# American University of Armenia

**Department of Public Health**


# SMOKING CESSATION PROGRAM AMONG MILITARY RECRUITS IN ARMENIAN PREPARATORY ARMY UNITS

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


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## Executive Summary

The problem of smoking is known to be one of the hazards of human health worldwide. This proposal addresses the problem of smoking, the epidemic of disease and death caused by tobacco production, promotion, and use, through fostering and participating in strategic efforts to achieve comprehensive tobacco prevention and control in the military.

According to the literature army recruits are one of the vulnerable groups in the population. Hence it is proposed to reveal the real prevalence of use by army recruits, and associated health effects in this target population, and to suggest measures to reduce the prevalence of smoking in the short has a the way of preparing for a longer term strategy in fighting smoking.

The goals of the program are the following:

- Preventing initiation of tobacco use among army recruits
- Promoting cessation of currently smoking army recruits
- Eliminating exposure to secondhand smoke.

According to the data of National Statistical Service of RA in 2000-2001 67.5% of males and 3.1% of females were smokers. But according to the data of several small non-governmental organizations 70-72% of males and 25-28% of females are smokers. Educating and raising awareness of smoking hazards among recruits is one of the strategic components toward achieving the goal of smoking reduction.

This program is envisaged to last for four months in preparatory army units. The estimated budget is US $13,338, including the preparatory stage, base line and follow up data collection, as well as the education itself which will last for one month. The teaching process will be conducted not only by trainers from the program but also by medical officers, who will be involved as trainer-counselors, and by a group of recruits who will be involved in a peer education.

The main goal of the evaluation is to find out to what extent the smoking cessation program may be applicable in Armenia, particularly in the military, and to what extent can the prevalence of smoking be reduced in the target population after participation in the smoking cessation program. The evaluation of the program is based on the assessment of the knowledge and attitudes towards smoking, and practices of smoking by recruits through the use of initial and final questionnaires, and the comparison of these results.

The support of Ministry of Defense, Ministry of Health and Ministry of Education and Science is crucial for this program highlighting the concern for future healthy nation. Community support is also critical in establishing a motivating environment towards tobacco control.

***Specific Aims/Objectives***

The mission of this proposal is to address the problem of smoking, the epidemic of disease and death caused by tobacco production, promotion, and use through fostering and participating in strategic efforts towards achieving comprehensive tobacco prevention and control in the military [1-2]. This proposal is an opportunity to take action now to prevent future death and disease through effective and sustainable tobacco prevention, cessation and control. According to the literature army recruits are one of the vulnerable groups in the population. The proposal is constructed to reveal the real volume of consumption of cigarettes by army recruits, the prevalence of use and the associated health effects in this target population [2-3]. The strategies for the proposed program are directed to the prevention and cessation of smoking through raising awareness of smoking hazards and directing efforts towards the encouragement of both the physical fitness and healthy life style of army recruits.

***Goals of the program are following***[3]:

- Preventing initiation of tobacco use among army recruits
- Promoting cessation of currently smoking army recruits
- Eliminating exposure to secondhand smoke.

Objectives of the program are following:

The objectives are set to meet the main goal of the proposal to implement a smoking cessation program among recruits during the preparatory six-month period of mandatory army service.

- After the implementation of one month project the level of knowledge of recruits is expected to be at least 50% higher than baseline data.

- After the implementation of the program the attitudes of recruits will be changed at least by 10% from baseline data.
- After the implementation of the project the number of the tobacco users among recruits will be decreased at least by 5%.
- Improvement of medical officers cessation counseling efforts during course of trainers in the preparatory stage of the program.
- Increasing government support with the cooperation of Ministry of Health and Ministry of Defense to effect tobacco control policy change.
- Expanding and strengthening strategic partnerships.
- Increasing the quality of technical assistance and its integration with smoking cessation programming.

## *Introduction*

*Background information*

The problem of smoking is known to be one of the hazards of human health worldwide. The addictive effects of tobacco have been well documented [3-7]. It is considered to be mood and behavior altering, psychoactive, and abusable. As a multisystem pharmacological agent that is voluntarily administered, tobacco is believed to have an addictive potential comparable to alcohol, cocaine, and morphine[3-7].

Nicotine dependence reflects compulsive use of nicotine-containing tobacco, physiologic tolerance such as needing to use increased amounts of nicotine to achieve the desired effect, nicotine withdrawal upon discontinuation of tobacco use with symptoms such as craving for nicotine, irritability, anger, anxiety, depression, increased appetite, and continued use despite significant problems related to tobacco use [5].

Smoking causes lung disease, lung cancer, emphysema, as well as cancers other than lung, such associations are also noted with bladder, stomach, pancreas, esophagus, larynx, mouth, cervix, peptic ulcer disease and a high risk of death from cardiovascular diseases [1-8].

In the period when a young adult leaves childhood on his way to adulthood, especially when he is enlisting in the military, he is leaving the security and regiment of high school and his home. He is out on his own, with less support from his friends and family. These situations will be true for all generations of younger adults as they go through a period of transition from one world to another. Dealing with these changes in his life will create increased levels of uncertainty, stress and anxiety. And the fact is that during this stage in life, some younger adults will choose to smoke and the role of the environment appears determinant since it leads to and designs behaviors, which are

implicated in a certain type of socialization. Stress may encourage nonsmokers to start smoking and may prompt occasional smokers to smoke more.

Stressful situations occurring in an environment favorable to smoking may contribute to the starting of the smoking habit, as well as to its continuation. Since there are several factors contributing to smoking in the army, including such predisposing factors as a high level of depression, irritability, frustration, anger and anxiety, all because of the change of living conditions and the strict military rules, may also lead to initiation or deepening of unhealthy habits such as smoking [1-2,6-8].

Smoking in its turn can lead to the poor performance of recruits, affect their health status and physical fitness[1-2].

No prior smoking cessation programs were implemented in Armenia, and particularly in the military. Recent antismoking programs in the world connected with the military were the Peer Cessation Program in Military/Thailand and Buddhist Monk Smoking Campaign/Cambodia. These programs have shown positive results.

*Magnitude of smoking in Armenia*

Tobacco use is one of the chief preventable causes of death in the world. The World Health Organization (WHO) attributes about 4 million deaths a year to tobacco use, a figure expected to rise to about 10 million deaths a year by 2030[9]. Unless this trend is reversed, 7 million of these deaths are projected to occur in the developing world [9]. It is estimated that tobacco was the cause of about 4,400 deaths in Armenia in 1995, 90% of which were men[10].

This number represents about 16% of all deaths (26% of male deaths, 3% of female deaths). This is a dramatic increase compared to only a decade earlier, in 1985, when the

percentage of deaths attributable to tobacco was estimated at 10% (19% for males, 1% for females)[10].

During the last decade, particularly in early 1990s, the European region presented a varied picture in relation to the prevalence of tobacco use. To a large extent this is related to the stage in the history of tobacco use, which has reached individual countries or groups of countries.

In particular there has been a significant increase of the number of smokers in Armenia. According to the data of National Statistical Service of RA, prevalence of smoking in 1998 was 63.7% of males, 1.2% of females in Armenia [10].

According to the same source of the National Statistical Service after two years there was an insignificant increase of smokers in 2000-2001 67.5% of males and 3.1% of females became smokers. These data do not provide the real picture of the prevalence of smoking. The prevalence is expected to be much higher than these numbers. There were several small non-governmental surveys providing numbers exceeding the numbers provided by governmental sources stating that 70-72% of males are smokers and 25-28% of females are smokers in 1995. See Appendices Figure2.

*Strategy Appraisal*

Based on the previous literature review the generation and assessment of various measures/strategies for achieving the set objectives and target for this proposed program were developed. The tobacco control measures in general include education and behavioral change, increased taxes and tariff controls, smoke-free areas, age restrictions on the purchase of tobacco products, advertising restrictions and bans, control of smuggling tobacco products across borders etc. The emphasis of this proposed program will be

education and behavioral change. The proposed intervention will be presented to Ministry of Health, Ministry of Defense and Ministry of Education and Science for approval to support for implementation and evaluation of the program. The implementation of the program will last four months, and the intervention itself will last one month. The evaluation of the program will be accomplished by initial and final questionnaires during a four-month period in each of two enlistment periods annually. To assess the knowledge of recruits by initial (first month of enlistment) and final (fourth month of the enlistment) questionnaires, and comparing these two results. For the military environment, the program will promote physical fitness and healthy life style, while monitoring and adjusting the program as needed to ensure the program effectiveness.

The feasibility of the program is based on creating a motivating environment emphasizing physical fitness and healthy life style along with monitoring and co-ordination to evaluate the program effectiveness. The success of the program will be dependent upon the military environment and unit culture, where the implementation will take place. Educating and raising awareness of smoking hazards among recruits is one of the tools toward achieving the goal of smoking reduction. The educational programs for smoking cessation are proved to be cost-effective [11-12].

*Recommendation for a course of action regarding smoking cessation program among army recruits.*

The effectiveness of community based smoking prevention programs can be enhanced and sustained by comprehensive health education and by community-wide programs that involve peers, medical officers, community organizations and all other elements of the social environment of the recruits. Education and raising awareness of recruits about

smoking hazards can be the primary action used towards smoking cessation in the preparatory army units. The target recruit population is one of the psychologically vulnerable groups in Armenian society, and the program actions will be directed toward the achievement of behavior change through the creation of a motivating environment and support from the community.

***Rationale:*** The training of medical officers for improvement of their knowledge, and for the development of their teaching-counseling skills for smoking cessation program will be one of the strengths of the program. This strategy will lead to the sustainability of the program beyond the initial funding period. The training of a particular group of recruits for peer education will increase the effectiveness of the educational process. Peer educators will become effective and credible communicators, who will have inside knowledge of the intended audience, and use appropriate language/terminology and gestures, which will allow their peers to feel more comfortable and open to learning. Peer education is also a cost-effective intervention strategy because the use of volunteers makes it inexpensive to implement and/or expand.

## Methodology

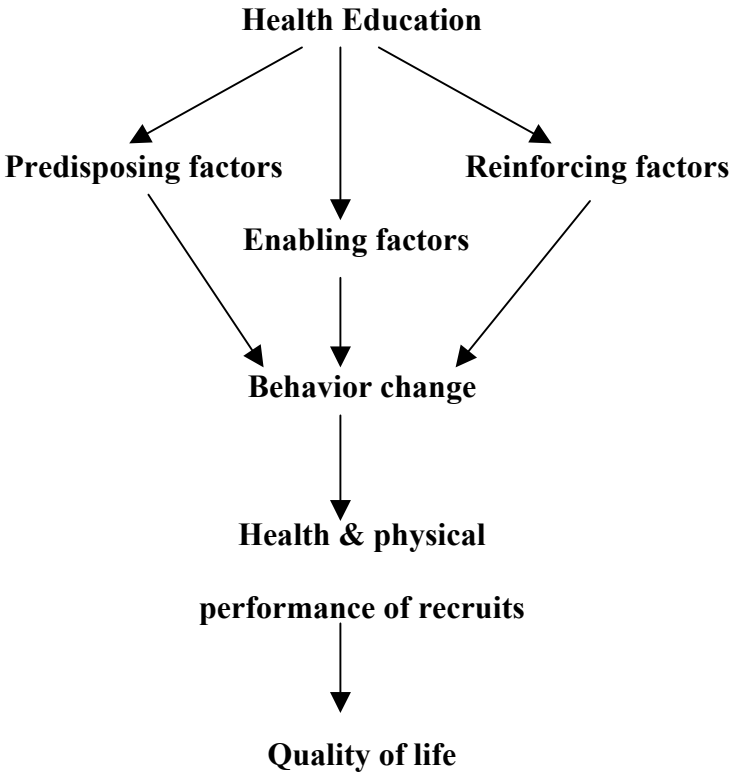
### Conceptual Framework

According to health promotion concept health education at the community level is more effective, and will affect behavior change in comparison with the individual level [13]. There are different theories of behavior change such as the Theory of Planned Behavior/Reasoned Action by Fishbein and Ajzen, Steps to Behavior Change by Piotrow, Stages of Change Theory by Prochaska which describe different frameworks of behavior

change. The PRECEDE model illustrates the overall conceptual framework for this smoking cessation program. The conceptual framework identifies:

- Enabling factors (knowledge and awareness of recruits)
- Predisposing factors (attitudes, perceptions and beliefs of recruits)
- Reinforcing factors (medical officers, peers)

Here the environment of the army unit and its culture play a significant role. This proposal is aimed to have an impact on enabling, reinforcing and predisposing factors using health education, which in its turn will lead to change of behavior of recruits, and in a long run to exert a positive effect on their health and physical performance.



**Implementation plan synopsis**

The proposed program is intended to reveal the problem of smoking among new recruits mainly of age 18-25, and the impact of smoking with the standards of body composition, fitness and appearance for the purpose of achieving and maintaining military readiness.

At initial stages it is significantly important to assess the relationships between active-duty military status, military weight standards, concerns about weight gain of recruits, and anticipated relapse after smoking cessation. The present review examines the impact of basic recruit training on health and lifestyle. Many of those recruited begin training with a less than optimal lifestyle with respect to fitness, smoking habits, alcohol consumption [6-9].

When the assessment of those relationships is completed the next step will include the enhancement of training programs that address fitness and lifestyle, minimizing potential losses in health and efficiency from upper respiratory infections, cardiac insufficiencies, mental disturbances, and adverse responses to extreme environments.

The proposed educational program is cost-effective and mainly will need equipment, human resources for the development of questionnaires, booklets and leaflets, interviewers for the interviews with recruits, training of medical officers for involving them in the education process [14], training of some recruits as peer educators [15-16], financial resources will cover the payments for equipment and facilities, as well as staff salary.

*Time Frame of the Program*

The proposed program will last for four months starting from the army enlistment period. The Gantt Chart in Table 2 shows the planned activities and their duration that will take place during the program implementation.

After the particular army unit is selected and an agreement from the Ministry of Defense is given, the staff of the program will be hired by the principal investigator. The project coordinator will be responsible for the management and coordination of the activities of the program, as well as for the training of interviewers, data entry operators, medical staff training, and peer-educators training. The project assistant will be responsible for the preparation of questionnaires and educational materials. The project coordinator and project assistant will conduct the presentation of the project materials.

1. Preparatory stage of the program will include the development of educational materials booklets, leaflet, acquiring of videotapes, development of scenarios for role playing using sources including library of Ministry of Health, CDC, WHO. Training of interviewers and operators for data entry will take place. The educational modules for smoking cessation programs for medical workers and the general population developed by AUA/CHSR as part of the Armenia Social Transition Program funded by USAID will be used also in the program as educational materials. The preparatory stage will last for the first two weeks of the first month of implementation. In this stage the pretest and revision of the instrument and the database will be done. The Training of Trainers (TOT) course for interviewers' training will be developed.
2. The second stage includes the needs assessment of newly enlisted recruits in their first month of military service. The interviews will be based on questionnaires for gathering anonymous and detailed individual information about each recruit's attitudes, beliefs,

knowledge, access to cigarettes, the extent of peer pressure and authority pressure, the role of environment change and adaptation to military life. The decision to distribute questionnaires before the intervention is reasonable in terms of discovering the actuality of the smoking problem in the particular unit as a target group. Anonymous questionnaire and the possibility to involve whole members of target group make this method feasible. Initial interviews will take place on the first half of the second month of the program and will last for 8 days (426 interviews), final interviews will take place on the first half of the forth month and will last again for 8 days (presumably 426 interviews). Data entry will be accomplished by double entry by 4 operators to minimize the data entry bias. Entry of each questionnaire will last almost five minutes, so entry by 4 operators will require almost 20 hours/3 days to be completed. Data cleaning will follow the data entry and will last for 2 days. Data analysis will be done after each entry (initial and final) and the final report will be written.

3. Organization of meetings with intervention group including all recruits of that particular army unit and distribution of booklets and leaflets, encouraging discussions, role-playing, scenario analysis and other appropriate techniques. These methods will help to gather general information about recruit knowledge, attitudes toward smoking and smoking prevention. During the discussion many behavioral and environmental factors will arise which can be used for further implementation of smoking cessation programs. This stage will last for one month. Schedule of meetings and the duration will be arranged based on the agreement and cooperation of military managers of that particular unit. Initially it is assumed to have two meetings with each sub-group (25 participants) each week during one month, totally 8 meetings each.

4. Organize meetings with military and medical staff. The purpose is to introduce the main characteristics of the project and to determine whether the smoking is an actual problem in the particular unit, and what contribution can they give. Cooperation with military staff will improve the outcome of the program. Here the medical officers play significant roles for advice and detailed explanations of topics concerning smoking hazards and smoking cessation. Medical officers become the link between recruits and the program and motivate smokers to set a quit date, help the recruits to resolve problems that result from quitting, motivate those who are reluctant to quit, reinforce intentions to quit, prescribe nicotine replacement treatment when appropriate and encourage relapsed smokers to try again. Medical officers should also be prepared to control and support those who quit to deal with the withdrawal syndromes, such as craving, irritability, frustration or anger, anxiety, difficulty concentrating, decreased heart rate, sleep disturbance, increased appetite or weight gain. The TOT course that will be provided for the training of medical officers is provided in appendix 1.
5. Peer education will be a significant component of tobacco control program. Young people often are more comfortable discussing smoking issues with peer educators and counselors than "outsiders" or authority figures. Peer education, which increasingly has the objective of behavioral change rather than mere information exchange, can include group or individual informal discussions, video and role-playing, and other activities that extend beyond the classroom. The TOT course that will be provided for the training of group of recruits, as peer educators will be developed.

**Evaluation plan synopsis**

The main goal of the evaluation is to find out to what extent the smoking cessation program will be applicable in Armenian military and to what extent can the prevalence of smoking be reduced in the target population due to a smoking cessation program.

The evaluation of the program will be based on the assessment of the knowledge and attitudes towards smoking, and practices of smoking of recruits by initial and final questionnaires, and the comparison of these two results.

*Study Design and sampling strategies*

Quasi-experimental pre-posttest with control group design is suggested for the evaluation of the study. The design is presented by $\mathbf{O_1\ X\ O_2}$

$\mathbf{O_1\quad O_2}$

$O_1$ is the baseline data collection/initial interviews on first half of the second month.

$O_2$ is the post intervention data collection/final interviews on first half of the forth month

X is intervention/education.

Sampling will include two stages. At the first stage two units out of seven preparatory units located in different areas in Armenia will be selected either by simple random sampling or by convenience. One unit will be an intervention group and the other will be a control group.

At the second stage the study population will be selected out of target population by simple random sampling or again by convenience.

*Inclusion criteria*: first month recruits to preparatory army units.

*Sample size*

In sample size calculation the use of basic formula 2 equal size parameter estimate to have a large enough sample to detect a specified difference of 0.1 between intervention and control groups [17].

$$\mathbf{N=2z^2 *pq/d^2}$$

The values of $\alpha$ and ß are estimated as $\alpha$=0.05(two-tailed test)

ß=0.2 with aPower=0.8

$z_\alpha$=1.96 assuming a 95% level of confidence.

Since there is no available data on the prevalence of smoking in Armenia particularly among recruits, the most conservative estimate of p was chosen.

p=0.5 q=0.5

with the desired precision of d=0.1.

$$\mathbf{N= 2*1.96^2*0.5*0.5/0.1^2=192}$$

Based on the literature the response rate (drop outs, refusals) in similar smoking cessation programs is 90%[18], accordingly a sample of 214 recruits is needed for evaluation in each group.

**N=192/0.9=214**

*Study Instrument/Data collection*

A self-administered questionnaire will be provided to both intervention and control groups. The self-administered format was chosen in order to give the army recruits more privacy hopefully to be more open and honest in answering questions. The questionnaire was adopted from Global Youth Tobacco Survey (GYTS) Core Questionnaire [19] and

redesigned to meet the needs of the program. This instrument is designed to gather data on five topics:

- Prevalence of cigarette smoking among army recruits
- Knowledge and attitudes of recruits towards cigarette smoking
- Access to cigarettes
- Role of the environment (peers, friends)
- Cessation of cigarette smoking

The questionnaire consists of 24 questions. The main concepts and domains are represented by the number of questions. Included are two demographic questions, eighteen short answer and yes/no questions on smoking status, knowledge, behavior, practices and perceptions, two short answer questions on physical performance, four short answer questions on cessation temptation. See Appendix 3. Pre-testing of the questionnaire and final revisions will be completed prior to interviews. One of the limitations of the study is the concern about the validity and reliability of the instrument since it was adapted for use.

*Data Analysis*

The objective of the proposed program is to analyze the significance and impact of independent variables in prediction of the dependent variable -smoking status.

The independent variables and their measurement level are following:

Attributes with demographics-interval (continuous)

Knowledge-categorical (binary)

Perceptions-categorical (binary) and interval (continuous)

Dependent variable and its measurement level

Smoking status-Categorical (binary)

The statistical analysis of these data will be done using the Stata statistical package. It is assumed that the analysis will:

- Determine is there a statistically significant difference of RR in intervention and control groups before the intervention by baseline data and after the implementation after follow-up.
- Two-sample t-test for the difference of mean smoking status, to determine what is the mean change between intervention and control groups after intervention.
- Paired t-test for intervention group only, the pairs will be the same individuals in pre and post test, to assess the mean change of smoking status in that group.

**Budget and financing**

The proposed budget for the program is presented in table 1. The estimated budget for the program is approximately $13,300, including salaries, equipment lease and operational costs. The staff includes the principal investigator, project coordinator, project assistant, two interviewers, four data entries/analysts and a driver. The whole staff, with the exception of interviewers and data entries, will work during the entire four month period. The staff salary is about $6,300.

Equipment-computers, laser printer, LCD and copier machine will be leased at a total cost of $3,400.

The rest $3200 is envisaged for operational costs, like office space, communications, office supplies, fuel, car rental and maintenance.

Unallocated $500 is needed for contingency expenditures.

**Study limitations**

The proposed program has some limitations in terms of external and internal validity. The study instrument was adapted and redesigned to meet the needs and requirements of the study. As such the instrument was not pre tested and thus its applicability can be one of the major concerns in terms of its validity and reliability of the results.

Even though the intervention and control groups are selected from separate preparatory army units to eliminate the cross-sectional contamination and a control group was selected to adjust for testing effect, the test effect can be a threat to internal validity. If the study population was selected by convenience during the first and second stages of sampling it will be a concern for external validity as a selection/experimentation interaction. Thus issue becomes to what extent the results of the study can be generalized for other preparatory army units.

**Ethical considerations**

The proposal was submitted to the Departmental Institutional Review Board (IRB) committee within the College of Health Sciences/ Committee on Human Research of the American University of Armenia and was approved as a study proposal.

The proposed program will have minimal risk to study participants. The proposed program will provide the recruits with privacy and respect, and will be addressed to protect the ethical considerations of Human Rights. Consent will be provided prior to the interview, to assure that the participants are informed about the study. The questionnaire that will be provided to recruits before the implementation of the program and after the implementation will guarantee their confidentiality using unique identification (ID)

numbers. The data will be used as aggregate data and only the principal investigator, project coordinator and the data analyst will have an access to ID numbers of participants.

**Community Support**

Health education is important but is insufficient by itself for effective tobacco control. The support of Ministry of Defense, Ministry of Health and Ministry of Education and Science is crucial for this program and will highlight the concern for a future healthy nation. Community support is critical in establishing a motivating environment for overcoming the expected psychological barriers for the establishment of rapport between the participants and the program. The role of medical officers is significant in the program implementation, but also the military officers and the other military staff are important in order to encourage and to support the recruits toward smoking cessation.

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Table1.

| # | Item description | Quantity * Duration | Price | Total Cost | Remarks |
|---|---|---|---|---|---|
| **1** | ***Personnel Salaries (tax inclusive)*** | | | | |
| | Principle Investigator | 1*4months | $300/per month | $1200 | |
| | Project Coordinator | 1*4months | $300/per month | $1200 | |
| | Project Assistant | 1*4months | $250/ per month | $1000 | |
| | Interviewer | 2*16days | $3/ per interview | $1278 | 426 interviews |
| | Data Entry/Analyst | 4*10 days | $3/ per hour | $960 | 426 interviews |
| | Driver | 1*4months | $150/ per month | $600 | |
| | **Sub-Total** | | | **$6238** | |
| **2** | ***Equipment Lease*** | | | | |
| | Computer | 6*4months | $100/ per month | $2400 | |
| | Laser Printer | 1*4months | $100/per month | $400 | |
| | LCD | 2* 10 days | $20/per day | $400 | |
| | Copier machine | 1*4months | $50/ per month | $200 | |
| | *Sub-Total* | | | **$ 3400** | |
| **3** | ***Operational Costs*** | | | | |
| | Office Space | 1*4 months | $250/ per month | $1000 | |
| | Communications | 4 months | $100/per month | $400 | |
| | Office supplies | 4 months | $250 /per month | $1000 | (paper, pen, pencils, cartridge) |
| | Fuel | 4 months | $100/per month | $400 | |
| | Car rental/Maintenance | 1*4months | $100/per month | $400 | |
| | **Sub-Total** | | | **$3200** | |
| | **Contingency expenses** | | | **$500** | |
| | **Total** | | | **$13338** | |

Table2.

| **Planned activities** | **Months** | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Staff hiring | | | | |
| Training of Interviewers | | | | |
| Training of medical staff | | | | |
| Training of peer-educators | | | | |
| Questionnaire Preparation(pretest/revision) | | | | |
| Preparation of educational materials* | | | | |
| Equipment, Facility Acquiring | | | | |
| Interviews, Data Entry/Analysis | | | | |
| Presentation of Educational Material | | | | |
| Monitoring/Evaluation | | | | |

**APPENDIX 1.**

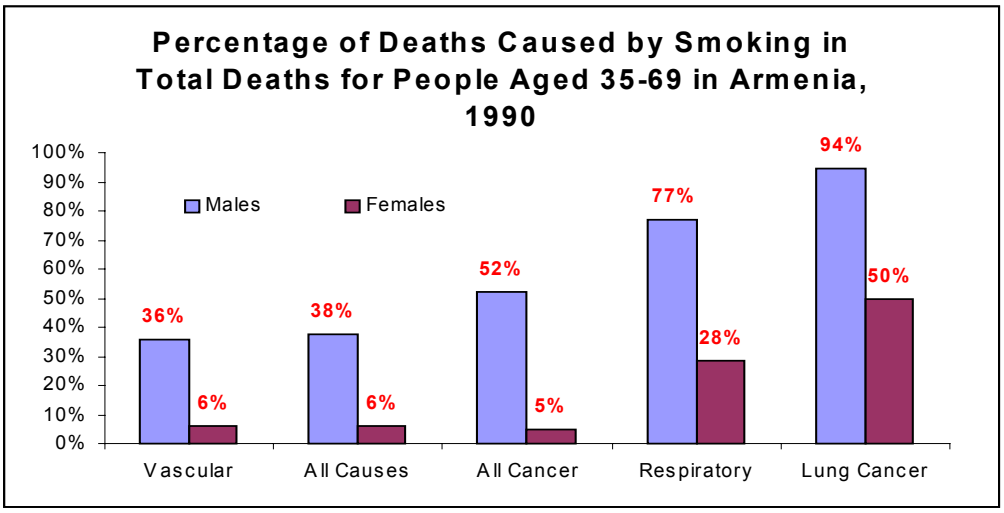


*Figure1.Source: Peto, Lopez et al, 1992, 1994*

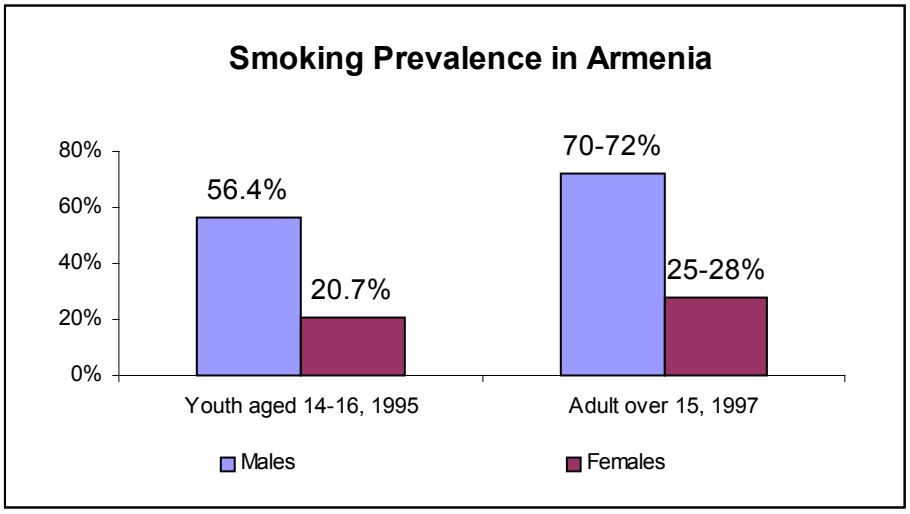


*Figure2. Source: Youth Data: Lragir Daily – Noyan Tapan, 07/27/1996. Data from a study conducted in 1995 by Armenia NIH. Adult Data: Harutunian A. Public speech at the conference "Fight against tobacco", Yerevan, 1997.*

APPENDIX2

# Unit of Instruction for the Training of Medical Officers for the Smoking Cessation Program in the Military in Armenia

***The Goal of the training:*** *After the completion of six day training course medical officers should be able to participate in smoking cessation program in particular army unit as educators and promoters of healthy life style.*

*After the training course the following objectives should be achieved by medical officers:*

- *Improvement of medical knowledge concerning anatomy and physiology of respiratory system, diseases connected with smoking and smoking hazards.*
- *Interpersonal and communicational skills for establishment of rapport between recruits and medical officers.*
- *Improvement of smoking cessation counseling efforts.*
- *Introduction to educational materials.*
- *Teaching techniques and professionalism.*

| Day | Trainers Activity | Student Activity | Duration | Setting | Utility |
|---|---|---|---|---|---|
| **Introduction, Lecture "Respiratory System"** | | | | | |
| **I** | **Project Coordinator introduces the program, its goal, introduces the trainers and their roles in teaching. Asks the students to present themselves. Project Assistant distributes the schedule of training and suggest to view it and to make clarifications if needed** | **Listening, self-introduction, questions.** | **30 minutes** | **Small Auditorium** | **Copies of schedule** |
| **Break 5 minutes.** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| I | Project Assistant distributes the handouts on anatomy of lung, copies of power point presentation and pencils.<br>Instructor introduces the distributed material. He/she presents the first topic "Anatomy and physiology respiratory system" with power point. | Students listen, make notes. | 45 minutes | Small Auditorium | Copies from the book of anatomy , copies of power point presentation, pencils, Notebook, LCD |
| | | Break 10 minutes. | | | |
| I | Instructor facilitates the discussion with the whole group.<br>Gives home assignment with prior distributed handouts. | Students discuss the topic presented, add additional information based on their prior knowledge and experience. | 30 minutes | Small Auditorium | |
| | Lecture "Smoking and its hazards" | | | | |
| II | Project assistant distributes the copies of ten minute quiz-test, gives instructions and rules on how to complete the test, after ten minutes gathers the completed tests.<br>Project assistant distributes the copies of power point presentation. | Students complete the test and submit to project assistant. | 20 minutes | Small Auditorium | Copies of quiz-test |
| II | Instructor presents the topic of "Smoking and its hazards" with power point. | Students listen, make notes, ask questions. | 30 minutes | Small Auditorium | Notebook, LCD, |
| | | Break 15 minutes. | | | |
| II | Instructor continues the presentation of the topic of "Smoking and it's hazards" with the video tape.<br>Instructor facilitates the discussion with the whole group. | Students watch the tape.<br>Students discuss the topic presented, add additional information based on their prior knowledge and experience.<br>Students summarize the main smoking hazards to human body, write on blackboard. | 55 minutes | Small Auditorium | Video player, TV, chalkboard, |
| | Introduction to Educational Materials. Teaching Techniques | | | | |
| III | Project assistant distributes the copies of ten minute quiz-test, gives instructions and rules on how to complete the test, after ten minutes gathers the completed tests. | Students complete the test and submit to project assistant. | 20 minutes | Small Auditorium | Copies of quiz-test |
| III | Project coordinator distributes the educational materials (samples of booklets and leaflets that further should be used in the smoking cessation program), with the group goes through them. | Students along with project coordinators descriptions and explanations go through educational materials.<br>Ask questions, make clarifications. | 30 minutes | Small Auditorium | Booklets and leaflets. |
| | | Break 15 minutes. | | | |

| | | | | | |
|---|---|---|---|---|---|
| **III** | **Project coordinator explains the meaning of teaching techniques via role playing with project assistant, and showing the video tape of different teaching techniques.<br>Project coordinator facilitates a free-discussion and brainstorming within the topic of teaching techniques.** | **Students watch, make notes.<br>Students summarize the meaning of teaching techniques, differences, generate more new ideas about good teaching techniques.<br>Two of the students play a role with a scenario-introduction to educational materials to army recruits.** | **55 minutes** | **Small Auditorium** | **Video player, TV,** |
| **Interpersonal and Communicational Skills. Counseling skills.** | | | | | |
| **IV** | **Project assistant distributes the handouts of power point presentation.<br>Project coordinator presents the main aspects of interpersonal and communicational skills, how to establish a rapport between the teacher and army recruit /or between the teacher and the group of army recruits. He/she uses the power point presentation for support.** | **Students listen, make notes.** | **30 minutes** | **Small Auditorium** | **Notebook, LCD** |
| | **Project coordinator and project assistant facilitate small-group discussions (5 students each)** | **Each group discusses the main points, summarizes. One of the group members presents the summary.<br>Each group makes a scenario of teacher and recruits communication and rapport establishment, writes down and present it by role playing of two students.** | **30 minutes** | **Small Auditorium** | |
| **Break 15 minutes.** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| IV | **Project assistant distributes the handouts on "medical officers as smoking cessation counselors". Project coordinator introduces the pre and post cessation periods, the role of medical officers in those periods. Project coordinator introduces the nicotine replacement therapy with the inclusion of nicotine replacement items, antidepressant-Wellbutrin, non-nicotine pill-bupropion hydrochloride or Zyben. Project coordinator introduces the topic to be covered by students during their fielding the next day, the needed duration and the sequence material to be presented. Project coordinator assigns to teach a group of 10 army recruits to each pair student.** | **Active listening, ask questions, make notes. Each pair of students are assigned to teach a group of 10 army recruits in particular army unit.** | **45 minutes** | **Small Auditorium** | **Copies of handouts, nicotine replacement items(nicotine gum, patches, inhalers), bupropin hydrochloride or Zyben, Wellbutrin etc.** |
| | **Fielding. Issues of teaching difficulties** | | | | |
| V | **Project assistant distributes the booklets and leaflets, checklists for teaching effectiveness for student peer evaluation. Project coordinator and project assistant separately accompany two pair of students.** | **Receive the booklets, leaflets. Take a rented car and go to assigned army unit.** | **15 minutes** | **Small Auditorium** | **Booklets, leaflets, peer evaluation checklists and checklists for supervision, 5 rented cars** |
| | **30-60 minutes break to reach the particular units** | | | | |
| | **Project coordinator and project assistant separately supervise the classes making snap-shot observations. After those snap-shot observations with one pair they leave for another army unit for the next pair of students and after the supervision of second pair they leave for the third pair. They use checklist for evaluation.** | **Reach the unit. Get the classroom. One student starts the introduction, distributes the booklet, leaflets, introduces them to recruits. Second student fills in the checklist for peer evaluation, makes notes about firsts techniques and effectiveness(manners, time considerations).** | **40 minutes** | **Five small rooms provided by five different army units** | **A group of army recruits (100 army recruits)** |
| | **Break 10 minutes** | | | | |
| | **Project coordinator, project assistant continue to make snap-shots.** | **Second student continues the presentation of the material First student fills in the checklist for peer evaluation, makes notes about seconds techniques and effectiveness (manners, time considerations).** | **40 minutes** | **Five small rooms provided by five different army units** | **A group of army recruits (100 army recruits)** |
| | **Evaluation of Fielding** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **VI** | **Project assistant collects the peer evaluation checklists. Project coordinator, project assistant start discussion about the fielding experience. Project coordinator read the peer checklist during the discussion.<br>Project assistant summarizes the main points with the help of students writing down on chalkboard.** | **Students discuss their fielding their impressions and feelings, weaknesses and strengths, unexpected problems or major errors during the teaching process, received feedback from recruits if any, the importance of peer evaluation, make recommendations.** | **45 minutes** | **Small auditorium** | |
| **Break 15 minutes** | | | | | |
| **VI** | **Project coordinator provides a feedback from supervision snap-shot observations.<br>Project assistant adds general comments on competencies trained during the course from supervision checklist to the summarized list of problems on chalkboard.** | **Students listen, discuss the project coordinator's feedback.** | **30 minutes** | **Small Auditorium** | **Chalkboard** |
| | **Project assistant distributes the training course evaluation forms and leave the room. Project coordinator evaluates the overall effectiveness of the group.<br>Project coordinator distributes the certificates of the completion of the training course.** | **Students evaluate the training course.** | **15 minutes** | **Small Auditorium** | **Course evaluation checklists** |

**APPENDIX3**

**Initial Questionnaire Date __ __ __ __ __ __**

**ID#_____**

**1. Date of Birth(day/month/year)__ __ __ __ __ __**

**2. Residency _____(City, Village, Marz)**

**3. Have you smoked before? YES □ NO □**

**4. Are you currently smoking? YES □ NO □**

**5. How old you were when you start smoking? _____(year)**

**6. How many years have you smoked? _____(year)**

**7. Have you tried to quit before? YES □ NO □,if no go to #9**

**8. If yes, how many times? _____(times)**

**9. Do you light a cigarette and forget to smoke it?**

**a. Often □**

**b. Occasionally □**

**c. Never □**

**10. Do you find that it is difficult to refrain from smoking in times when it is not allowed? ( When you are doing your military duties.) YES □ NO □**

**11. Are you using the free distributed cigarettes? (Zinvor)**

**a. Always □**

**b. Occasionally □**

**c. Never □**

**12. Are you smoking the cigarettes provided by your family, friends?**

**a. Always □**

**b. Occasionally □**

**c. Never □**

**13. Do you smoke more frequently during the first few hours after waking up than during the rest of the day? YES □ NO □**

**14. How soon after you wake up do you smoke your first cigarette?**

**a. Less than 5min □**

**b. 6-30min □**

**c. 31-60min □**

**d. more than 60 min □**

**15. Do you think you need to smoke cigarettes?**

**YES □ NO □**

**16. Do others think that you need to smoke cigarettes?**

**YES □ NO □**

**17. Do you think that smoking will have a negative impact on your health?**

**YES □ NO □**

**18. Do you have information about how smoking can harm your health?**

**YES □ NO □**

**19. Does smoking affect your physical performance when exercising?**

**YES □ NO □ , if yes go to #20**

**20. What physical difficulties did you observe during the exercising?**

**a. Breathing difficulties □**

**b. Feeling of tiredness □**

**c. Headaches □**

**d. Dizziness □**

**e. Feeling of vomiting □**

**f. Other(specify)_____**

**21. Do you want to quit? YES □ NO □**

**22. Do you think you can quit whenever you want? YES □ NO □**

**23. Who or what can make you quit?**

**a. family □ c. girlfriend □ e. health problems □**

**b. friends □ d. money □ f. real stories of the harm of smoking □**

**24. Do you think this program will be helpful for you to quit/ or not to start?**

**YES □ NO □**

**Thank you for your participation.**