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RESEARCH ARTICLE

ADOLESCENTS AND AIDS: A SURVEY OF KNOWLEDGE OF AND ATTITUDES TOWARDS AIDS IN THE CITY OF SEMIROM, IRAN IN 2012-2013

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ABSTRACT

Background: AIDS epidemic is currently in the third step of its emergence and has turned into an epidemic threatening the physical community. According to a report of WHO 68 million were infected with AIDS by December 2002 and adolescents were identified as the population at the highest risk of AIDS. Since the transmission routes of this disease are limited, an increase in the level of knowledge of people, especially the adolescents, about AIDS/HIV can be very helpful in the reduction of HIV infection. This study was conducted to investigate knowledge of and attitudes toward HIV/AIDS in male high school students in Semirom, Iran

Methods: The population of this descriptive, cross-sectional study was male high school students in Semirom, Iran. The questionnaire included knowledge questions on the disease and its transmission routes and attitude questions on AIDS and its victims. The responses were based on a four-point Likert scale ("strongly agree" to "strongly disagree"). The data were analyzed by SPSS software through demographic variables.

Results: Although around 80% of the students had accurate knowledge about the contagious nature of the disease, there were still misconceptions about the disease and importance of preventing HIV transmission in a way that around 35% of the students did not know the importance of observing hygiene in the prevention of this disease.

Conclusion: We recommend that schools be considered as one of the central focuses in AIDS reduction strategies, and students' training on all aspects of HIV/AIDS as a complementary part of school curriculum be seriously addressed by government and educational policy makers.

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INTRODUCTION

Acquired immune deficiency syndrome (AIDS) is a new, conventionally fatal disease. Human immunodeficiency virus (HIV) destroys human immune system and makes its victims vulnerable against opportunistic fatal infections. This virus has infected millions of men, women, and children in developed as well as developing countries, really achieving a global scale and leaving no continent unaffected (WHO 2013). Asia has the highest rate of AIDS. Declared by WHO, 16 to 20 people are added everyday to the AIDS victims. Of these, 70000 are the youth (UNAIDS 2004). In Iran, the incidence rate of this disease is on the rise. By the first half of 2008, about 18320 persons were identified with HIV infection, of whom 1592 developed AIDS, 58.2% were infected through addiction-related injections, 7.6% through intercourse, 3% through blood products, and 0.04% from mother, and 21% for unknown reasons (Modjarrad et al., 2013).

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In Iran, the majority of HIV transmission occurs among the addicted with a population of more than 200000 and infection rate of 1%. High risk behaviors are widespread among this group and half of them use shared syringe. In recent years, the incidence of HIV has been 12% among the drug users (Modjarrad et al., 2013). Around 88% of the total AIDS cases, as reported by Iran Center for Disease Control, have been 25-44 years old (Kippax 2012). Because this disease has no effective cure, the only way of fighting it is to teach public health to people and to become familiar with its transmission routes and prevention methods. Special attention has been paid to AIDS-related trainings in schools and universities in Iran and appropriate investigations have been done (Montazeri 2005). Increase in the knowledge of people in the society, especially the youth, in respect to reproductive health and AIDS prevention has been mentioned as the most important part of programs of Family Planning Association. The treatment of AIDS is very costly (Lichenberg et al., 2012). This disease is now seen all over the world and the impact of poverty on its prognosis incidence has been firmly confirmed in the prognosis incidence rate of AIDS (<http://www.cdc.gov/hiv/basics/transmission.html>).

Therefore the only approach to fighting it is to establish socioeconomic justice, to strengthen morals, to distribute AIDS drugs equally among different countries, and to continue attempts to produce vaccine and curative medicines (<http://www.cdc.gov/hiv/basics/transmission.html>). The only solution to fight this disease is its prevention which is not the duty of governments only but private and research companies must also do something to eradicate this disease. As prevention is the most important action, people should be taught AIDS' transmission routes and complications and be informed that AIDS is not transmitted through air, kissing, shaking hands, etc.; therefore, it is not necessary to isolate the victims. Instead, physicians and all professionals dealing with society's health should be obliged to support them (Quek and Li 2002). Based on the fact that this disease is more prevalent among the adolescent, this study aims to evaluate the knowledge and attitudes of high school students about AIDS.

MATERIALS AND METHODS

This descriptive, cross-sectional study was carried out in 2012-2013 in high schools of Semirom, Iran. The samples under investigation were male high school students of all (first, second, third, and pre university) grades. The final questionnaire included questions regarding personal information, knowledge about the disease and its transmission routes, and attitude towards AIDS and its victims. The knowledge questions included 20 (yes-no) questions and there were 11 attitude questions. The responses were based on a four-point Likert scale (from "strongly agree" to "strongly disagree"). Due to political acceptability and ethical considerations of the research, the necessary arrangements with Department of Education of the city and the principals and teachers were made and the questionnaires were completed by the students while the researcher was present.

The students were ensured that their information will be confidential and participation in the study is completely voluntary. Having collected the finished questionnaires, we entered the data into SPSS software and analyzed them as demographic variables. In addition, because of the imposed restriction, we failed to enroll the students of both genders and had to enroll male students only were investigated in the present study.

RESULTS

Overall, 100 students were investigated in the present study. We tried to mainly enroll pre university students because knowledge of and attitudes toward HIV/AIDS potentially increase with age. 65% of the students agreed with the importance of observing personal hygiene in the prevention of AIDS transmission. Due to the importance of this issue, this percentage cannot be considered as high since 35% of the students still disagreed. A rather high percentage (75%) of the students agreed with the importance of observing moral issues in preventing AIDS transmission. Still, 25% of them believed that observing moral issues cannot be influential in preventing AIDS transmission. 88% of the students accepted addiction treatment and lack of drugs injection as a highly effective method of preventing AIDS. This shows that the knowledge of the students about transmission routes of this fatal disease is rather high. Also, 80% of the students had appropriate knowledge about the contagious nature of this disease. 70% of the students disagreed with AIDS patients' innocence. This confirms that there are still incorrect attitudes about AIDS victims in our society as 30% of the respondents considered them as being guilty (Table 1).

DISCUSSION

The present study has evaluated knowledge and attitudes of high school students of Semirom about AIDS. The

Table 1. Knowledge and Attitudes about AIDS in Semirom

Knowledge/ Attitudes	Strongly agree		Agree		Disagree		Strongly disagree	
	No.	Percentage	No.	percentage	No.	percentage	No.	Percentage
Addiction treatment and non injection drug in prevention AIDS	6 4	6 4	24	2 4	1 0	1 0	2	2
contagious nature of AIDS	3	3	45	4	1	1	5	5
Attitude of high school students about guilty patients with AIDS	1 5	1 5	15	1 5	4 5	4 5	2 5	25
Observing hygiene in the lack of AIDS transmission	4 0	4 0	25	2 5	1 5	1 5	2 0	20
Observing moral issues in the absence of AIDS transmission	5 0	5 0	25	2 5	9	9	1 6	16

majority of these students had appropriate attitudes towards HIV/AIDS but there were still misconceptions or wrong attitudes about this disease among them. A significant percentage of the students believed that patients with AIDS are guilty and 20% of the students believed AIDS is noncontiguous. 12% of them disagreed with the fact that addiction treatment and lack of drugs injection can prevent this disease. 25% of the students disagreed with the importance of observing moral issues in preventing AIDS. 35% of students did not have appropriate knowledge about the importance of observing hygiene in preventing AIDS transmission. A comprehensive investigation in Iran indicated that more than 50% of 15-24-year-old people had incorrect points of view about the routes of HIV/AIDS transmission (Shan and Yang 2011).

According to some experts, these misconceptions about AIDS are likely derived from common baseless rumors among people and failure to give necessary information to the public to equip them with the required knowledge (Qin *et al.*, 2013). Thus, it is suggested that teaching about AIDS transmission routes and how to prevent this disease from spreading could give more appropriate knowledge to the students and adolescents. According to some studies, HIV/AIDS knowledge education could improve students' and parents' attitudes toward children affected by HIV/AIDS (Shan and Yang 2011; Qin *et al.*, 2013). Gao *et al.* (2012) suggested that HIV/AIDS education programs were appreciated by secondary students and created positive HIV/AIDS-related attitudes among them. A systematic and long term intervention among secondary school students has been recommended for the prevention of HIV (Gao *et al.*, 2012). A study of unmarried male students showed that educational programs alongside some interventions could be helpful to increase knowledge, attitudes, and practice and to prevent HIV infections among students in Lao PDR (Thanavanh *et al.*, 2013). A study in Iran indicated that although some misconceptions still exist about AIDS, Iranians have sound knowledge and positive attitudes about AIDS and its victims in general (Montazeri 2005). In the present study, 75% of the students had emphasized the adherence to moral principles. This adherence includes avoiding unsafe sex and fidelity as two primary and central components in basics of AIDS prevention (Okware *et al.*, 2005). The issue is of such a high importance that avoiding unsafe sex is suggested as the first cause of reducing HIV/AIDS (Singh *et al.*, 2004). Thus, it is imperative that the role of moral principles and religious teachings about preventing AIDS be explained to the students.

Recommendation

The results of this study suggest that emphasis should be placed on teaching to increase students' knowledge about AIDS.

Chapters entitled "fatal contagious diseases" should be added to the textbooks and also some radio and television programs about AIDS could be produced to increase the general knowledge and change the attitude of the whole nation. Taken together, we found the knowledge of the students about AIDS was higher than their attitudes toward it; therefore, all professionals in any rank should try harder to increase and improve people's attitudes toward this disease and its victims.

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REFERENCES

- CDC. HIV Transmission. Centers for disease control and prevention, available from: <http://www.cdc.gov/hiv/basics/transmission.html>.
- Kippax S. Effective HIV prevention: the indispensable role of social science. *Journal of the International AIDS Society* 2012, 15:17357.
- Lichenberg M, Hansen I, Mukhopadhyay SM. Total control of epidemic (TCE) programme of human people to people: a community driven response to the fight against AIDS. Abstracts of the xix international AIDS conference, *j int AIDS society* 2012, 15:163.
- Modjarrad K, Mohraz M, Madani M. AIDS epidemic: Iran needs global support to fight HIV. *Nature* 2013, 494; 314.
- Montazeri A. AIDS knowledge and attitudes in Iran: results from a population-based survey in Tehran. *Patient Education and Counseling* 2005, 57:199-203.
- Qin J, Yang T, Kong F, Wei J, Shan X. Students and their parental attitudes toward the education of children affected by HIV/AIDS: a cross-sectional study in AIDS prevalent rural areas, China. *Aust N Z J Public Health* 2013, 37(1): 52-7.
- Quek GT, Li SC. A Study of the effectiveness of AIDS Health education Interventions among the adolescent population of Singapore. *med J* 2002,43: 359-6.
- Shan X, Yang T. Attitude of elementary and middle school students and their parents toward children affected by HIV/AIDS and its determinants. *Zhong Nan Da Xue Xue Bao Yi Xue Ban* 2011, 36(5): 448-52.
- UNAIDS. AIDS epidemics by country. <http://www.unaids.org/en/geographical+area/by+country.asp> (accessed 9 May 2004).
- WHO. HIV Programmes and projects. 2013, Available from: <http://www.WHO.int/features/qa/71/en/index.html>
