Implementation of Health Care on High School Students in Amol City Case Study: Control Violence Behaviour and Smoking

Fereshteh Fani¹, Seyed Jamaledin Tabibi², Mahmood Reza Gohari³

^{1.} M.Sc., Department of Health Services Management, Science and Research Branch, Islamic Azad University (IAU), Tehran, Iran.

fani.fereshteh@gmail.com

Abstract: Students' health promotion is a key strategy in long run planning and also mentioned in the Iranian Constitution. This analytical study was done by cross-sectional quantitative method. The Population of the study was consist of 2182 high-school students from first and second base. 250 students were selected as sample. Cronbach's alpha reliability was 0.8 and confirmed. Using SPSS software and Mann Whitney Kolmogorov-Smirnov test was analyzed. Create a learning environment, supportive and positive communication in schools is more effective in preventing risky behaviors health.

[Fereshteh Fani, Seyed Jamaledin Tabibi, Mahmood Reza Gohari. **Implementation of Health Care on High School Students in Amol City Case Study: Control Violence Behaviour and Smoking.** *N Y Sci J* 2016;9(2):63-70]. ISSN 1554-0200 (print); ISSN 2375-723X (online). http://www.sciencepub.net/newyork. 11. doi:10.7537/marsnys09021611.

Keywords: Health Care Plan for Students, Risky Health Behaviours in Schools, Amol City.

1. Introduction

Any action in order to ensure physical, psychological and social health of students is responsibility of the Ministry of Education which should be implemented by help the Ministry of Health, Treatment and Medical Education and other relevant organizations, to realize these goals." (Helmseresht, Delpisheh, 2007). And in line with this important strategy, health promoting schools raised with new horizons.

"One of the features of adolescence is proliferation of social relations, and teen always tries to bring out his social relations form his family restrictions, and expand it to others, especially peers "(Taghipour, 2001, p. 3).

These components in health promoting schools which recommended by WHO member states include:

- 1. A comprehensive program of health education in schools;
- providing clinical services in the school through the physical, mental, social and spiritual health care system for students, and also providing clinical services (public services and health screenings, students' health information ID card) and also provide special services to students with special needs;
- 3. healthy environment in school;
- 4. Improve nutrition feeding in schools;
- 5. physical activity in schools;

- 6. improve the health of school staff, active participation of parents and educators in students' health promotion;
- Mental health and counseling services in schools and also training and health promotion based on the model of peer education;
- 8. Volunteers and community participation in health promotion programs in schools, as well as creating a network of health volunteers, students in line with their active participation. (Amirkhani, 2008, p. 15) that is recent study analyzed and evaluated based on data in section 7.

"The study shows till September 2008, the important risk factors of non-communicable and lifestyle-related health and disease in the latest survey revealed that 96.8% of people aged 15 to 24 do not smoke, 0.7% of them smoke more than 5 cigarettes per day and age of most smokers in this group are among 15 to 19 years old"(Amirkhni, 2008, p. 11).

Evaluation of health promotion indicators in schools is a very useful tool to assess the effectiveness of health interventions in the health sector for adolescents and young adults in the country; and it's possible before exacerbate the health problems in this age group, design prevention tools are to provide the necessary investment to reduce the

² Professor, Department of Health Services Management, Science and Research Branch, Islamic Azad University (IAU), Tehran, Iran.

^{3.} Tehran University of Medical Sciences, Associate Professor, Department of Biostatistics.

burden of disease and practically manage the health of these groups.

"According to the statistics of Drug Control Headquarters, 25% of addicts started addiction from entering to schools" (the site of Iran's Statistics Center, 2010).

Now that the Health Promoting Schools (HPS) program is implemented in several schools throughout the country, a questions in the mind researcher is that how much this program with its eight dimensions had positive affect on health of students and increase the level of young people's health indicators and whether to continue the project with these huge costs is profitable for students' interest in the health sector or not. So far, research in the field of knowledge of students about risky behaviors is done, but no research has been done on evaluation effectiveness of HPS projects and health indicators in schools.

The main objective of this study was to determine the effect of HPS project on the health of high school boys and girls in Amol City in controlling violent behaviors and smoking.

Research questions:

- 1) What is difference between control violent behavior among male and female high school students with HPS project promoters and non-executive health plan?
- 2) What is difference of smoking rate between boys and girls high school students with HPS project promoters and non-executive health plan?

3) Research hypotheses:

- 1) There is relationship between control violent behavior in male high school students and implementation HPS projects.
- 2) There is relationship between smoking among male high school students and implementation HPS projects.
- 3) There is relationship between the control violent behavior in female high school students and implementation HPS projects.
- 4) There is relationship between smoking among female high school students and implementation HPS projects.

In terms of scope, research on the influence of health factors effect on students with HPS program has been carried out.

Health promoting schools: "They are places where all the schools are active and hand in hand in order to provide a positive and integrated experiences and structures that can improve the health of students" (Amirkhani, 2008, p. 3).

Risky behaviors: "Unhealthy or risky behaviors that threaten the health aspects" (Khalesi, Alikhani, b. 2003, p. 8).

Historical Background:

In 1971, to provide the required human resources for health institutes, school institute affairs to establish the first high school of health technology should be taken into schools in Tehran.

The number of schools by the year 1978 was 17 cases in 17 provinces. From theses school before the Islamic Revolution, about 5000 people were employed as school health care and education for health services.

In 1990, followed a strong need to health services forces in schools, the Department of Nutrition and Health Education was established to coordinate educational years 1990-1991 for school health care programs, after ten years of part-time and, in fact, stay away from schools and students, again for the great mission returned to Education Ministry, served as a constant and full-time (Helm Seresht and Delpisheh, 1998, pp 19-21).

Benefits of Health Promoting Schools:

Concept of Health promoting school encompasses the following advantages:

- A) Applies a comprehensive model of health which involves aspects of physical, psychological, social and environmental health.
- B) By encouraging families to develop skills and knowledge related to the health of children involved in HPS program.
- C) Determine role of the physical environment "school building, environmental sanitation, safe water, and sports environments ..." on children's health.
- D) The importance of school social customs in support of a proper educational environment reveals environment in which the vitality of students is strengthened.
- E) Health Services regional and local binds to school up on important aspects such as parasitic infections, malaria and emphasizes that impact on health in schools.
- F) With the spread of justice in terms of education and health, increased competence and participation of girls and women in the community.

- G) Provides a supportive and positive working environment for school staff.
- H) Participation of school and community in health program measures in a way that enables students, families and community members to benefit from these measures (Amirkhani, 1998, p. 4).

Violence and Teens

"Human health can directly or indirectly be determined by his behavior. But this does not mean lack of influence of environmental factors on health. Thus, some behavior that aims to ensure the health of those who are healthy and unhealthy aspects of health threatening or risky. Youth compared to other age groups, too reckless behavior that threaten their health and adolescent age in which the risk is not strange phenomenon "(Khalesi, Alikhani, 2003, p. 8). "Violence as a cause of illness and premature death from infectious diseases surpassed with great speed. Today violence is the main cause of premature deaths among youth. Violence of the kind of self-harm factor for premature deaths of young people in real life cannot achieve your dreams." (Khalesi, Alikhani, 2003, p. 62).

"The public health with the involvement of all people in the face of this, and as credit problems will require strong government participation, local communities, non-governmental organizations is legal and requires the participation of responsible individuals and researchers, public health, education and social sciences." (Khalesi, Alikhani, 2003, p. 63). "In 1996, the World Health Association approved the discontinuation of names. The resolution violence is considered one of the priorities of health care and public calls for the design of Operations for the prevention and fight against it. Explaining the great human health and wellbeing of people and communities still need to identify indicators to measure the times of violence "(Khalesi, Alikhani, 2003, p. 64).

Symbols of mental health in students

- 1. Know your prestige;
- 2. socialize with peers and satisfaction from it;
- 3. Having self-confidence;
- 4. respect for law and order;
- 5. Tolerance and self-being;
- Learn experience from instructor's advice and use them.

Smoking and hard facts:

"Approximately four million premature deaths occurred due to tobacco-related diseases and till 2030, approximately ten million deaths in the year

will happen. Many victims of tobacco in the future are among present children and adolescents. Most people start smoking in adolescence and youth have and to cause dependence and nicotine addiction continue to use it to adulthood "(Khalesi, Alikhani, 2003, p. 38).

"According to the World Health Organization" If a person over the age of 25 and tobacco users were more likely in older age groups is very low. "According to various surveys, more than 95 percent of smokers start smoking before the age of 19 "(Khalesi, Alikhani, 2003, p. 38).

Smoking and students

With regard to smoking, the students are divided into several categories as follows:

- 1- Non susceptible, Nonuser;
- 2- Susceptible, Nonuser;
- 3- Experimental supers;
- 4- Irregular Users;
- 5- Regular Users;
- 6- Persistent Smokers;
- 7- Heavy Smokers.

The first groups were under good care and have high self-esteem. The second group is those that their father, mother, sisters or brothers are smokers. They simply sit among smokers and do not have any negative view about smoking. The third group often has one or more friends who smoke. It's noteworthy that if a student enters the third group was spontaneously drawn towards other groups. Adult smokers enter students to second group and then take them to friends and classmates to enter the third group and other groups.

To fight smoking as much as possible should be worked on first and second groups. Education should be the starting age when students are in first or second group. For example, in the United States, educations against smoking in schools will begin at the age of eleven. Now in some countries the number of new cases of smoking among girls is equal to or even higher than that of boys. For example, in Belgium, France, Germany, Netherlands, New Zealand, Norway, the United Kingdom and the United States, adolescent girls smoke more than boys. Even in areas where measures against cigarette smoking rate of loss in girls than boys. But any reason to suspect heavy smoker in boys than in girls (Khalesi, Alikhani, 2003, p. 39-40).

"In girls, age of smoking is directly associated with puberty. If maturity be low, the age of smoking becomes low too. In general, most young smokers, especially female smokers smoking at an early age in industrialized countries ", mostly under the age of 19" begin "(Khalesi, Alikhani, 2003, p.

41)."According to the World Health Organization, most anti-smoking activities carried out in many countries on schools, but with deep ties to the community because despite widespread smoking at the community level and with a variety of covert and overt propaganda, and despite its widespread use by parents and adults, in no way does not seem unlikely that students with their inquisitive mind try to smoke eagerly. Based on studies in the UK, 90 percent of teens who smoke 3-4 cigarettes become become regular and permanent consumers "(Khalesi, Alikhani, 2003, p. 46).

Mousavi (2001) in a study entitled "The role of education, life skills and coping strategies in the prevention of smoking, has investigated cannabis and alcohol among youth of the province," concluded that the potential growth of individual life skills training to deal with stress and problem-solving, confidence, growth and improved family relationships and communication with peers, prevention of dropouts among students and active participation of students in the training and transfer of learning.

Tavakolizadeh et al. (2002) carried out a study to "investigate the mental health of youth smokers and non-smokers Gonabad". The results of this study showed that 5.9 percent of smokers are youth that 12.9% percent men and 1.7 percent are women. Cigarette smoking among men aged 25 to 30 years and smokers' younger brother and sister were observed and significantly higher. The findings also indicated that 21 percent of people with mental illness are suspicious of the youth smoking rate (47.1%) was significantly higher than male youth (19.3 percent). The data also suggest that the average young male (19.3 percent) was higher. Data also showed that the mean scales of anxiety, social dysfunction and depression in young smokers (respectively 10.45, 9.7 and 4.63) was significantly higher than male youth (3.76, 6.53, 2.19) respectively.

Nojoomi et al. (2003) studied entitled "Evaluation of awareness about AIDS among high school students in Tehran". The data collection tool was a questionnaire with 32 questions about prevention and transmission of AIDS. Using multistage sampling questionnaires were distributed to high school students. Results showed that 77.5 percent of the students had a good knowledge and 22.3 percent had moderate knowledge about the disease. Level of knowledge of good and average transmission was 90 percent and 9.8 percent, respectively. These ratios on ways to prevent the disease were 48.5% and 50.8%, respectively. Knowledge of girls was significantly higher than boys. By increasing education level, knowledge of students increased to maximum rate (86.5 percent good knowledge) was obtained in pre-university courses. Experimental field was students' knowledge of other disciplines. (87.3% good) and this difference was statistically significant.

On the use of tobacco and other substances in the group of middle school students have 89 percent or pipe smoking hookah tobacco smoking or not, and 80 percent of high school students have not yet smoking. The mean age at first smoking was 13.9 and also 3.9 percent of students consume every day, 6.2 percent smoke at least once a week and 14.5 percent of the students smoke less than once a week.

Taremian and Mehryar (2008) studied "Effectiveness of Life Skills Training Program for prevention of drug use among middle school students". In this study, 1862 male and female students of Tehran province who were enrolled in the first class of guidance school were selected as experimental and control groups. Students in the experimental group participated in life skills training classes but control groups students didn't participate. Two groups of healthy behavior, Dr. Butwin through the implementation of a questionnaire based on statistical analysis using dependent and independent groups were compared with each other. The result was that the average scores of students in terms of material information, and changing the attitudes and skills required in the post-test materials significantly different from those in the pre-test scores.

Sayed Abadi (2010) studied "Effectiveness of Life Skills Training on mental health in Mashhad high school girl students in the academic year 2009-2010". The study population consisted of 100 high school female students saw 30 girls randomly assigned to the experimental group (n = 15) and control group (n = 15). The training program for 10 sessions of 90 minutes in the experimental group was discussed. The control group received no training. Data were collected using a questionnaire SCL90-R. The results showed that life skills training to reduce the assessment criteria (including somatization syndrome, obsessive compulsive anxiety, depression, hostility, phobic anxiety, paranoid interpersonal sensitivity, psychosis) is seen in girls.

McNeely Clea & MonneMaker, James & Blum, Robert (2002) in a study entitled "continuity of schools associated with the health of young people" showed that when young people are in schoolsponsored or school feel that they are part of the risk of drug use, violence and behavior in less risky sex. In this study, 75515 students in 127 schools were studied. The results showed that the positive atmosphere of classes, participate in extracurricular activities, and systematic and sustainable policies and small school size had a positive relationship with high affinity school.

Karcher (2004) studied "Effects of advanced consultation and the presence of a consultant on high school students' self-confidence and social skills". In this study, the presence of a consultant on students was investigated within 6 months. In this randomized study that performed on 73 young people from rural Caucasian, results indicate that self-confidence, social skills and behavioral competition was significantly positively associated with the presence of consultants.

Brenner et al. (2006) studied 'Health Study programs and school health policies ". This study aimed to describe the characteristics of school health services provided in the United States, including regional and state policies and actions in schools. Every six years, Centers for Disease Control and Prevention study of school health programs and policies (SHPPS) carried out under consideration of Centers for Disease Control and Prevention. In 2006, telephone interviews or questionnaires computers postal evaluation by state educational agencies in all 50 states plus the District of Columbia and among national representative sample of school districts was completed by n= 449. Computer assisted personal interviews with personnel in the national sample of secondary and primary school students were evaluated with n=1029.

Barry & Chaney (2009) study titled "Effects of alcohol-related behaviors and escape from school and educational objectives: a study in senior high school students in the United States". The results showed that students involved as much or school break are increased alcohol consumption and decreased as the educational aspirations of students for the period of 4 years at university or college, with the possibility of high-risk behaviors little drinking alcohol or truancy affected. In this study, school administrators and public health managers were advised to initiate efforts that leads to a reduction of alcohol consumption among students are away from school.

Ekramul & Tse Samson (2011) in a study entitled "Knowledge and attitudes of young asian on prevention of injuries in New Zealand" has

investigated risky behaviors and attitudes such damaging in the prevention of injuries in young Asian living in New Zealand's Auckland and the ideals they studied in order to mitigate these behaviors and attitudes. The findings of this study suggest that familial and cultural identities and beliefs, family and peer pressure at school have substantial impact on the incidence of risky behaviors in students.

Materials and methods:

This research set out to do, analytical research study and also in terms of methodology is quantitative research, based on deductive logic and the results of the research is applicable and its time was cross-sectional. The research findings can be generalized to the research community that it is, first and second grade high school students in Amol city. Data collection tools were based on students' risky behaviors. The questionnaire has 40 questions in two parts: demographic information and questions to assess violent behavior, behavior is related to tobacco use. In the information age, level of education, number of children, and education level of parents, father and mother were. Scoring on the Likert scale for very high (5), high (4), average (3), low (2), never (1).

Data on violent behavior and use of tobacco among high school Executive HPS with students' answers non-executive out using SPSS software using Kolmogorov-Smirnov test and Mann-Whitney were analyzed and the positive or negative effect or no effect of this project on health indicators were students.

Results and discussion:

This analytical study was a case-control that carried out in health-promoting environments of project schools and non-project schools with guidance from the consultants and supervisors and distribution and questionnaires completed by the first and second grade students of secondary school. Hypotheses were analyzed using appropriate statistical

Table (1): Distribution and percentage of subjects based on gender

Gender	Frequency	Percent
Boy	276	55.2
Girl	224	44.8
Total	500	100

As in Table above can be seen, 55.2% are male and 44.8% are female.

Table 2: The results of the questionnaire assuming normal health behaviors in students by Kolmogorov - Smirnov

			, 0	
Statistics	Number	Average	Kolmogorov –	Sig.

Dimensions			Smirnov	
Violent behavior	500	1.56	2.83	0.0001
Smoking	300	2.35	1.42	0.035

As seen in Table 2, because the significant level of both components of violence behavior, smoking is less than the alpha level (α =0.05), so the

distribution of above data components is non-normal, so non-parametric tests were used for statistical hypotheses.

Table 3: Results of Mann-Whitney test to assess differences in Health Promoters and Non- Health promoters' male students

Dimensions	N	Number		Average Mean			S.D.	
	HPS	Non HPS	HPS	Non HPS	Difference	HPS	Non HPS	p-value
Violent behavior	138	138	1.61	1.68	0.07	0.47	0.48	0.144
Smoking	138	138	1.58	1.84	0.26	0.98	1.29	0.217

First hypothesis:

As seen in the table above, according to the p<0.05 the significance level in violent behavior among male students and health promoters showed no significant difference in outcome research hypothesis; so hypothesis was rejected. In other words, the promoters have less than male students violent behavior toward male students were non-promotion, but this difference was statistically significant in the control health promoters and non-promoters violent behaviors among male classes differ health.

Second hypothesis: There is relationship between smoking among male high school students and HPS projects.

As seen in the table above, according to (p<0.05) the significance level of smoking among students in boys school and promoters showed no significant difference in outcome research, so hypothesis was rejected. Although male students smoking promoters have a lower average than male students, but the difference was not statistically significant.

Table 4: Results of Mann-Whitney test to assess differences in Health Promoters and Non- Health promoters Female students

Dimensions	N	lumber	Average		Mean	S.D.		
	HPS	Non HPS	HPS	Non HPS	Difference	HPS	Non HPS	p-value
Violent behavior	112	112	1.49	1.54	0.05	0.30	0.40	0.545
Smoking	112	112	1.14	1.26	0.12	0.58	0.68	0.021

Third hypothesis: There is relationship between the control violent behavior in female high school students and HPS projects.

As seen in the table above, according to the p<0.05. The significance level in violent behavior among school students and promoters showed no significant difference in outcome research hypothesis and it was rejected. However, promoters have less than secondary school students in violent behavior than were school students, but the difference been not statistically significant.

Fourth hypothesis: There is relationship between smoking among female high school students and HPS projects.

As seen in the table above, according to (p<0.05), in aspect of tobacco use among school students and promoters were significant differences in outcome research, so hypothesis was confirmed.

In other words, promoting school students are smoking less than students of non-promoters schools by average, and this difference was significant. Therefore, schools, health promoters have been more successful in tobacco control.

The first and second target determine the effect of health promoting schools initiative in controlling violent behavior in high school students who were evaluated separately for boys and girls in schools. Although high school students in the project HPS has less than violent behavior towards high

school students of HPS, but this difference was not statistically significant (P=0.144). In the girls' high schools, statistically, there is not a significant difference by average (P=0.545). The health promoting school effectiveness in controlling violent behavior in boys and girls was not successful. The result of Koochaki et al. study in 2010 was also consistent with recent research results.

Their research results showed that the mean scores for general health, self-esteem and life satisfaction experimental group and comparison group there was no statistically significant difference.

The results Ranjbar et al. study, in 2009 to evaluate the effectiveness of life skills training programs in first year high school students have also had the effect of recent research aligned with the results. The Sandrapy in 2004 in conjunction with the school management, violent and non-violent behavior of young people tense and American announced a major role in changing the culture in the social atmosphere of school health educators and the youth to better stress management skills and social skills that are inconsistent with the results of recent research.

To determine the effectiveness of the implementation of HPS on smoking in high school students that boys and girls were analyzed separately. The amount of smoking in male students in schools that promote health and health-promoting schools was showed no significant difference. Although health promoting school male students smoking has on average less than male students were non-promoters but the difference is not statistically significant. High School Girls in front of the HPS project has a positive effect on tobacco consumption and smoking among high school girls has been reduced.

The results Scofield and colleagues in 2003 showed that the impact of health promoting school programs to reduce smoking in Australia's schools is consistent with the results of recent research in male high school. They conclude that although the health promoting school program was successful in increasing knowledge about the group but had no effect on attitudes and behavior. On the other hand, the results Hitzis et al. in 2010 to assess the long-term effect on school health education programs over a ten-year intervention study in girls' high schools aligned with the results.

The final conclusion is to manage students' health is a sensitive and important programs that need to pay attention to all-round and formulate policies and activities, as well as in the development of health infrastructure in schools. Although health promoting schools project was founded with the goal of creating positive change in schools but was not very

successful in improving the health of students. It seems monitoring system for timely and accurate monitoring and evaluation plan is needed to run better.

References:

- 1. Amirkhani, M.A.; Ziaaldin, H.; Dashti, M.; Ardalan, G.; Aminayee, T. (2008). Health promoting schools in the Islamic Republic of Iran, printing, Tehran: Ministry of Health
- 2. Taghipour, M. (2001). Effect of student organizations on social development and responsibility high school students of Damavand city in the academic year, 2000-2001, M. Sc.; Faculty of Management Science and Research Branch of Tehran.
- 3. Helm Seresht, Parivash; Delpisheh, I. (2007). School Health, Third Edition, Tehran: Chehr Publication.
- 4. Hosseinabadi, H. (2010). Advisor to the Secretary General of the Drug Control Headquarters statements, the site of Iran's Statistics Center, July 2010
- 5. Ranjbar, Kh.; Ibrahimi, B.; Hasanzadeh, H. (2009). The effect of life skills training programs in first year high school students in the province. Journal of Kurdistan University of Medical Sciences, 5 (2), 55-59
- 6. Seyedabadi, M. (2010). The effectiveness of life skills training on mental health control female students in secondary schools in the academic year 2009-2010 Mashhad. MA thesis, University of Medical Sciences.
- 7. Taremian, F.; Mehryar, A. (2008). Effectiveness of Life Skills Training Program for prevention of drug use in middle school students. House of Zanjan University of Medical Sciences, 16 (65), 1998-2009.
- 8. Alikhani, S. and Bahonar, A. (2005). The effectiveness of the traditional model of coordinated school health programs in health behaviors of children of school age, the first stage of determining the health behaviors of adolescent students in the city of Damavand and Pakdasht, Department of Health, Shahid Beheshti University of Medical Sciences and Health Services.
- 9. Alikhani, S. and Khalesi, A. (2003). School health promoting scientific reference for teachers, Ministry of Education, Office of Research and Development, Printing, Sari Amir Kabir Publications.
- 10. Mousavi, A. (2001). The role of teaching life skills and coping strategies in the prevention of smoking, cannabis and alcohol use among youth in the province, MA thesis, University of Medical Sciences, Tehran, Iran.
- 11. Barry , Adam; Chaney, Beth; Chaney, J.Don. (2009) The Impact of Truant and Alcohol-Related

Behavior on Educational Aspirations: A study of US High School Seniors. Jurnal of School Health, 81, 485-492.

- 12. Hatzis, Christos; Papandreou, Christopher; Kafatos, Anthony (2010). School Health Education Programs in Crete: Evaluation of Behavioural and Health Indices a Decade after Initiation. Preventive Medicine 51, October4, 2010, from www.science Direct.Com.
- 13. Lowry, R; Eaton, Dk;Brener,ND;Kann,L.(2009).Prevalenceof Health-Risk Behaviors Among Asian American and Pacific

- Islander High School Students in the US,2001-2007. Public Health Rep, 126(1),39-49.
- 14. McNeely, Clea;Nonnemaker, James; Blum, Robert(2002)Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescoent Health. Journal of School Health, 72, 138-146.
- 15. Sandra p, Thomas.(2004). School Connectedness, Anger Behavior, and Relationships of Violent and Nonviolent American Youth .Prespectives in Psychiatric Care, 40, 135-148.

2/9/2016