

## Thematic Analysis of Iranian Female Adolescents' Perceptions About HIV/AIDS: A Qualitative Study

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### ABSTRACT

**Background:** HIV/AIDS continues to be a major global health problem. The aim of this study was to evaluate common opinions and beliefs about HIV/AIDS among Iranian teenager girls.

**Methods:** This Qualitative study (face-to-face interviews with tape recording) was conducted among fifty female teenager school students in Urmia-Iran.

**Results:** The thematic analysis indicated the main information sources for HIV/AIDS among teenage girls to be their mother and teachers. The participants had little concern about the dissemination of HIV/AIDS in Iran. Using a common syringe is mentioned as the main risk factor for HIV transmission. There were some misconceptions about the at-risk group among teenage girls.

**Conclusions:** Considering the misconceptions among the teenage girls, their beliefs should be reformed and reorganized in order to reduce the risk of exposure to HIV. The best practice is training life skills in the school level.

**Keywords:** Girls, adolescents, HIV/AIDS, Iran, qualitative study

### INTRODUCTION

HIV/AIDS continues to be a major global health priority.<sup>[1]</sup> HIV is the world's leading infectious cause of death.<sup>[2]</sup> Everyday, more than 6 00 people become infected with HIV and more than 5, 700 die worldwide.<sup>[3]</sup> At the end of 2008, an estimated 33.4 million people worldwide were living with HIV.<sup>[2]</sup>

According to the recent report of World Health Organization (WHO), Islamic Republic of Iran is among countries with concentrated epidemic level of HIV.<sup>[2]</sup> The cumulative number of the reported cases of HIV/AIDS among Iranians up to the end of September 2006 was 13 702. However, since the overall coverage rate of HIV-infected Iranians, including hidden cases until the end of the year 2006, could be about 68 525 infections.<sup>[4]</sup> The total HIV rate for males (36.4 per 100 000) was 16.5 times greater than the rate for females (2.2 per 100 000).<sup>[4]</sup>

Injection drug use is the main risk factor associated with HIV infection. According to the reports of WHO in the year 2009, 19%

of injecting drug users in Iran are living with HIV.<sup>[2]</sup> Although injection drug use is the main mode of transmission among males in Iran (91.1% of males), the heterosexual contact accounts for the largest proportion of HIV cases among women (75.5%).

Of course, the mode of transmission in almost 25% of HIV/AIDS cases was unspecified,<sup>[4]</sup> so it is probable for the proportion of heterosexual contact in the transmission of HIV to be underreported since the issues such as sex are taboo topics in Islamic world.<sup>[5]</sup>

Adolescent and young adults are behaviorally at risk for HIV infection and are therefore important targets for HIV prevention programs.<sup>[6]</sup> It is clear that education has an important role in promoting the knowledge of people at risk about HIV/AIDS prevention.<sup>[7]</sup> There is a paucity of data regarding the knowledge of Iranian teenager girls about HIV/AIDS.

Therefore, the authors decided to evaluate common opinions and beliefs about HIV/AIDS among teenage girls in a qualitative manner to be used in the future planning and implementing successful HIV/AIDS risk reduction programs.

## METHODS

This study was conducted in Urmia, with the approval of Scientific and Ethical Review Boards of Urmia University of Medical Sciences, Iran.

### Study population

This study was carried out among 50 teenage girls (as an important at-risk group for HIV) in two urban schools (a guidance school and a high school, which called as Farzanegan) in the center of Urmia. This sample size was determined according to the saturation. The participants were queried one-by-one about their main source of information regarding HIV/AIDS. The interviews lasted two hours for average. We tape-recorded all interviews and did not rely only on verbal statements.

### Study design and methods of data collection

Thematic analysis with qualitative design was used. In-depth semi-structured interviews were done. This method helped us to find the applicable information for educational programs. We believe that a strong intervention can be performed with carrying out the qualitative studies among sensitive groups. We used a questionnaire that contains

open-ended questions as a tool to reach a wider, more flexible, and longer type of responses. We tried to include all sensitive issues and not to make biases during interviews. The purpose of this thematic analysis was to explore the concerns, prevention issues, main information source, and overall risk perception in this at-risk group.

### Statistical Analysis

We transcribed the tape-recorded data. We carefully read the data, line by line and divided them into meaningful analytical units. Each segment was coded with keywords. The codes were inductive codes and some concurring of them was applied. We had done the content analysis manually to identify key themes and pattern in the data.

## RESULTS

### Demographic characteristics of study population

Fifty girls participated who were 11 to 18 years old. The mean average of age was ( $14.4 \pm 4.1$  years) and most of them were in guidance school.

Thematic analysis had reached the following findings:

### Main information source

Most of participants declared that mothers, teachers, and media were the information source. Only 30% of participants mentioned reference organizations such as hospital or Red Crescent Society as their information source.

The following statements are some important themes which were extracted in thematic analysis:

*"I spent a very short-term course in Red Crescent Society regarding First Aids and acquired some information about HIV/AIDS (ways of transmission and prevention)".*

*"I don't have information about reference training centers regarding HIV/AIDS."*

*"I think the abovementioned centers will not provide appropriate information. It could be better."*

*"The hospital staffs are involved in emergencies, they have no time to inform people".*

*"I think, if I ask any question about HIV/AIDS, the staffs will think that: I have AIDS!"*

*"I think educational posters and brochures could be a good type of informative source for schools."*

### Modes of transmission

The most common theme that explored in this issue was the “drug abusing as the most frequent mode of transmission.” Un-protected sexual contact and homosexuality were not mentioned as the important transmission ways. Some of the important themes are:

*“I think the men are more susceptible to HIV than women because they have more freedom.”*

*“IV drug abuse is more common used in males than they are susceptible.”*

*“The men are more profligate, and then they have more infections.”*

*“I think the teenagers are the more susceptible group for HIV infection. But it’s common in boys.”*

The main theme which should be considered is that the girls think boys are more susceptible to HIV/AIDS.

The main themes about the HIV infection in neonates mentioned by the students were as follows:

*“The pregnancy should be aborted, if the mothers had HIV.”*

*“All of the infected mothers can infect their children.”*

*“Breastfeeding is forbidden, if mother infected with HIV.”*

### HIV/AIDS in Iran and other countries

The other issue we found is that the participants had little concern about the progression of HIV/AIDS in Iran. Participants explained their opinions with following statements:

*“AIDS is the problem of poor (low-income) countries!”*

*“Our country is protected against HIV.”*

*“Nowadays, AIDS becomes the main problem of western countries.”*

*“I think the most of HIV infected people living in Sub-Saharan Africa.”*

*“I think the prevalence of HIV in Iran is less than 30%!!!”*

### Risk factors

Using a common syringe is known as the main risk factor among drug abuser in thematic analysis.

Thematic analysis declared that the high-risk jobs are not clear for teenagers. Nobody mentioned any risky job during interviews.

### Prevention

Thematic analysis determined that the girls believe that AIDS is a preventable disease.

Behavioral cautions were mentioned in few of interviews but the mostly mentioned preventive action was the individual hygiene and self sterile injections. Some believe that the vaccine is available for prevention. In all interviews, they agree with free distribution of sterile syringe among IV drug abusers. Condom was not mentioned in any of the interviews. We asked their knowledge about condom, but some did not know about it.

### Viewpoints about HIV patients

In situation confronting a case of HIV/AIDS, the main themes were that:

*“I will run away.”*

*“I leave quietly.”*

*“I will be shocked.”*

*“I will show no reaction.”*

The interviewers recorded that the participants demonstrated some kind of stress, anxiety, and doubt while answering this question.

For the question “what is your suggestion for an infected case?” They responded as following themes:

*“It’s better for you to keep your disease confidential.”*

*“I will suggest to him/her, please do not disappointed.”*

*“I think it is better for you to try to be a useful member for society and doing the humanistic activities.”*

*“Please isolate yourself and; keep caution over your personal contacts.”*

In response to the question “If one of your relatives has this problem, what is your suggestion?”

The main themes were:

*“I will be careful.”*

*“I will help him/her.”*

*“I’ll follow personal hygiene instructions.”*

*“I will be kind with him/her and won’t annoy him/her.”*

In general, in the participants’ point of view, it is better for HIV patient to keep his/her disease confidential, and then he/she can continue his/her normal life. All of participants disagree with the HIV/AIDS patient’s right to get married.

About continuing normal activities in society, the first reaction of participants was asking to stop their activities. Reviewing the recoded interviews revealed that most of the participants take some time for thinking about this question in the meanwhile. The main theme in their second reaction was *“I think patients must continue their activities in society, but must be careful.”* And *“I feel sympathy towards HIV/*

*AIDS patients.*” It seems that in this case, interviews had a partial but effective influence in changing the opinions of the teenage girls.

We asked about applying HIV tests and found that all of them agree with HIV/AIDS screening test before marriage. Some main themes were:

*“I agree with screening test.”*

*“All of pregnant women must be screened.”*

## DISCUSSION

Although the injecting drug use is the main mode of HIV transmission in Iran similar to other countries in the neighborhood, but as reported before the sexual transmission of HIV have increased in recent years.<sup>[4]</sup> According to the reports of WHO in 2009 from Iran, only 33% of injecting drug users reported the use of condom in the last time they had sexual intercourse.<sup>[8]</sup> This issue becomes important by knowing that 19% of injecting drug users in Iran are living with HIV.<sup>[8]</sup> This indicates the need for more information regarding the knowledge of teenage girls about HIV/AIDS. Considering the special traditions and Islamic culture in Iran, most of the time teenager girls are shameful to seek any information regarding sexual aspects of HIV transmission. Sexual contact (especially sexual promiscuity) was declared as the main cause of HIV transmission in almost 7% of Iranian HIV-infected population.<sup>[4]</sup>

Although there are some data about the sex workers in Iran within the WHO reports, they are not stated in any of the Iranian studies. According to mentioned reports, 55% of Iranian sex workers reported the use of condom with their most recent client. Fifty eight percent of sex workers in Iran reached with HIV prevention programs in the past 12 months (December 2004 - March 2006).<sup>[8]</sup>

The only report from the at-risk women of Tehran, Iran, in 2006, demonstrated that the baseline knowledge about HIV/AIDS among runaway women seeking safe haven was high.<sup>[9]</sup> This (findings of study among at-risk women population) is contrary to the findings of current study in teenage girls.

There are some data regarding the knowledge and attitude of Iranian population. The study of Hedayati-Moghaddam in 2008 in Mashhad (in the Northeastern Iran) revealed important misconceptions about HIV transmission such as through hugging, food, clothing, public places, and

insect bites.<sup>[10]</sup> Our study is the only Iranian study which approached the teenager girls as the target population. There is a study by Ghabili *et al.* which had studied the attitude in a similar population regarding HIV/AIDS,<sup>[11]</sup> but the knowledge of female adolescents about HIV/AIDS was not studied before.

Another study in 2010 studied the attitude of Iranian students (male and female) via attitudes' three dimensions (knowledge, emotion, and tendency), and the findings demonstrated that students did not have enough knowledge about HIV/AIDS.<sup>[12]</sup>

The authors suggested the following actions according to the findings of this study in association with the literature: To utilize the media properly in the education process, voluntary testing and counseling of patients, promoting the use of condom, even their free distribution among high-risk group, developing educational workshops for teenage girls who left the school, Training programs for behavioral risk reduction among students, initiating risk reduction programs among sexually high-risk group, program to decrease unsafe injections among injecting drug users, treatment for sexually-transmitted disease, and educational programs to improve the attitude of teenage girls toward HIV/AIDS patients.

Since heterosexual contact accounts for the largest proportion of HIV cases among Iranian women,<sup>[4]</sup> and considering the low level of knowledge about HIV/AIDS in the teenager girls as indicated in this study, these issues should be targeted while planning for HIV prevention programs in the female population.

## CONCLUSION

Considering the misconceptions among the teenage girls, their beliefs should be reformed and reorganized in order to reduce the risk of exposure to HIV. The best practice is training life skills in the school level.

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