change in attitude and behavior (8).

2.2. Implementation Plan Synopsis

2.2.1. Program

The target population for this program will be children of school grades 6-8th (mostly 13-15 years of age) where similar educational programs have been shown to be most effective (6). The schools for the implementation of the program will be chosen from Yerevan.

According to the WHO smoking prevention through education may be most effective when integrated into comprehensive, systematic and organized health education program (7). So the option of integration would be the most preferable. However, based on the fact that currently there are no regular health education classes in the schools curriculum in Armenia and taking into account limited financial resources it will be more feasible to conduct the program separately and devote it only to smoking prevention. As the literature shows, the main concern among substance-use prevention issues for school-age children is smoking prevention. The option of including modules devoted to hygiene, alcohol and drug use were considered for inclusion in the program. However, these topics are not included because of several reasons. In personal contacts with schoolteachers and administration it was found that the schedules in the schools are not flexible, the schedules of students at 6-7th grades are overloaded with classes. Thus, it is not possible to have additional classes on smoking prevention. A one-month time frame for the program with 4-5 classes seems to be the most feasible option. During this time the school administration and teachers will be ready to assist with scheduling the classes and to give other technical support. The time period of 4-5 classes could be effectively used by concentrating on the anti-smoking education only.

2.2.2. Personnel

During program implementation core personnel will consist of health educators.

Certified health educators will be eligible for that position. In addition to that, schoolteachers, nurses, psychologists, or specialists in relevant fields may be recruited for the position of health educator. A training course will be provided to the personnel. The training will be conducted by a qualified specialist in the field of health education. Besides educators, personnel will include program manager, program coordinator and other supporting personnel according to the needs of the program.

It can be noted that recruitment of schoolteachers would be especially effective. Training of teachers probably will be more effective considering their experience. An important aspect is that schoolteachers are familiar with children at their schools, and don't need to change their work environment to perform the job. Having trained teachers will help to provide continuity of the antismoking education at the schools. Thus, the most favorable option will be teachers, one from each school, to be trained for the position.

2.2.3. Education Materials

Educational materials include a student package and a curriculum guide for educators. Educational materials are developed using existing modules in Armenian and some modules used in other countries. These modules consist of the following steps: concentration of immediate psychological and biochemical consequences of smoking, discussion of media influences on smoking, and role-playing (10, 11, 12, 13). Particularly, a booklet "Read me" by Anahit Ghazanchyan, a guide "Be Healthy" by Karine Markosyan, "Guide for Health Educators" developed by the United Methodists Committee on Relief (UMCOR) were used for developing a curriculum of Anti-smoking Health Education Program (ASHEP) (4, 14, 15) (Appendix 1).

The curriculum of the ASHEP is designed for 4 classes. The duration of each class is 40 minute without a brake. Student package will include lecture notes, homework assignments, an antismoking booklet, colored pencils and markers, an eraser, and a notebook. Educators besides curriculum guide will be given education materials, colored papers, pencils, pens, notebooks, poster-papers, and prizes to use in different in-class activities according to the curriculum.

2.3. Evaluation Plan Synopsis

2.3.1. Sampling Scheme

A list of schools for the implementation of the program will be chosen by random selection from the area of Yerevan. Random selection of schools increases external validity of the results. However, readiness of school administration to cooperate will be prioritized, as it is an important factor for the successful implementation of the program. Thus, it is decided from the list of schools created by random selection eliminate the schools where the administration doesn't agree to fully cooperate. Another criterion in school selection will be their location. The desired goal in selection is to have schools located in different districts of Yerevan, in order to have higher representativeness and increase external validity. The sample drawn from the list of schools will consist of 6 schools. Classes will be chosen by the following scheme: in each school two 6th, two 7th and two 8th grade classes will be chosen by random selection.

It is planned to conduct the education program in 4 schools. In each school three classes will be chosen as an intervention groups and three as control groups from 6, 7 and 8 grades. In addition, 6 classes will be chosen as control groups from 2 schools where the program will not be conducted. These groups will control for the effect of peer-to-peer dissemination of knowledge, which is possible in schools where the program will be conducted. Overall, the program will

cover 12 intervention and 18 control groups. In average each class consist of 25 students. Thus overall the intervention groups will cover about 300 students (25*12=300), and the controls 450 (see Table 1). It is estimated, based on experts opinions and schools records, that the program participation will be at least 90%, thus at least 270 students will participate in the program; attrition rate up to1 year follow-up will be about 5%, thus at least 255 students will participate in follow-up survey.

2.3.2. Evaluation Study Design

Evaluation of the program will be an important component. The evaluation will consist of preliminary evaluation, impact evaluation and outcome evaluation. In preliminary evaluation the baseline data of knowledge, attitude and behavior of the children will be gathered. The follow-up data collection will be done three months and one year after the implementation. The collection of these data will be accomplished using questionnaires. The comparison analysis of these data will make it possible to evaluate the effectiveness, acceptability, and sustainability of the program. The evaluation will be done based on the measurable objectives stated in the "Description of proposed project" section.

A quasi-experimental non-equivalent control design (Panel Design) will be applied for the proposed evaluation. According to this design, the baseline data will be compared with post-intervention data collected right after the implementation, 3 months and one year after the implementation in both control and intervention groups. The important condition here is that pre-test and post-test surveys will be conducted with the same people in both control and intervention groups.

Intervention group	O	\mathbf{X}	\mathbf{O}_1	O_2	O_3
Control group A	\mathbf{O}		O_1	O_2	O_3
Control group B	O		\mathbf{O}_1	O_2	O_3

Intervention group- all students who participated in the intervention.

Control group A- students of control groups from schools where intervention is conducted.

Control group B- students of control groups from schools where intervention is not conducted.

O- baseline data collection

X - intervention

O₁- data collection right after the intervention

O₂- 3 months post-intervention data collection

 O_3 -1 year post-intervention data collection

The quasi-experimental non-equivalent control design usually provides good internal validity. The limitation is that participants are not randomly assigned to the intervention and control groups; however having even a non-equivalent control group increases internal validity. Effectiveness of control in this design depends on similarity of the recruitment procedure, and can be further be ensured by comparison of baseline data between control and intervention groups. Another limitation may be an interaction of selection and maturation; one group may have a higher rate of maturation than the other. Interaction of testing and intervention also is a possible limitation. It is likely that the person's attitude and acceptability to persuasion may be changed by the pretest data collection. The program may have low generalizability, as it will be conducted in a few schools that may differ demographically from other Armenian schools. Among threats to external validity may be a reactive effect of pre- and post-intervention data collections and other experimental arrangements. The most prominent source of unrepresentativeness in the case of this study design may be unusual setting for participants, or their knowledge of participating in the experiment. To avoid this limitation it is recommended to conduct a study in a usual classroom setting, by school teachers, and do not provide students with information about their participation in the study. This program will be conducted in a usual classroom, during usual class time, by schoolteachers, however the students will be provided some information about their participation in the study (16).

2.3.3. <u>Sample Size Considerations</u>

Due to logistical constraints the program will cover 300 students in intervention groups and 450 in control groups. However, this number will provide enough power (80%) to detect a difference of 10% in behavior, which is the least difference that has to be seen according to the measurable objectives. The sample size for both intervention and control groups has to be at least 224, if the baseline prevalence of smoking among children aged 13-15 in Armenia is 40% (3), the least expected difference is 10%, and α is 0.05, β is 0.80.

$$N = (z_{\alpha/2} * \sqrt{pq} + z_{\beta} * \sqrt{p_1q_1} + p_2q_2)^2/\Delta^2 = 224$$

2.3.4. Variables/Measurements/Analysis

The intervention itself will be used as an independent variable. The smoking practice will be used as a main dependent variable. The knowledge and attitude scores will be used as other dependent variables. Among intervening variables are gender, age, parents' smoking status, and amount of pocket money.

For statistical analysis a Paired T Test will be used. This test will be applied for comparison of mean aggregate scores within groups before and after implementation. An independent t-test will be used to compare control group with the intervention group. For dataentry and analysis SPSS software will be used.

2.3.5. Questionnaire

For evaluating the effectiveness of the education program a special Smoking Information Questionnaire (SIQ) will be used for pre and post-test measurements (Appendix 2).

The SIQ, which will be used to evaluate this program, is developed using core questions of the Global Youth Tobacco Survey (GYTS) 2001 (17). Several questions from the GYTS

questionnaire are not included in SIQ, as they are not relevant to Armenia and/or are not of research interest for this program. Most questions on knowledge and attitude are given in a format of close-ended questions with several response options. A table containing statements and providing options of agreement or disagreement also is used. This table contains mostly statements regarding knowledge and some regarding attitude. It includes several questions from GYTS questionnaire transformed to statements, also statements taken from the questionnaire of Household Survey in Yerevan and Vanadzor (18). Some statements are added by the author based on the research interest of this program to test the knowledge of students on particular issues included in the education program. Overall, after pretest and modifications, the SIQ contains 30 questions and 13 statements on knowledge, attitude and behavior, and 3 questions on demographic information about the respondents. The questions are not categorized by topics in the SIQ. It is a self-administered anonymous questionnaire. Using self-administered questionnaire is less time-consuming and gives an opportunity to provide anonymity. No personal identification information will be used in the questionnaire. Each respondent will have his/her own ID number, which will be used for matched comparison of pre- and posttest data. The ID number will consists of 2 numbers. For each participant first number will be created by putting in the provided space his/her own date of birth and his/her mothers (or another family member's) date of birth in the format of mm/dd/yy (e.g. 03 11 95 02 05 65). The content of questionnaires and the consistency of English version with the Armenian were reviewed by several 2nd year MPH students of the AUA. Several changes have been made.

A special version of SIQ for the researcher is developed, which should be used for the analysis of data (Appendix3). This version provides division of questions by topic, as well as indicates the scores for each answer on knowledge, attitude, and behavior questions. A score range from "0" for false/undesired answer to "3" for true/desired answer is used for attitude and

knowledge questions. Questions on behavior are divided into two categories. The aggregate score for the smoking status category questions is calculated using special formula provided in the SIQ for the researcher. The aggregate score for willingness to quit questions is calculated the same way as for attitude and behavior questions. Thus, an aggregate score for each category as well as for all the questions may be calculated. There are questions on demographic information, and other intervening variables that are just informative and do not provide any score.

3. Validation of the Instrument and the Curriculum

Experts reviewed the content of the curriculum and the questionnaire; appropriate changes were made. The (ASHEP) curriculum and SIQ were also pretested in a school setting in one class, for which a written agreement was obtained from the school. The objective of the pretest was to check if the content of questions and curriculum is relevant to the background of the audience, if the time devoted to each designed class was enough, and to make appropriate adjustments. During the last class a focus group discussion was held with those students who agreed to participate. For that reason an oral consent was used (Appendix 4). The questions asked in a focus group were related only to the content of the curriculum. The educator asked children about what they like, what they didn't like, and what they would change. The pretest had no harm for the participants. The burden of each class of the pretest was not more than the burden of usual school classes. The pretest classes were not additive to the regular classes, but were conducted instead of one of the regular classes. The information obtained during the pretest of questionnaires will not be kept and analyzed. For assuring anonymity, no personal identification information or ID number were used. Participants' potential benefit from the

pretest classes was the acquired knowledge that by assumption they had not been provided in their usual classes.

The request to the Ministry of Education and Sciences (MOES) will be sent for approving the revised curriculum of the program. The official letter from the MOES also shall be obtained for notifying the school directors about the objectives and intentions of the project and recommending its implementation.

4. Ethical Issues Consideration

4.1. Human Subject

Program participants are human subjects, children aged from 13 to 15. Thus, all necessary steps have to be made to ensure that the program will not cause any psychological or physical harm to the participants. For that reason the curriculum will be reviewed again by experts, including schoolteachers, psychologists, and health educators. A special training shall be conducted for educators, during which a special attention will be given to the ethical issues, particularly equal respect by educator toward both smokers and non-smokers, encouraging plurality of opinions within the class and freedom in making a decision, and providing the class only with objective and true information. No punishment will be used for not being prepared or for not performing teacher's assignments; however special rewards will be used for an active participation. For pre and post-tests data collection, an oral consent will be used (Appendix 5). The objectives of the self-administered interview will be explained to students, they will have a freedom to participate or not participate in the interview.

When developing SIQ efforts were made to exclude any question that may cause a psychological harm. However, as SIQ contains questions on students' personal information such as smoking behavior, the students will have a right not to answer questions that are sensitive for them. Also, for encouraging true answers, the interview will be anonymous. In general, the students will not be posed to any risk if participate in the program. The burden of each class will not be more than the burden of usual school classes. Moreover, students potentially may benefit increasing their knowledge about healthy behavior and obtaining new skills of in-class work. However, there is an issue of discrimination, as only some classes will participate in the intervention. To resolve this issue it is decided that the students of at least control groups will be provided with student packages and other educational materials after the evaluation of the program.

4.2. Community Support

In personal contacts with school administrations and teachers in several schools of Yerevan it is found that health education classes are perceived positively, and schools are ready to provide technical support. It is also found that many schoolteachers are ready to be trained as health educators and work in the program for the salary adequate to their official salary at schools or higher. The pretest of the curriculum in school N83 also shows that conducting such a program in schools is considered feasible and acceptable by the school administration. However, the option that some schools may not be ready to cooperate was taken into consideration in the sampling scheme. During implementation efforts will be made to get financial or technical support of humanitarian organizations and agencies working in the area of health promotion (booklets, posters, other materials for distribution to schools and to students).

5. Time framework

Year 2003

December. Office and equipment rendering, hiring staff personnel, sharing responsibilities, contacting the MOE and the MOH for obtaining approval of the curriculum and letter of support, selection of schools, intervention and control groups selection.

Year 2004

January. Recruiting schoolteachers and their health education training, schedule planning with school administration, preparing educational materials and questionnaires, buying other stuff for educational classes, preparing student and educator packages.

February – March. Collecting baseline data in intervention and control groups, conducting the classes, collecting post-intervention data (O_1) , creating database, data entry, and data-analysis. May. Collecting post-intervention data (O_2) , data entry, and data analysis.

Year 2005

March. Collecting post-intervention data (O₃), data entry, and data analysis.

April. Writing a report on program implementation and evaluation with recommendations on future actions (see Table 2).

6. Budget

The budget of the proposed project is developed for years 2003, 2004, and 2005 separately. For three years the budget will sum up to US \$9737. It consists of personnel cost, operating cost, and project material cost.

For calculating personnel cost the consultations with project managers in the area of health promotion in Armenia, as well as schoolteachers were conducted. The differences between salaries depend on the number of hours required to fulfill the duties of each position. The salary/year was calculated depending on the number of months worked per year.

In calculating the operating cost the market prices were considered. The total operating cost may be lower than calculated depending on availability of office and equipment for implementing organization.

The project materials cost was calculated considering the number of each item needed for the implementation of program and its price. The number of questionnaires provided is required to conduct a data collection in control and intervention groups 4 times according to the evaluation design. The number of student packages is calculated based on the number of students in the intervention group. The cost for student package includes cost of lectures notes, as well as colored pencils and markers, and an anti-smoking booklet. Five educator packages are for the 4 educators and a trainer. Each package will include all the materials for conducting inclass activities (education materials, colored papers, pencils, pens, note-books, poster-papers, prizes). The additional education materials (anti-smoking booklets) are in the number of 500 to be distributed among students of control groups after the evaluation of the program. The cost for project materials may be lower depending on the community support available (some materials may be provided for free by humanitarian organizations or individuals) (see Table 3).

7. References

- 1. WHO, Tobacco & the rights of the child. 2001
- Markosyan K. Substance uses prevention school health project: Development, implementation and evaluation. Yerevan: AUA; 2000
- 3. Tobacco or Health: A Global Status Report. [online] (cited 2002 August 3). Available from URL: http://www.cdc.gov/tobacco/who/usa.htm
- Ghazanchyan A. Read me: Antismoking booklet for family reading. Yerevan: UMCOR;
 1997
- WHO, Educational Programs to Prevent and Reduce Tobacco Use. [online] [cited 2002
 August 5]. Available from: URL: http://
 www.who.int/archives/ntday/ntday98/ad98e8.htm
- Last JM, Wallace RB. Public health&Preventive medicine. Norwalk: Appleton&Lange;
 1992
- School-Based Tobacco Use Prevention Programs. MMWR Highlights. August 10, 2001;
 50(31)
- 8. Green WG, Kreuter WM. Health promotion planning: An educational and environmental approach. Mountain View: Mayfield Publishing Company; 1991
- 9. Langlois AM, Petosa R, Hallam JS. Why do effective smoking prevention programs work? Student changes in social cognitive constructs. Journal of School Health.

 October, 1999; 69(8): 326-38
- Mahoney MC, Costley MC, Cain J. School nurses as advocates for youth tobacco education programs: The TAR WARS experience. Journal of School Health, October, 1998; 68(8): 339-42

- 11. WHO, Changing the Environment to Help Kids Grow up Tobacco-Free. [online] [cited 2002 August 5]. Available from: URL: http://www.who.int/archives/ntday/ntday98/ad98e_12.htm
- 12. Langlois AM, Petosa R, Hallam JS. Why do effective smoking prevention programs work? Student changes in social cognitive constructs. Journal of School Health. October, 1999; 69(8): 326-38
- 13. Cassel RN, Blackwell J. Positive assertiveness begins with character education and includes the abuse of cigarettes, alcohol, and drugs. Journal of Instructional Psychology. June, 2002; 29(2): 77-80
- 14. Markosyan K. Be healthy: Substance use prevention school health project. Yerevan: AUA; 2000 (in Armenian).
- 15. Guide for health Educators. Yerevan: UMCOR, 1999
- Campbell D.T., Stanley C.J., Experimental and Quasi-experimental Designs for Research. Houghton Mifflin Company, 1963; p7-24
- 17. Global Youth Tobacco Survey. [online] [cited 2003 August 2] Available from:URL: http://www.cdc.gov/tobacco/global/GYTS.htm
- Baseline Household Survey in Yerevan and Vanadzor- September 2002. Yerevan:
 AUA, 2003

Table 1: Sampling Scheme

	No. of	No. of classes	Total No. of	No of students	Total No.
	scholls	in each school	classes	in each class	of students
Intervention group	4	3	12	25**	300
Control group	(4+2)*6	3	18	25	450

^{*}Control and intervention groups will be selected from the same 4 schools, and from 2 schools only controls will be selected.

^{**}In average there are 25 students in usual classes of Yerevan schools.

Table 2: Time Framework

Year Month	Office and equipment rendering	Hiring staff	Contacting MOH and MOE	Schools and groups selection, scheduling	Training of health educators	Preparing educational materials, questionnaires and other stuff	Data collection, entry, analysis	Education classes	Writing a report
Year 2003									
December	X	X	X	X					
Year 2004									
January		X			X	X			
February							X	X	
March							X	X	
May							X		
Year 2005									
March							X		
April									X

^{*}X – the action indicated in a corresponding column title will be implemented in a corresponding date.

Table 3. Budget

	Year 2003	Year 2004	Year 2005
Personnel	2003	2004	2003
Project Coordinator (1), \$300/month	\$300	\$1,200	\$600
Project Assistant (1), \$200/month	\$200	\$800	\$200
Health Educator Trainer (1) \$150/month		\$150	
Health Educators (4) \$50/month		\$200	
Total Personnel	\$500	\$2,350	\$800
Operating Cost			
Office rent (1) with equipment (computers (2), laser printer (1)) \$200/month	\$200	\$1,000	\$400
Car rent \$30/month	\$30	\$150	\$60
Office supplies (pen, paper, etc.) \$30/month	\$30	\$150	\$60
Communication \$30/month	\$30	\$150	\$60
Total Operating Cost	\$290	\$1,450	\$580
Project Materials			
Questionnaires (3,200) @ \$.25		\$800	
Student Packages (300) @ \$3.00		\$900	
Health Educator packages (5) @ \$50		\$250	
Additional Education Materials (500) @\$2		\$1,000	
Total Project Materials		\$2,950	
Cost	\$790	\$6,750	\$1,380
Indirect Cost 10%	\$79	\$675	\$138
Overall Cost	\$869	\$7350	\$1518

Appendix 1

Anti-smoking Health Education Program

Curriculum Guide

Unit: Anti-smoking Health Education

Educator: Schoolteachers passed a special Health Education Training

Participants: Students of 6th, 7th, 8th grades of Yerevan schools.

Setting: The classes will be conducted in usual classrooms at schools.

Goal: The goal of the program is to increase the knowledge about smoking and its consequences among students, as well as to change their smoking related attitude and behavior.

Competency/Objectives:

In the end of the program students will have a satisfactory knowledge about

- nicotine dependency
- poisons containing in cigarettes
- consequences of smoking
- passive smoking
- reasons why people smoke

and will

- demonstrate a negative attitude towards cigarette advertisement and smoking in public places
- be able to list reasons why do not smoke or quit smoking
- be able to create an anti-smoking add or demonstrate an anti-smoking scene as a group activity

Topics:

- Nicotine dependency
- Poisons in cigarettes
- Reasons why people smoke
- Effects of smoking (concentration on biochemical and psychological consequences)
- What is passive smoking
- Smoking and pregnancy
- Reasons to quite smoking
- How to fight smoking in your environment

Teaching techniques:

- Lecture
- Discussion
- Demonstration
- Group work
- Role playing
- Questions/Answers

Method of pre- and post-assessing of participants' smoking knowledge, attitude and

behavior:

An anonymous self-administered close-ended Smoking Information Questionnaire, containing questions on smoking status, smoking behavior, smoking related knowledge and attitude, and demographic information.

Note: Pre- and post intervention data collection will be conducted by the Educator and Program Assistant at the beginning and at the end of the education program. Students' participation in the interview is voluntary, and students must be provided with an oral consent form.

Package for Students:

- Lecture notes
- Homework assignments
- Note-paper, colored pencils, pens, eraser
- Antismoking booklets

Package for Educator:

- Curriculum guide
- Lecture notes
- Note-paper, pencils, pens
- Colored posters for demonstration
- Poster papers, colored papers
- Prizes

Program Curriculum

The curriculum consists of 4 education classes; each class will last 40 minutes according to the school schedule. The classes will be conducted in a usual classroom except the last class, which will be a contest between the classes in a school auditorium.

1. During first class an educator will conduct an interactive lecture, which will cover following topics: some history on smoking, nicotine dependency, poisons in cigarettes, why people smoke, effects of smoking, what is passive smoking, how quit smoking. As a homework assignment, students will be given an exercise that asks questions about their positive and negative feelings related to smoking, and will be asked to review the lecture notes

- 2. In the beginning of the second class an educator will make a review of the homework assignment. After that the educator will ask students to divide into the groups, and will conduct an oral quiz. Prizes will be given to the best students and best group. After that the educator will initiate a discussion about the reasons why people smoke and cigarette advertisement strategies. As homework assignment the educator will ask students to think at home about the ways to fight smoking in their environment.
- 3. During third class the educator will initiate a short discussion about ways how students can fight smoking in their environment. The educator will demonstrate cigarette adds and anti-smoking adds, after that will ask students to form groups with equal number of students in each, and will give a group in-class assignment to prepare an anti-smoking add, or anti-smoking scene. Before starting a groupwork, students will get proper instructions how to work in a group effectively. Each group will present its work to the class, and a prize will be given for the best job. As homework assignment students will be assigned to prepare their anti-smoking ads and anti-smoking scenes for a public presentation.
- 4. A contest between the classes will be conducted in auditorium. Each class will present its groups' presentations, and will be graded by the jury.

Program Curriculum

	Topic	Educator activity	Students activity	Materials	Setting
1 st class	Smoking and its consequences	Delivering a lecture, initiating a discussion	Listening to lecture, questioning, participating in the discussion	Lecture notes, HW assignment 1	Classroom
2 nd class	Reasons why people smoke/Cigarette adds	Reviewing HW assignment 1 (questioning the class), dividing class into groups, conducting a quiz, initiating a discussion	Presenting HW assignment, dividing into groups, participating in the quiz, participating in the discussion		Classroom
3 rd class	Anti-smoking activities	Initiating a discussion, demonstration of adds, dividing class into groups, assigning tasks, instructing groups, helping each group, explaining homework assignment	Participating in the discussion, dividing into groups, preparing in-class group assignment, presenting group work	Colored adds, poster papers, colored papers, pencils, markers, and eraser.	Classroom
4 th class	Contest	Conducting a contest between the classes*: quiz, poster presentations, scene presentations	Participating in quiz, presenting prepared posters and scenes, getting prizes	Materials prepared for presentation by the groups during in-class activities	Auditorium

^{*} A special jury consisting of schoolteachers and parents will grade the classes.

Appendix 2

ID		

Smoking Information Questionnaire

This questionnaire is prepared to assess the knowledge, attitude, and behavior related to smoking in adolescents enrolled in 6^{th} , 7^{th} , and 8^{th} grades of Yerevan schools N , , , , .

This is a self-administered questionnaire. The students shall fill it after the interviewer explains the instructions to the class.

Instructions: Please, check the appropriate answer. You should check it by circling the bullet sign before an appropriate answer.

How old are you?

- a. 11 years old or younger
- b. 12 years old
- c. 13 years old
- d. 14 years old
- e. 15 years old
- f. 16 years old or older

What is your sex?

- a. Male
- b. Female

In what grade are you?

- a. 6^{th}
- b. 7th
- c. 8th

Instructions: Please check the best answer. You should check it by circling the bullet sign before an appropriate answer. Circle only one response, unless there is an indication to check all the answers that apply.

- 1. Have you ever tried or experimented with cigarette smoking, even one or two puffs?
 - a. Yes
 - b. No

If No, skip to Q17

- 2. How old were you when you first tried a cigarette?
 - a. 7 years old or younger
 - b. 8 or 9 years old
 - c. 10 or 11 years old
 - d. 12 or 13 years old
 - e. 14 or 15 years old
 - f. 16 years old or older
- 3. During the past 30 days (one month) did you smoke cigarettes, if any?
 - a. Yes
 - b. No

If No, skip to Q17

- 4. During the past 30 days (one month), on how many days did you smoke cigarettes?
 - a. 1 or 2 days
 - b. 3 to 5 days
 - c. 6 to 9 days
 - d. 10 to 19 days
 - e. 20 to 29 days
 - f. All 30 days
- 5. During the past 30 days (one month), on the days you smoked, how many cigarettes did you usually smoke?
 - a. Less than 1 cigarette per day
 - b. 1 cigarette per day
 - c. 2 to 5 cigarettes per day
 - d. 6 to 10 cigarettes per day
 - e. 11 to 20 cigarettes per day
 - f. More than 20 cigarettes per day

- 6. During the past 30 days (one month), how did you usually get your own cigarettes? (*Check all that apply*)
 - a. I bought them in a store, shop or from a street vendor
 - b. I gave someone else money to buy them for me
 - c. I borrowed them from someone else
 - d. I stole them
 - e. An older person gave them to me
 - f. I got them some other way
- 7. During the past 30 days (one month) how much do you think you spent on cigarettes?
 - a. I don't buy my cigarettes
 - b. Less than 1,000 Drams
 - c. 1,000 5,000 Drams
 - d. 5,000 10,000 Drams
 - e. 10,000 15,000 Drams
 - f. More than 15,000 Drams
- 8. In a usual month (30 days) how much pocket money do you get?
 - a. I don't get pocket money
 - b. Less than 1,000 Drams
 - c. 1,000 5,000 Drams
 - d. 5,000 10,000 Drams
 - e. 10,000 15,000 Drams
 - f. More than 15,000 Drams
- 9. Where do you usually smoke? (*Check all that apply*)
 - a. At home
 - b. At school
 - c. At friends' houses
 - d. At social events
 - e. In public spaces (e.g. parks, cafes, street corners)
 - f. Other, specify_____
- 10. Are you under pressure from friends to continue to smoke?
 - a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes

11.	What	can make you decide to stop smoking?
	a.	If I knew that smoking is harmful to my health
	b.	, and the second se
	c.	If my family doesn't like it
	d.	If my closest friends don't like it
	e.	
	f.	Other, specify
12.	Do y	ou think you would be able to stop smoking if you wanted to?
	a.	Yes
		No
13.	Do yo	u want to stop smoking now?
		a. Definitely not
		b. Probably not
		c. Probably yes
		d. Definitely yes
14.	During	g the past year, have you ever tried to stop smoking cigarettes?
	a.	Yes
		No If No, skip to Q 17
	•	y 110, omp to £ 1,
15.	What	was the main reason you decided to stop smoking?
	a.	To improve my health
	b.	To save money
	c.	Because my family doesn't like it
	d.	Because my friends don't like it
	e.	Other, specify
16.	Have y	you ever received help or advice to help you stop smoking? (Check all that apply)
	a.	Yes, from a program or professional
		Yes, from a friend
	c.	Yes, from a family member
	d.	Yes, from both programs or professionals and friends or family members
	e.	No

- 17. Do your parents smoke?
 - a. None
 - b. Both
 - c. Father only
 - d. Mother only
 - e. I don't know
- 18. Has anyone in your family discussed the harmful effects of smoking with you?
 - a. Yes
 - b. No
- 19. At any time during the next 12 months do you think you will smoke a cigarette?
 - a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes
- 20. Do you think you will be smoking cigarettes 5 years from now?
 - a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes
- 21. Do you think boys who smoke cigarettes have more or less friends?
 - a. More friends
 - b. Less friends
 - c. No difference from non-smokers
- 22. Do you think girls who smoke cigarettes have more or less friends?
 - a. More friends
 - b. Less friends
 - c. No difference from non-smokers
- 23. Does smoking cigarettes help people feel more or less comfortable at celebrations, parties, or in other social gatherings?
 - a. More comfortable
 - b. Less comfortable
 - c. No difference from non-smokers

25. Do you think smoking cigarettes makes girls look more or less attractive?
a. More attractive
b. Less attractive
c. No difference from non-smokers
26. Do any of your closest friends smoke cigarettes?
a. None of them
b. Some of them
c. Most of them
d. All of them
27. When you see a man smoking what do you think of him?
a. Indecent
b. Stupid
c. Loser
d. Successful
e. Intelligent
f. Macho
g. None of the above
28. When you see a woman smoking, what do you think of her?
a. Indecent
b. Stupid
c. Loser
d. Successful
e. Intelligent
f. Sophisticated
g. None of the above
29. During this school year, were you taught in any of your classes about the dangers of smoking?
a. Yes
b. No
c. Not sure

24. Do you think smoking cigarettes makes boys look more or less attractive?

a. More attractiveb. Less attractive

c. No difference from non-smokers

- 30. How long ago did you last discuss smoking and health as part of a lesson?
 - a. Never
 - b. This term
 - c. Last term
 - d. 2 terms ago
 - e. More than a year ago

Instructions: Please, read carefully the following statements and in front of each statement circle the number in the cell that is located under the response (strongly agree, agree, disagree, strongly disagree) that best describes your attitude to that statement.

	Strongly Disagree	Disagree	Agree	Strongly agree	
31. Smoking cigarettes is harmful to a person's health.	1	2	3	4	
32. It is safe to smoke for only a year or two as long as you quit after that.	1	2	3	4	
33. Breathing smoke from another person's cigarette is harmful to a person's health.	1	2	3	4	
34. Smoking should be prohibited in public places.	1	2	3	4	
35. Persons up to 18 years should be prohibited to buy cigarettes.	1	2	3	4	
36. Once someone has started smoking it would be difficult to quite.	1	2	3	4	
37. Smoking cigarettes may cause cancer.	1	2	3	4	
38. Smoking cannot be a cause of any life-threatening disease.	1	2	3	4	
39. Smoking low-nicotine cigarettes cannot be harmful to the health.	1	2	3	4	
40. Smoking cigarettes in young ages may stop the growth of a child or adolescent.	1	2	3	4	
41. Smoking cigarettes is not addictive.	1	2	3	4	
42. Smoking cigarettes help people to relax.	1	2	3	4	
43. Smoking cigarettes negatively affects nervous system.	1	2	3	4	

ID	

Ծխախոտի օգտագօրծման տեղեկատվական հարցաթերթիկ

Այս հարցաթերթիկը նախատեսված է N , , , դպրոցների 6-րդ, 7-րդ, և 8-րդ դասարանների աշակերտների ծխախոտի օգտագործմանը վերաբերվող գիտելիքների, վերաբերմունքի և վարքի գնահատման համար։

Այս հարցաթերթիկը պետք է լրացվի աշակերտի կողմից ինքնուրույն։ Աշակերտները կարող են սկսել լրացնել հարցաթերթիկը միայն նրանից հետո, երբ հարցազրուցավարը կբացատրի դասարանին լրացման կարգը։

Հարցաթերթիկի լրացման կարգը։ Խնդրում ենք նշել Ճիշտ տարբերակը։ Նշել պետք է օղակի մեջ վերցնելով Ճիշտ պատասխանի առջևում գտնվող տառանիշը։

Խնդրում ենք նշել Ձեր տարիքը։

- a. 11 կամ ավելի փոքր
- b. 12 տարեկան
- c. 13 տարեկան
- d. 14 տարեկան
- e. 15 տարեկան
- f. 16 կամ ավելի մեծ

Խնդրում ենք նշել Ձեր սեռը:

- a. Արական
- b. Իգական

Խնդրում ենք նշել, թե որ դասարանում եք սովորում:

- a. 6-рդ
- b. 7*–*րդ
- c. 8-nn

Հարցաթերթիկի լրացման կարգը: Խնդրում ենք նշել լավագույն պատասխանը։ Նշել պետք է օղակի մեջ վերցնելով Ճիշտ պատասխանի առջևում գտնվող տառանիշը։ Նշեք միայն մեկ պատասխան, բացառությամբ այն դեպքերի երբ հատուկ հիշեցում է բերված նշել բոլոր Ճիշտ պատասխանները։

- 1. Դուք երբևէ փորձել ե՞ք ծխել անգամ մեկ հատիկ կամ պակաս քան մեկ հատիկ ծխախոտ։
 - *a.* Ujn
 - b. Ns

Եթե Ոչ, ապա անցեր Հարց 17-ին։

- 2. Քանի՞ տարեկան էիք, երբ առաջին անգամ փորձեցիք ծխել:
 - a. 7 տարեկան կամ ավելի փոքր
 - b. 8 9 տարեկան
 - c. 10 11 տարեկան
 - d. 12 13 տարեկան
 - e. 14 15 տարեկան
 - f. 16 տարեկան կամ ավելի մեծ
- 3. Վերջին 30 օրվա ընթացքում (մեկ ամիս) Դուք ծխախոտ օգտագործե՞լ եք։
 - a. Uın
 - b. N₂

Եթե Ոչ, ապա անցեք Հարց17-ին։

- 4. Վերջին 30 օրվա ընթացքում (մեկ ամիս), քանի՞ օր եք օգտագործել ծխախոտ։
 - a. 1 կամ 2 օր
 - b. 3 կամ 5 on
 - c. 6 կամ 9 on
 - d. 10 կամ 19 օր
 - e. 20 կամ 29 on
 - f. Pninn 30 onn

- 5. Վերջին 30 օրվա ընթացքում (մեկ ամիս), այն օրերին երբ ծխախոտ եք օգտագործել, սովորաբար քանի՞ հատիկ եք ծխել մեկ օրվա ընթացքում։
 - ց. Մեկ հատիկից պակաս մեկ օրվա ընթացքում:
 - h. Մեկ hատիկ մեկ օրվա ընթացքում
 - i. 2 5 hատիկ մեկ օրվա ընթացքում
 - j. 6 10 hատիկ մեկ օրվա ընթացքում
 - k. 11 20 հատիկ մեկ օրվա ընթացքում
 - I. Ավելի քան 20 հատիկ մեկ օրվա ընթացքում
- 6. Վերջին 30 օրվա ընթացքում (մեկ ամիս), որտեղի՞ց եք սովորաբար ձեռք բերել ծխախոտ։ (Սշեք բոլոր Ճիշտ պատասխանները)
 - a. Գնել եմ խանութում կամ այլ վաձառակետում
 - b. Մեկ ուրիշին եմ գումար տվել, որպեսզի նա ինձ համար ծխախոտ գնի։
 - c. Մեկ ուրիշի ծխախոտից եմ օգտվել:
 - d. Գողացել եմ։
 - e. Տվել է ինձանից մեծ տարիքով մեկը։
 - f. Ձեռք եմ բերել որևէ ուրիշ Ճանապարհով:
- 7. Կերջին 30 օրվա ընթացքում (մեկ ամիս) Ձեր կարծիքով ո՞րքան գումար եք ծախսել ծխախոտ գնելու վրա։
 - a. Ես չեմ գնում իմ ծխախոտը։
 - b. 1,000 դրամից պակաս
 - c. 1,000 5,000 դրամ
 - d. 5,000 10,000 դրամ
 - e. 10,000 15,000 դրամ
 - f. Ավելի քան 15,000 դրամ
- 8. Սովորաբար ամսեկան ո՞րքան գումար եք ստանում Ձեր առօրյա ծախսերը հոգալու համար։
 - a. Ես որևե գումար չեմ ստանում։
 - b. 1,000 դրամից պակաս
 - c. 1,000 5,000 դրամ
 - d. 5,000 10,000 դրամ
 - e. 10,000 15,000 դրամ
 - f. Ավելի քան 15,000 դրամ

9.	Որտե՞ւ	ղ եք Դուք սովորաբար ծխում։ <i>(Նշեք բոլոր Ճիշտ պատասխանները)</i>
	b. 6 c. 1 d. 6 e. 6	Տանը Դպրոցում Ընկերներիս տանը Հավաքույթների ժամանակ Հասարակական վայրերում (զբոսայգում, սրձարաններում, փողոցի անկյուններում) Այլ տեղ, նշեք
10.		նկերները որևէ ազդեցություն գործադրու՞մ են Ձեր վրա, որը ստիպում է ւրունակել ծխել:
	b. c.	Հաստատ ոչ Հավանաբար ոչ Հավանաբար այո Հաստատ այո
11.		վատձառով Դուք կորոշեիք թողնել ծխելը։ <i>(Նշեք բոլոր ձիշտ</i> ասխանները)
	b. c. d. e.	Եթե իմանայի, որ ծխելը վնասում է իմ առողջությանը։ Եթե ես գումար խնայելու կարիք ունենայի։ Եթե իմ ընտանիքը դեմ լիներ։ Եթե իմ մոտիկ ընկերները դեմ լինեին։ Եթե իմ ընկերը/ընկերուհին դեմ լիներ։ Այլ, նշեք
12.	Կարծ	ու՞մ եք արդյոք, որ ցանկության դեպքում կկարողանաք թողնել ծխելը։
		Այո Ոչ
13.	Դուք ւ	այժմ ցանկություն ունե՞ք թողնել ծխելը։
	b. c.	Հաստատ ոչ Հավանաբար ոչ Հավանաբար այո Հաստատ այո
14.	Վերջի	ոն մեկ տարվա ընթացքում, երբևէ փորձե՞լ եք թողնել ծխելը։
	a. b.	•

- 15. Ի՞նչ պատձառով էիք որոշել թողնել ծխելը։ *(Նշեք բոլոր ձիշտ պատասխանները)*
 - a. Լավացնել առողջությունս։
 - b. Գումար խնայել։
 - c. Քանի որ իմ ընտանիքը դեմ եր։
 - d. Քանի որ ընկերներս դեմ էին։
 - e. Այլ, նշեք _____
- 16. Ծխելը թողնելու համար որևէ օգնություն կամ խորհուրդ ստացե՞լ էիք։ *(Նշեք բոլոր Ճիշտ պատասխանները)*
 - a. Uյո, ծրագրի կամ մասնագետի կողմից
 - b. Այո, ընկերոջ կողմից
 - c. Uյո, ընտանիքի անդամի կողմից
 - d. Այո, և ծրագրի կամ մասնագետի և ընտանիքի անդամի կամ ընկերոջ կողմից
 - e. Nչ
- 17. Ձեր ծնողները ծխու՞մ են։
 - a. Ոչ մեկը
 - b. Երկուսն էլ
 - c. Միայն hայրս
 - d. Միայն մայրս
 - e. Չգիտեմ
- 18. Ձեր ընտանիքում որևէ մեկը քննարկել է Ձեզ հետ կամ Ձեր ներկայությամբ ծխելու վնասակար ազդեցությունը։
 - a. Ujn
 - b. N₂
- 19. Կարծու՞մ եք արդյոք, որ երբևէ մոտակա 12 ամսվա ընթացքում ծխախոտ կօգտագործեք։
 - a. a. duunum ns
 - b. Հավանաբար ոչ
 - c. Հավանաբար այո
 - d. <uuunuun uin

- 20. Կարծու՞մ եք արդյոք, որ հինգ տարի հետո ծխախոտ կօգտագործեք։
 - a. <uuunuun nş
 - b. Հավանաբար ոչ
 - c. Հավանաբար այո
 - d. Zwumwm wjn
- 21. Ինչպե՞ս եք կարծում, ծխող տղաները ունեն ավելի մեծ ընկերական չրջապատ թե ավելի փոքր։
 - a. Ավելի մեծ
 - b. Ավելի փոքր
 - c. Տարբերություն չկա չծխողների հետ համեմատած։
- 22. Ինչպե՞ս եք կարծում, ծխող աղջիկները ունեն ավելի մեծ ընկերական շրջապատ թե ավելի փոքր։
 - a. Ավելի մեծ
 - b. Ավելի փոքր
 - c. Տարբերություն չկա չծխողների հետ համեմատած։
- 23. Ինչպե՞ս եք կարծում, ծխելը օգնում է մարդկանց զգալ իրենց ավելի վստահ, թե պակաս վստահ տարբեր տեսակի հավաքույթների, հանդիսությունների ժամանակ։
 - a. Ավելի վստահ
 - b. Պակաս վստահ
 - c. Տարբերություն չկա չծխողների հետ համեմատած։
- 24. Ինչպե՞ս եք կարծում, ծխելը տղաներին դարձնում է ավելի գրավիչ, թե պակաս գրավրիչ։
 - a. Ավելի գրավիչ
 - b. Պակաս գրավիչ
 - c. Տարբերություն չկա չծխողների հետ համեմատած
- 25. Ինչպե՞ս եք կարծում, ծխելը աղջիկներին դարձնում է ավելի գրավիչ թե պակաս գրավիչ:
 - a. Ավելի գրավիչ
 - b. Պակաս գրավիչ
 - c. Տարբերություն չկա չծխողների հետ համեմատած

- 26. Ձեր մոտիկ ընկերներից որևէ մեկը ծխու՞մ է։
 - a. Ոչ մեկը
 - b. Մի մասը
 - c. Մեծ մասը
 - d. բոլորը
- 27. Երբ դուք տեսնում եք ծխող տղամարդ, ի՞նչ եք կարծում նրա մասին։
 - a. Անպարկեշտ
 - b. Անխելք
 - c. Անhաջողակ
 - d. Հաջողակ
 - e. Խելացի
 - f. Չարգացած
 - ց. Վերը նշվածից ոչ մեկը
- 28. Երբ դուք տեսնում եք ծխող կին, ի՞նչ եք կարծում նրա մասին։
 - a. Անպարկեշտ
 - b. Անխելք
 - c. Անhաջողակ
 - d. Հաջողակ
 - e. Խելացի
 - f. Չարգացած
 - ց. Վերը նշվածից ոչ մեկը
- 29. Այս ուսումնական տարվա ընտացքում Դուք ե՞րբևէ քննարկել եք դասերի ընթացքում ծխախոտի վնասակար ազդեցությունը։
 - a. Ujn
 - b. **N**₂
 - c. Համոզված չեմ
- 30. Վերջին անգամ ո՞րքան ժամանակ առաջ եք քննարկում ունեցել ծխելու և առողջության թեմայի վերաբերյալ որևէ դասի ընթացքում։
 - a. Երբեք
 - b. Այս կիսամյակում
 - c. Անցած կիսամյակում
 - d. 2 կիսամյակ առաջ
 - e. Ավելի քան մեկ տարի առաջ

Հարցաթերթիկի լրացման կարգը: Խնդրում ենք, ուշադիր կարդացեք հետևյալ պնդումները և յուրաքանչյուր պնդումի դիմաց օղակի մեջ վերցրեք այն պատասխանի ներքևում գնտվող թիվը (լիովին համաձայն չեմ, համաձայն չեմ, համաձայն եմ, լիովին համաձայն եմ) որը լավագույնս է նկարագրում ձեր վերաբերմունքը տվյալ պնդումին:

	Համաձայն չեմ	Մասամբ համաձայն չեմ	Մասամբ համաձայն եմ	Համաձայն եմ
31. Ծխելը վնասակար է մարդու առողջության համար։	1	2	3	4
32. Մեկ կամ երկու տարի ծխելը վտանգավոր չէ, եթե դրանից հետո այլևս չծխել:	1	2	3	4
33. Ուրիշի ծխախոտի ծուխը շնչելը վնասակար է մարդու առողջության համաո։	1	2	3	4
34. Ծխելը պետք է արգելված լինի հասարակական վայրերում։	1	2	3	4
35. Մինչև 18 տարեկան անձանց ծխախոտ վաձառելը պետք է արգելված լինի։	1	2	3	4
36. Եթե որևէ մեկը արդեն սկսել է ծխել, ապա թողնելը դժվար կլինի։	1	2	3	4
37. Ծխելը կարող է առաջացնել քաղցկեղ։	1	2	3	4
38. Ծխելը չի կարող լինել կյանքին սպառնող որևէ հիվանդության պատՃառ։	1	2	3	4
39. Ծխելը անբարոյական է։	1	2	3	4
40. Վաղ տարիքում ծխելը կարող է կանգնեցնել երեխայի կամ դեռահասի աՃը։	1	2	3	4
41. Ծխելը կախվածություն չի առաջացնում։	1	2	3	4
42. Ծխելը օգնում է մարդկանց լիցքաթափվել (հանգստացնել ներվերը)։	1	2	3	4
43. Ծխելը բացասաբար է ազդում ներվային համակարգի վրա։	1	2	3	4

Smoking Information Questionnaire for Researcher

Note for the researcher: Please, use scores provided in the brackets behind the circled answer for calculating an aggregate score for each category (knowledge, attitude, smoking status, and willingness to quit). If the question is not answered, or answered inappropriately (more than one answer is selected when there is no indication allowing that) use the score of "0" for the attitude and knowledge categories. If any of the Q1, Q4, or Q5 is not answered, when consider the smoking status part as incomplete. If any of Q10, Q12, Q13, or Q14 is not answered when consider the willingness to quit part as incomplete. If more than 30% of attitude or knowledge questions are not answered, when consider these categories as incomplete. You should separately analyze the questionnaires that are partially completed (one or more categories are incomplete). In each category there are questions that don't have any scores; these are just informative questions and may be used in the analysis as intervening variables. Highest score for the attitude section is 18, for the knowledge section is 39, for the willingness to quit section is 8, and for the smoking status section is 901.

This questionnaire is prepared to assess the knowledge, attitude, and behavior related to smoking in adolescents enrolled in 6^{th} , 7^{th} , and 8^{th} grades of Yerevan schools N,,,,.

Instructions: Please, check the appropriate answer. You should check it by circling the bullet sign before an appropriate answer.

How old are you?

- g. 11 years old or younger
- h. 12 years old
- i. 13 years old
- j. 14 years old
- k. 15 years old
- 1. 16 years old or older

What is your sex?

- c. Male
- d. Female

In what grade are you?

- $d. \quad 6^{th}$
- e. 7th
- f. 8th

Instructions: Please check the best answer. You should check it by circling the bullet sign before an appropriate answer. Circle only one response, unless there is an indication to check all the answers that apply.

Smoking Status (the scores are provided in the brackets)

Note: To get the score for this part you need to use the following formula: Total score = 901- (score for Q1 + (score for Q3*score for Q4))

- 1. Have you ever tried or experimented with cigarette smoking, even one or two puffs?
 - a. Yes (0)
 - *b*. No (1)

If No, skip to Q17

- 2. How old were you when you first tried a cigarette?
 - a. 7 years old or younger
 - b. 8 or 9 years old
 - c. 10 or 11 years old
 - d. 12 or 13 years old
 - e. 14 or 15 years old
 - f. 16 years old or older
- 3. During the past 30 days (one month) did you smoke cigarettes, if any?
 - a. Yes
 - b. No

If No, skip to Q17

- 4. During the past 30 days (one month), on how many days did you smoke cigarettes?
 - a. 1 or 2 days (1.5)
 - b. 3 to 5 days (4)
 - c. 6 to 9 days (7.5)
 - d. 10 to 19 days (14.5)
 - e. 20 to 29 days (24.5)
 - f. All 30 days (30)
- 5. During the past 30 days (one month), on the days you smoked, how many cigarettes did you usually smoke?
 - a. Less than 1 cigarette per day (0.5)
 - b. 1 cigarette per day (1)
 - c. 2 to 5 cigarettes per day (3.5)
 - d. 6 to 10 cigarettes per day (8)
 - e. 11 to 20 cigarettes per day (15.5)
 - f. More than 20 cigarettes per day (30)

6. During the past 30 days (one month), h	ow did you usually	get your own	cigarettes? (Check
all that apply)			

- a. I bought them in a store, shop or from a street vendor
- b. I gave someone else money to buy them for me
- c. I borrowed them from someone else
- d. I stole them
- e. An older person gave them to me
- f. I got them some other way
- 7. During the past 30 days (one month) how much do you think you spent on cigarettes?
 - a. I don't buy my cigarettes
 - b. Less than 1,000 Drams
 - c. 1,000 5,000 Drams
 - d. 5,000 10,000 Drams
 - e. 10,000 15,000 Drams
 - f. More than 15,000 Drams
- 8.In a usual month (30 days) how much pocket money do you get?
 - a. I don't get pocket money
 - b. Less than 1,000 Drams
 - c. 1,000 5,000 Drams
 - d. 5,000 10,000 Drams
 - e. 10,000 15,000 Drams
 - f. More than 15,000 Drams
- 9. Where do you usually smoke? (*Check all that apply*)
 - a. At home
 - b. At school
 - c. At friends' houses
 - d. At social events
 - e. In public spaces (e.g. parks, cafes, street corners)
 - f. Other, specify____

Willingness to quit

10. Are you under pressure from friends to continue to smoke?

10 D.		41
12. Do	yo	u think you would be able to stop smoking if you wanted to?
	a.	Yes (1)
	b.	
13. Do	yo	u want to stop smoking now?
		Definitely not (0)
		Probably not (1) Probably yes (2)
		Definitely yes (3)
14. Du		g the past year, have you ever tried to stop smoking cigarettes?
14. Du		
14. Du	ring	Yes (1)
	aring a. b.	Yes (1)
	a. b. nat y	Yes (1) No (0) If No, skip to Q 17 was the main reason you decided to stop smoking?
	aring a. b.	Yes (1) No (0) If No, skip to Q 17 was the main reason you decided to stop smoking? To improve my health
	aring a. b. nat v	Yes (1) No (0) If No, skip to Q 17 was the main reason you decided to stop smoking?
	a. b. a. a. b.	Yes (1) No (0) If No, skip to Q 17 was the main reason you decided to stop smoking? To improve my health To save money

- 16. Have you ever received help or advice to help you stop smoking? (*Check all that apply*)
 - a. Yes, from a program or professional
 - b. Yes, from a friend
 - c. Yes, from a family member
 - d. Yes, from both programs or professionals and friends or family members
 - e. No
- 17. Do your parents smoke?
 - a. None
 - b. Both
 - c. Father only
 - d. Mother only
 - e. I don't know
- 18. Has anyone in your family discussed the harmful effects of smoking with you?
 - a. Yes
 - b. No

Attitude questions (the scores are provided in the brackets)

- 19. At any time during the next 12 months do you think you will smoke a cigarette?
 - a. Definitely not (3)
 - b. Probably not (2)
 - c. Probably yes (1)
 - d. Definitely yes (0)
- 20.Do you think you will be smoking cigarettes 5 years from now?
 - a. Definitely not (3)
 - b. Probably not (2)
 - c. Probably yes (1)
 - d. Definitely yes (0)
- 21. Do you think boys who smoke cigarettes have more or less friends?
 - a. More friends (0)
 - b. Less friends (1)
 - c. No difference from non-smokers (2)

- 22. Do you think girls who smoke cigarettes have more or less friends?
 a. More friends (0)
 b. Less friends (1)
 c. No difference from non-smokers (2)
- 23. Does smoking cigarettes help people feel more or less comfortable at celebrations, parties, or in other social gatherings?
 - a. More comfortable (0)
 - b. Less comfortable (1)
 - c. No difference from non-smokers (2)
- 24. Do you think smoking cigarettes makes boys look more or less attractive?
 - a. More attractive (0)
 - b. Less attractive (1)
 - c. No difference from non-smokers (2)
- 25. Do you think smoking cigarettes makes girls look more or less attractive?
 - a. More attractive (0)
 - b. Less attractive (1)
 - c. No difference from non-smokers (2)
- 26. Do any of your closest friends smoke cigarettes?
 - a. None of them
 - b. Some of them
 - c. Most of them
 - d. All of them
- 27. When you see a man smoking what do you think of him?
 - a. Indecent (1)
 - b. Stupid (1)
 - c. Loser (1)
 - d. Successful (0)
 - e. Intelligent (0)
 - f. Macho (0)
 - g. None of the above (1)

- 28. When you see a woman smoking, what do you think of her?
 - a. Indecent (1)
 - b. Stupid (1)
 - c. Loser (1)
 - d. Successful (0)
 - e. Intelligent (0)
 - f. Sophisticated (0)
 - g. None of the above (1)
- 29. During this school year, were you taught in any of your classes about the dangers of smoking?
 - a. Yes
 - b. No
 - c. Not sure
- 30. How long ago did you last discuss smoking and health as part of a lesson?
 - a. Never
 - b. This term
 - c. Last term
 - d. 2 terms ago
 - e. More than a year ago

Knowledge (the scores are provided in the brackets)

Instructions: Please, read carefully the following statements and in front of each statement circle the number in the cell that is located under the response (strongly agree, agree, disagree, strongly disagree) that best describes your attitude to that statement.

	Strongly Disagree	Disagree	Agree	Strongly agree
31. Smoking cigarettes is harmful to a person's health.	(0)	(1)	(2)	(3)
32 It is safe to smoke for only a year or two as long as you quit after that.	(3)	(2)	(1)	(0)
33. Breathing smoke from another person's cigarette is harmful to a person's health.	(0)	(1)	(2)	(3)
34. Smoking should be prohibited in public places.	(0)	(1)	(2)	(3)
35. Persons up to 18 years should be prohibited to buy cigarettes.	(0)	(1)	(2)	(3)

36. Once someone has started smoking it would be difficult to quite.	(0)	(1)	(2)	(3)
37. Smoking cigarettes may cause cancer.	(0)	(1)	(2)	(3)
38. Smoking cannot be a cause of any life-threatening disease.	(3)	(2)	(1)	(0)
39. Smoking low-nicotine cigarettes cannot be harmful to the health.	(3)	(2)	(1)	(0)
40. Smoking cigarettes in young ages may stop the growth of a child or adolescent.	(0)	(1)	(2)	(3)
41. Smoking cigarettes is not addictive.	(3)	(2)	(1)	(0)
42. Smoking cigarettes help people to relax.	(3)	(2)	(1)	(0)
43. Smoking cigarettes negatively affects nervous system.	(0)	(1)	(2)	(3)

Appendix 4

American University of Armenia College of Health Sciences Master of Public Health Program Fall 2003

Dear Student:

During today's class we are going to have a discussion about the lessons you have had on smoking last two weeks. This discussion will be for the evaluation of this program. I will ask you questions about what was clear for you, what was not, what you liked, what you did not like. Your opinion will be considered to improve the program.

We will have a note-taker, who will write down a summary of your opinions. However, nobody except me will have later access to those notes. Please be honest in answering the questions irrespective of whether your feelings about the program are positive or negative. Your opinion is very important and valuable.

Participation in this discussion is not mandatory. You may decide yourself whether to participate or not. If you do not want to answer any question I ask you, you may refuse to do that as well. Your decision not to participate or refuse to answer any question will not have any negative effect. If something is not clear for you or you have questions, you may raise your hand and refer to me at any time. If you believe that your questions have not been satisfactorily addressed or you have not been treated fairly, you may contact Dr. Yelena Amirkhanayan at the AUA at 51 25 68 or Dr. Michael Thompson at the AUA at 51 25 92.

Anush Gevorgyan, BS	
---------------------	--

Հայաստանի Ամերիկյան Համալսարան Քժշկական Գիտությունների Քոլեջ Հասարակական Առողջապահության Մագիստրոսի Ծրագիր Աշուն 2003

Սիրելի աշակերտ,

Այսօրվա դասի ընթացքում մենք կքննարկենք վերջին երկու շաբաթվա ընթացքում ծխախոտի օգտագործման թեմայով անցկացված դասընթացները։ Այդ քննարկումը նպատակ անցկացված ծրագրի գնահատման համար է։ Այդ նպատակով ես Ձեզ կտամ հարցեր նրա մասին թե ինչը Դուք հավանեցիք դասընթացներում և ինչը ոչ, ինչն էր Ձեզ համար պարզ ներկայացված և ինչը պարզ չէր։ Ձեր կարծիքը հաշվի կառնվի ծրագրի լավացման համար։

Ձեր կարժիքները կրձատ ձևով գրի կառնվեն իմ օգնականի կողմից։ Այնուամենայնիվ ինձանից բացի ոչ ոք չի ունենա հնարավորությույն կարդալ դրանք։ Խնդրում եմ, եղեք անկեղծ հարցերին պատասխանելիս` անկախ նրաինից թե ձեր կարծիքի դրական կամ բացասական լինելուց։ Ձեր կարծիքը շատ կարևոր է և մեծ առժեք ունի մեր համար։

Մասնակցությունը այս քննարկման մեջ պարտադիր չէ։ Դուք կարող եք ինքնուրույն որոշել մասնակցել թե ոչ։ Եթե Դուք չուզենաք պատասխանել որևէ հարցի, Դուք կարող եք չպատասխանել։ Ձեր որոշումը չմասնակցել կամ չպատասխանել որևէ հարցի չի ունենա ոչ մի բացասական ազդեցություն Ձեր վրա։ Եթե որևէ բան պարզ չէ Ձեր համար կամ Դուք ունեք հարցեր, կարող եք ձեռք բարձրացրել և դիմել ինձ յուրաքանչյու պահի։ Եթե կարծում եք որ Ձեր հարցերին լիարժեք պատասխան չեք ստացել կամ Ձեր նկատմամբ զգացել եք անարդար վերաբերմունք, ապա կարող եք դիմել ՀԱՀ՝ Դր. Ելենա Ամիրխանյանին 512568 հեռախոսահամարով, կամ Դր. Մայքլ Թոմփսոնին 512592 հեռախոսահամարով։

Անուշ	Գևորգյան,	Գիտությունների	Բակալավր	
-------	-----------	----------------	----------	--

Appendix 5

American University of Armenia College of Health Sciences Master of Public Health Program Fall 2003

Dear Student:
Good day! My name is During the coming two weeks we will have several interesting lessons devoted to smoking. Today, I would like you to fill a questionnaire, which assesses knowledge and attitude toward smoking, as well as smoking behavior.
You will have 30 minutes to do that. You do not need to indicate your name or provide any other personal information. After you complete the questionnaire you need to put it in the provided envelope. I will be the only person who may look at your answers after that.
It is your right to decide whether or not to complete the questionnaire. If you decide not to participate, there will be no punishment for that. Before starting you will receive instruction how to fill the questionnaire. However, if you have questions or need help, you may raise your hand and refer to me at any time. Please, do not hesitate to ask if something is not clear.
Now, I will distribute the questionnaires and explain how to fill it. Please, be quiet irrespective of whether you decided to participate or not, and raise your hand if you have questions. If you believe that your questions have not been satisfactorily addressed or you have not been treated fairly, you may contact Dr. Yelena Amirkhanayan at the AUA at 51 25 68 or Dr. Michael Thompson at the AUA at 51 25 92.
Anush Gevorgyan, BS

Հայաստանի Ամերիկյան Համալսարան Բժշկական Գիտությունների Քոլեջ Հասարակական Առողջապահության Մագիստրոսի Ծրագիր Աշուն 2003

Սիրելի աշակերտ,	
ծխախոտի օգտագործմանը։ Այսօր	։ Մոտակա երկու շաբաթվա զ հետ մի քանի հետաքրքիր դասեր նվիրված , ես կխնդրեմ Ձեզ լրացնել հարցաթերթիկներ, ոագործման վերաբերյալ Ձեր գիտելիքները,
նշել Ձեր անունը կամ որևէ այլ անձ	լրացնելու համար։ Ձեզանից չի պահանջվում նական տվյալ։ Հարցաշարը լրացնելուց հետո, ի մեջ։ Ձեր պատասխանները կստուգվեն միայն
հարցամանը։ Եթե Դուք որոշեք չմա պատՃառով։ Նախկան սկսեք լրաց լրացման կարգը։ Այնուամենայնիվ,	ուք ունեք իրավունք չմասնակցելու այս սնակցել, որևէ պատժամիջոց չի կիրառվի այդ նելը, ես կբացատրեմ Ձեզ հարցաթերթիկի եթե Դուք ունենաք որևէ հարց կամ օգնության ուրաքանչյուր պահի։ Խնդրում եմ, մի ևիցե բան պարզ չէ։
Խնդրում եմ, լուր եղեք անկախ նրա թե ոչ, և ձեռք բարձրացրեք եթե ուն լիարժեք պատասխան չեք ստացել վերաբերմունք, ապա կարող եք դի	ները և կբացատրեմ ինչպես դրանք լրացնել։ մից մասնակցում եք հարղցաթերթիկի լրացմանը եք հարցեր։ Եթե կարծում եք որ Ձեր հարցերին կամ Ձեր նկատմամբ զգացել եք անարդար մել ՀԱՀ` Դր. Ելենա Ամիրխանյանին 512568 յքլ Թոմփսոնին 512592 հեռախոսահամարով։
Անուշ Գևորգյան, Գիտությունների (Oudmuudo
Carrie Tarriffica, Transferradulii	–ազալազլ։