Received: 28.2.2009
Accepted: 15.8.2009

Exploit the Developed Countries Experiences of **Primary School Education to Prevent Drug Addiction** and Implications for Iran

Ali Kheradmand MD*, Eshrat Zamani PhD**, Nassim Hedayati DDS***

Abstract

Background:

The purpose of this study was to evaluate various educations in primary schools to prevent drug addiction.

Methods:

In this qualitative study, data included the experiences of those who been students in the developed countries for some years as well as their parents. The data were collected by semi-structured and unstructured interviews as well as documents.

Findings:

The results showed that education for prevention of drug addiction begins in primary schools in the developed countries using various methods. These educations are not occasional but constant and infused in all curriculum subjects and grades. Students become familiar with various drugs and learn about their effects.

Conclusion:

Our findings showed that social problems are discussed openly in schools of the developed countries and students try to find solutions which are considered by authorities.

Key words:

Drug addiction, Education, Teaching strategies, Primary school, **Developed countries**

Page count:

Tables: 2 0 **Figures:** 13

References: Address of

Eshrat Zamani PhD, Associate Professor, School of Education, University of Isfahan, Isfahan,

Correspondence:

E-mail: nhdzamani@yahoo.com

Resident of Psychiatry, School of Medicine, Kerman University of Medical Sciences and Neuroscience Research Center, Kerman, Iran

^{**} Associate Professor, School of Education, University of Isfahan, Isfahan, Iran.
*** General Dentist, Kerman University of Medical Sciences, Kerman, Iran.

Introduction

One of the innovations in educational systems is the relation between school education and students' real life experiences. Drug addiction is a problem is most societies and statistics show that two million Iranian are known to be drug addicts while 800 thousands take drugs occasionally. It means that about 4% of the Iranian population is using drugs. Also, there are about 100 thousands prisoners related to drugs, 8 thousands of who are foreigners. To prevent drug import to Iran, about 570 millions of USD has been spent to protect the borders and about 30 thousands of security forces are guarding the eastern borders of the country. The statistics provided by the State Welfare Organization show the significance of this problem in Iranian society especially since most of drug addicts are adolescents and youth. Socioeconomic, psychological, natural and family related factors are mentioned as the causes of drug dependency. There are so many studies and professional controversial opinions on the reasons for attractions to drugs. Some consider social and economical problems such as poverty and unemployment.¹⁻⁷ Some others mentioned personality, individual and psychological factors.^{3,8-11} Some others emphasized on genetic and family related factors^{12,13} and some mentioned the role of cultural, moral and religious factors.

Many studies show that prevention is more effective than treatment and education is one of the prevention methods. Iranian students barely learn anything about drug addiction in school and just face it in the society. While such important knowledge that should be learned and thought about solutions in schools are neglected by the Iranian educational system. One of the reasons for this neglect is the belief that hiding such problems is better than discussing them openly in schools and lack of familiarity is a good reason for not using them. Therefore, the innocent adolescents who never heard of drugs up to the age of 14 and 15 and never thought of it, can easily be trapped and turn to addicts. This study is an effort to use the experiences of other countries and find educational implications for prevention of drug addiction in Iranian society.

Methods

In qualitative study, data were collected through formal documents and statistics, library resources, databases and deep interviews with parents and students

Study population included students who had at least 3 years of primary school education experience in one of the following countries: USA, Canada, Australia and England and were currently students in Iran. Interviews with their parents were also a part of data collection. The above countries were selected because they were developed countries in various continents of the world and had the highest population of Iranians students supported by Iranian government scholarship. The study population included university professors and students who had studied abroad with Iranian government scholarship and their children studied in the primary schools of one of the above-mentioned countries for minimum of 3 years. Several issues were discussed in this study including the educational approach to social problems such as drug addiction a brief of the results will be mentioned in this paper.

Study sample included 200 people, students and their parents, selected randomly from a list of professors who returned to Iran since 1991 and were living in one of the three big cities of Iran, Tehran, Shiraz and Isfahan then. We interviewed 143 out of 200 people. Data analysis was qualitative methods including coding, categorizing and organizing the data. To respect the privacy of interviewees, each of them received a code.

Results

Most of the interviewees (90%) mentioned the role of knowledge and education in preventing drug addiction among students and believed that in the schools of the selected countries the drugs were introduced to children and the way they were produced and their effects was openly and clearly instructed using various forms. The main educational methods are presented in table 1.

Using visual media

According to the interviewees, one of the educational methods was documentation of drug addicts problems their lives, challenges, problems, and the way they became addicted, and showing these documentaries in the school. In addition to the drug, addicts' life, the effects of addiction on various parts of the body including brain, nerves, lungs, and the related diseases were introduced in the films. According to one of the

parents, a very important case on which students were educated was condemning addiction even to what looks good or whatever leads to addiction. The reasoning for this was the rule that human beings should use their mind constantly and all their acts should be with awareness and based on knowledge and information. Whatever turns to habit will not include thinking and is not favorable (Interviewee number 13, September 1999).

According to 67% of the students, films were basically cartoons showing the complications of addiction and the bad outcomes for health, which were very effective on them. One of the parents said: "Education on addiction was so good that nobody in our house dared to smoke cigarettes, and if a guest wanted to smoke, our son would protest. Because he had learned well about the harmful effects of cigarettes on human health and considers smoking poisonous." (Interviewee number 128, April 2000).

Most parents believed that films and videos were used to a great extent in the education of developed countries. Some of these films were just educational and some other was both amusing and educational. Only educational films were used mostly for higher grades and amusing ones for lower grades. In general, the goal of using visual media is to increase the students' motivation for learning and giving them information which won't be as effective in other methods.

Using real cases in teaching

According to most interviewees, to teach diseases and drug addition, real cases were used and those who had addiction experience were invited to school to explain their experiences for students. For example, a drug addict would explain how he was acquainted with the drug and got addicted. In this program, the students would hear about the pains a drug addict experiences by somebody

who experienced it. According to some parents and students, when the real cases explained their addiction and their challenges afterward and the way the society face them, it had a permanent impression on children. The mother of two children who studies in Canada mentioned the permanent effect of this method saying that: "My child was so impressed by a lady who had AIDS and talked (while crying and being upset) in the school about her disease and how she got it, especially the pain she had being away from her children." (Interviewee number 151, July 2000). Another mother mentioned a drug addict who started trembling all over because of not having access to drugs and believed that seeing such cases and feeling their pain when have not access to drugs had a big impression on her children. These addicts usually explain the way they got addicted and give children necessary awareness (Interviewee number 98, March 1998). Inviting family members of drug addicts to the classroom to talk about the problems they face in daily life and to answer students' questions in this regard is another method. In addiction to inviting drug addicts and their families, visiting related centers is also a part of educational program in schools.

Using information networks and Portable Computers

The results of this study showed that portable computers (PC) have been used for preventing addiction among students in various ways, introduced in table 2.

- 1. as an educational appliance: Most information was delivered to the students by educational software. 85% of students mentioned using PCs as educational appliance in education related to addiction prevention.
- 2. As means of information: teachers introduced website addresses and encouraged students to obtain information through websites.

Table 1. Using visual media is one of the most important educational methods for preventing drug addiction

Educational method	Parents (n = 33)	Students $(n = 110)$
Movies and other visual media	32(98%)	108(98.5%)
Real cases	18(55%)	73(67%)
Information technologies (PC)	25(80%)	94(85%)
Scientific visits to prisons	22(66%)	78(70%)
Human resources in the society (such as professionals)	29(90.5%)	98(89%)
Conducting research projects	20(66%)	104(95%)
Lectures	6(19%)	34(30%)

Table 2. Aims of using new technologies of information and communication in addiction preventing education according to students' view (n = 110)

Aims		
As educational appliance	94(85%)	
As means of education	106(96%)	
In research	62(56%)	
To communicate with others	33(30%)	

56% of students used PCs for personal and group projects related to addiction and by learning from the websites.

- 3. Using PCs as means of education: students were encouraged to type their projects and prepare their charts and figures using application software. 96% of students mentioned using PC to type their projects.
- 4. Using PCs for communication: students and teachers of a region or a country were connected to those of another region and exchange information using an intranet. Less than 30% of students mentioned using intranet to communicate with other schools for projects related to addiction. In addition to technologies, teachers used other methods to teach about addiction.

Visiting addiction rehabs and prisons

Students' group visits to rehab centers for addicts as well as prisons are very educative for addiction outcomes. In these centers, regrets and experiences of addicts make students aware.

Educational programs in schools included making students aware of the possibility of addiction through distribution of food and advising children not to accept any food from strangers even their classmates and friends and report to the teachers or school authorities if they see any suspicious behavior. These kinds of institutions was constantly emphasized and widely advertised by means of posters, brochures, wall papers, etc.

Inviting police officers or other forces involved in fighting drug addiction

Inviting police officers or other forces involved in fighting drug addiction to explain their experiences for the students was another way to make school students acquainted with this phenomenon and become aware of dangers. Frequent invitations to police officers to lecture students about crimes happened in recent month and asking students the cause of those crimes and

events and encouraging students to cooperate with police was another approach to prevent addiction. An outcome of these invitations was informing students to prevent various incidents. A student who went to primary school in the US for 3 years said: "A police came to school frequently to teach us about various issues. For example told us what to do if our house was on fire, where the family members should be gathered. If we got fire, should not run, should not scream in the house. He taught us how to control fire. Also, there was theater to teach us; for example, about not smoking, four of us performed a show. There was a room full of clothes and other things we needed for our show and scene decoration" (Student number 51, April 2000).

News from newspapers and other media about drug addiction was explained in the classes. Most news were collected by students themselves and discussed in the class.

Inviting other professionals

In many occasions, schools use the facilities available in the society such as inviting parents and other professionals to educate students. For example, the father of a student who was a neurologist was invited to talk about the effects of addiction on nerve cells (Interviewee number 56, August 1999). This neurologist who was a university professor as well talked also about the outcomes and complications of drug addiction and the why it makes addicts shiver and tremble. Other interviewees also mentioned invited lung and respiratory health professionals. In these sessions, the impact of cigarettes on health and its bad effects especially on lungs were discussed. Most of these professionals used some slides in their lectures.

According to most parents and students, school and teachers took advantage of available resources in the society to educate children in the best way. Having professionals of every field could made students familiar with those field so that they could choose their interested area of study easier.

Another student who studied in the US said: Once a theater group came and played a show about how drug addiction is harmful and destroys lives. Then, they divided us into groups and asked us to play a show for them. Then, we put our minds together and made a show about the problems of addicts' lives and played for them 20 minutes (Student number 33, July 2000).

In addition, schools take advantage of the facilities provided by various institutions in different occasions. For example, the mother of a student who studies in Australia said: "Every year, a container of pictures, paintings, posters and dummies would come to school to show students the harms of smoking. They would show

different parts of the body and their task and would show the parts that would be harmed by smoking. There were also films showed about that (Interviewee number 11, January 1998).

According to many interviewees, schools of foreign countries put importance on children's experiences and would use any opportunities to educate their students.

Joining education with real life

The goals of educational systems of the developed countries selected in this study are to provide opportunities for student to grow up in all fields. Therefore, they try to develop attitudes or thinking habits that make students a responsible citizen in modern complicated societies. They pay attention to the individual and social needs of their students along with developing their cognitive skills and create selfrespect in their students. Developing these characteristics in students helps the prevention of many social problems including addiction. Therefore, in primary schools of the developed countries, the emphasis is more on development of social skills rather than cognitive skills. Social skills include group working communication skills, research skills (collecting data, organizing and interpretation of data) and thinking skills (hypothesizing, comparison, suggesting solutions and selecting parallels). In these programs, students understand that they have responsibilities towards their family, school, society and country. Environment health and sustainability, respecting law and regulations as well as religious and moral codes and being disciplined are some of these responsibilities. Also, teachers try to develop students' interpersonal skills using various methods. These skills include having positive thoughts, being flexible and patient, and paying attention to others' ideas and trying to understand them, group working, respecting law and regulations and being disciplined. Developing positive thoughts and self-respect among students are some of the important factors in preventing addiction.

Conducting research projects related to addiction by students

The results of the study showed that students learn decision making skills by active participation in curriculum and performing. Students participate in social issues by conducting research projects related to these issues. In brief, students conduct carious projects and think about global and local problems and try to find solutions for them. In all development programs, the role of education is strong and all students are involved as members of national projects.

Conducting research projects about social problems

One of the issues mentioned by most interviewees (89%) was preparation of students for future event and encouraging them to cooperate with authorities in the future. The role of education in various social, political and economic programs was well defined and the goals and contents of the curriculum were designed based on these roles and teachers were taught about how to perform these programs. According to parents, schools would use the great human resource of students for highest efficiency without spending much money. Parents and students who were interviewed in this study mentioned several cases, some of which we being here. One of the parents said: "One day I went to a library in the US, a group of little kids were searching in the catalogs. I asked them what they were doing and they said that the mayor of the city asked people to find out which part of the city have better water resources with higher quality and what are the ways to access those resources with the least expenses." Their teacher brought them to the library to find books and articles related to the subject (Interviewee number 55, February 1998).

According to 76% of interviewees, education was related to the society and a basic characteristic of school classrooms was to discuss social problems and ask students to find solutions. Students' ideas were considered in many issues discussed in city councils. Regarding the above-mentioned project of water resources, interviewee number 55 said: "Because of I was impressed by the case, I followed it up and found that the plan students offered was discussed in the city council. This means giving students credit. After that, the city council gave students reflections toward their plan. Imagine how it can give students self-confidence. This will have a great lesson for us if school students could

participate in social issues" (Interviewee number 55, February 1998).

Besides, some students said that their teacher would put them in various jobs and used their ideas. For example, they told them what will be their plan and what organizations they need to cooperate with if they are the head of an office or institution to fight drug addiction. What will be their policies to treat drug addicts and what prevention policies they will consider? The teachers not only face students with addiction problem but also encourage them to find solutions. Data resources also are introduced to them and students will get addresses of places they should go to find answers. Students have to go to various offices and organizations to find the data, in addition to studying, and meanwhile they learn about problems that drug addicts make for themselves and their societies and try to find the solutions for this harmful problem. Or they are asked to search about drug addicts and their problems in the society and discuss it together. In this project, students have to refer to books and other resources to collect data and prepare for class discussions.

Making reports in different ways

Sometimes teachers ask students to create a poster or brochure about addiction and its complications in addition to writing a report, or ask them to make a film about drug addicts and the way society deal with them. Doing research about these people and learning about addiction and related problems make students acquainted with realities.

Making students used to reading books and providing them with various books not only increase their knowledge but improve the quality of their leisure time. Schools of these countries tried to increase the habit of reading among students in different ways.

Reading habits and how to develop it

According to most interviewees, students become interested in reading from the family. Parents sit next to the children and read them books. This period of reading is called "preschool readings". Studies show that this program leads to children's language development increase their knowledge and improve their reading skills very fast. In primary school age, also, various programs are aimed to encourage students to read and in general, the educational system makes students a reader. In the family, parents and child discuss a book together. First parents read a paragraph and

then the child read the same paragraph while parents emphasize on the main parts. This way, children enter schools with a good background. In school, reading spaces are wider so that in each classroom, there is a small library. Children are exposed to reading in various ways every day. Teachers read books to children and ask them to explain what they listened. Sometimes children read books to each other and discuss it together and sometimes page through by the guidance of teachers. Books and reading are always part of school life.

In higher grades, students are asked to write books based on their age and they do. Sometimes children have to refer to other books to write their own or ask their teachers and parents' questions. Their book is a few handwritten pages with some related paintings. All children read students' books and write an encouraging note at the end.

Students develop their writing skills fast; because of the way books and reading are emphasized in those cultures. In weekly programs of schools, some hours are specified to reading. In these hours, students should read a certain number of books weekly or monthly and while reading they should also do their assignments including answering questions asked by the teacher and looking up words in a dictionary. In general, schools and teachers try to introduce students to reading and with the help of parents and facilities in the society develop the reading habits in students. Establishing libraries with interesting and attractive books in various areas of the cities and easily public access is another factor in encouraging reading. Creating a reading habit in students improve the quality of students' leisure times and prevent many potential risks that are in the society for children and adolescents.

Discussion

Prevention is the best method: To rescue our youth and vulnerable adults from the monstrous disease of addiction, it is necessary to provide numerous cultural opportunities and facilities for the society while passing severe law to punish smugglers and those involved in this dirty business. Cultural establishment against this problem is formed in the family and then in schools. Researchers believe that schools are more important than family because in most cases children can have an influence on their parents and prevent their bad habits.

Addiction is a disease and it can become epidemic. Therefore, to fight it, 3 factors should be considered: agent, environment and vulnerable people. If one of these 3 connected factors are ignored the chain will be broken.4 It should be considered in education to prevent addiction. Students should be informed about drugs and their harmful complications and issues such as bad friends and strangers who may offer it in food, or addicted parents in the family and the effects of addiction on family should be discussed in the classrooms. Listening to challenges of an addict can be very informing for students. As it was mentioned in the results, the schools of developed countries use this method and it would be helpful for students to observe the pain of an addict when they cannot access drugs. Asking students to do individual or group projects make films about drug addicts or play a show about it in the classroom along with explaining to them would be very effective. Doing research about drugs and their effect on different parts of the body can be part of curriculum. Showing educational films about addiction and its effects on body made by various institutions and organizations are good options for schools. In general, indirect educational methods (showing videos and real cases) can be much more effective than direct teachings through lecturing and giving advices.

Based on the results of this study, the following suggestions are offered.

- Discussing social issues in the schools openly and teaching students about prevention
- Emphasizing on daily issues in students' life including addiction in schools
- Teaching students about addiction and its effects on health in primary schools
- Taking advantage of various resources in the society, including institutions and organizations and parents to educate children about drug addiction

- Cooperation among mass media and orienting them towards education to prevent addiction
- Changing theoretical teaching methods to practical methods
- Involving students and giving them active roles in finding the roots of social problems including addiction by asking them to do various projects
- Discussing important news and social crimes and their causes in classrooms
- Using real cases and giving opportunities to those with addiction experience to talk in classrooms
- Making students curious about drug addiction and encouraging them to think about it and find answers to their questions by introducing them books, people and organizations who can give them information
- Answering students' question correctly and logically
- Developing social and individual skills of the students rather than too much emphasis on cognitive skills
- Developing self-respect in students
- Providing opportunities for students to develop their talents and interests
- Giving as much possible as funds to primary school education
- Selecting talented people for teaching in primary schools by screening them through various examinations (teachers should be not only knowledgeable but have high manner)
- Creating favorable environment for learning using all facilities and resources in the society
- Developing the culture of reading in families and society
- Developing libraries in the cities and facilitating public access to their services
- Equipping libraries with books, videos and other visual resources attractive to children and adolescents

References

- 1. Owrang J. A research on addiction: causes, preventions and treatments. Tehran: Ministry of culture and Islamic guidance publications; 1988. p. 32-54.
- **2.** Asadi H. An application study on two global problems of population explosion and drug addiction at the onset of 21st century. Tehran: Sepehr; 1997. p. 9-20.
- **3.** Shambayati H. Children and adolescents' crimes. Tehran: Zhubin; 1998.
- **4.** Farjad MH. Addiction. Tehran: Badr. 1995.
- **5.** Keinia M. Criminology. Tehran: Tehran University Publications; 1981.
- **6.** Saburi Ordubari A. Addiction: diagnosis, causes and prevention. Tabriz: Sazman Behdari; 1984. p. 34-43.

- **7.** Mosavati A. Pathology of Iranian society (sociology of deviations). Tehran: Novil; 1995.
- **8.** Shakarami A. Addiction. Tehran: Gutenberg; 1989.
- 9. Modrcin-Talbott MA, Pullen L, Zandstra K, Ehrenberger H, Muenchen B. A study of self-esteem among well adolescents: seeking a new direction. Issues Compr Pediatr Nurs 1998; 21(4): 229-41.
- 10. Miller NS. The role of the physician in

- addiction prevention and treatment. Psychiatr Clin North Am 1999; 22(2): 489-505.
- **11.** Qorban Hoseini AA. A new study on drugs and addiction. Tehran: Sepehr; 1989. p. 15-27.
- **12.** Atkinson RL, Hilgard ER. Introduction to psychology. 11th ed. Trans Baraheni MT, Birashk B, Zamani R. Tehran: Roshd; 1999.
- **13.** Hilgard ER, Atkinson RC. Introduction to Psychology. New York: Harcourt Brace Jovanovich Inc; 1975.